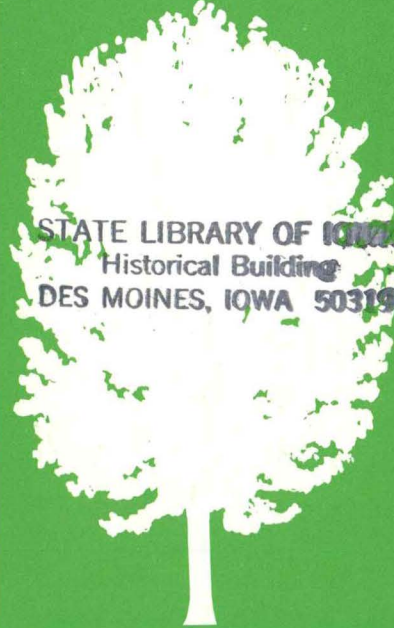
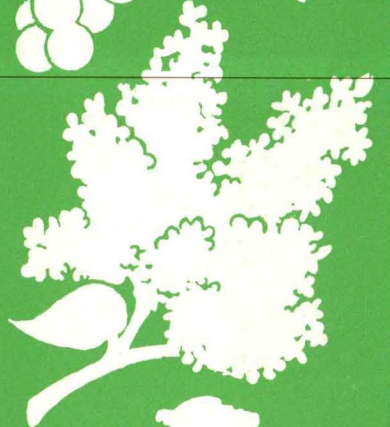
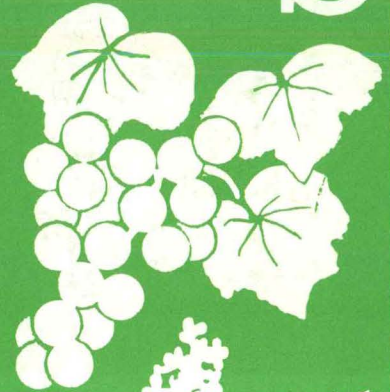


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Landscape Plants

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Pm-212 | Revised | May 1984

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Prepared by Jean E. Olson, extension landscape architect; with assistance from Donald R. Lewis, extension entomologist; James T. Midcap, extension horticulturist; Robert B. Moorman, extension wildlife conservationist; Laura E. Sweets, extension plant pathologist; Paul H. Wray, extension forester. Edited by J. Clayton Herman, communication specialist—agriculture.

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Landscape Plants for Iowa

This pamphlet has been prepared to help you make wise choices of plants for home grounds, farmsteads, and public and semipublic areas.

First, decide **why** you wish to plant. Next, decide **where** the plants should be located. Then, you are ready to decide **what** to plant.

When deciding on why, where, and what to plant, keep the four goals for development of outdoor areas in mind. All outdoor areas, if they are to satisfy over the years, must be:

1. Convenient and efficient in layout.
2. Pleasant to look at.
3. Safe, with no hazards to life or property now or in the future.
4. Easy to take care of.

All landscapes should be easy to care for. It is hard to enjoy something that takes all of your time and money for upkeep. A poorly maintained landscape rapidly becomes inconvenient, inefficient, ugly, filled with litter, and ultimately, unsafe.

Why Do You Want to Plant?

There may be several reasons for landscape plantings:

1. To make a man-made place fit into its natural surroundings.
2. To beautify an area.
3. For cool shade in the heat of summer.
4. For protection from wind, rain, or snow.
5. For privacy.
6. For added interest.
7. For flowers, beautiful foliage, or fruit.
8. For food.
9. To attract birds by providing shelter and food for them.
10. For delightful fragrances and sounds.
11. For other reasons.

Where to Place the Plants

After you have decided why you want to plant, you must decide where the plants must be placed to get the desired results. For example, you might wish to place large trees where they will cast cool shade on your patio during hot summer afternoons. Or, perhaps you are constructing a solar-heated home or are adding solar collectors to your present home. Then you would want to be sure the trees and shrubs would not interfere with the solar collectors during the winter.

What to Plant

Now you must decide what you want to plant. You will want to select plants that naturally grow to the size and shape needed. And, you want to be sure the selected plants will thrive.

How to Select Plants

It is easier to select satisfactory plants if you have a planting plan drawn to scale. Such a plan need not be elaborate. However, it should be based upon an accurate scale drawing of the area you wish to plant. Iowa State University Cooperative Extension Service publication Pm-612, *Home Grounds Planning Worksheet*, provides sturdy graph paper and simple directions for preparing such a drawing.

Here is a step-by-step method of selecting your plants.

Step 1

Make an accurate scale drawing of the area you wish to plant. A good scale for the average home grounds would be either 1 inch = 10 feet or 1 inch = 20 feet. These are easy scales to work with. The drawing will be small enough to handle easily and large enough so that details will be clear. A drawing for a public building (such as a school or church) should be at a similar scale. If necessary, a scale of 1 inch = 40 feet can be used for large areas such as parks or recreation areas. Avoid using scales larger than 1 inch = 40 feet because scales larger than that cannot show much detail. Your scale drawing should include significant buildings or landscape features that are outside the area you are planning.

Step 2

Consider your budget. It would be very disappointing to plan an elaborate planting and then find your budget is too small. Good quality nursery-grown trees and shrubs are not cheap. Decide early on how much you can afford to spend. Be sure to allow for the cost of maintenance equipment such as lawnmowers, rakes, and other tools. Include the cost of seed, fertilizer, trees, shrubs, and fences.

Step 3

Consider time for maintenance. Don't plan huge flower beds or extensive clipped formal hedges if nobody has the time or energy to care for them. Remember, native trees and shrubs often require much less care than exotic ornamentals.

Step 4

List your needs. Make a list of your needs so you won't forget something important when planning your plantings. This is important whether you are planning an individual home grounds or a large park.

Step 5

Decide what activity belongs where. For the home grounds, decide where your private outdoor area should be, as well as where the public area is. Also decide upon and locate areas for necessary service activities. For public buildings, be sure to allow for necessary circulation of vehicles and pedestrians. Also consider areas for storage and for maintenance activities.

Step 6

Make a preliminary plan.

Using tracing paper over your scale drawing, try several schemes. Be creative. It is easy, simple, and cheap to try many ideas on paper. It can be quite expensive to plant the wrong things and then have to dig them up or cut them down later.

Step 7

Make your final plan. Select the best idea or combination of ideas from your preliminary sketches. Check carefully to be sure all of your needs will be met. Remember, it is always easier and cheaper to make changes before you plant.

Step 8

Select your plants. Using your final plan, look for plants that:

1. Are hardy in your area.
2. Grow to the desired height and spread.
3. Have the other characteristics (foliage or bloom color, season of bloom, etc.) you desire.

Then, ask your local supplier about the availability of the various plants you have selected. Selecting plants by hardiness, size, and shape allows you to make substitutions without fear of spoiling your plan in case the plant you originally wanted is not available.

Spacing of Trees

To have a continuous canopy, plant trees three-fourths of their listed mature spread apart. This will allow the trees to intermingle their upper branches without interfering with their growth.

If trees are to stand alone, or be viewed as specimens, they must be planted a little farther apart than their listed spreads. This will give them sufficient room to develop a full crown without interference.

Trees may be planted quite close (within 3 or 4 feet) to buildings, but they will grow into a somewhat distorted form for many years. The side of the tree that is next to the building will not develop, and the tree will be "one-sided." If the tree eventually grows up above the interfering structure, the top will often round out naturally, and the finished effect will be that of building the structure right next to and under the tree's canopy. Remember, this effect may take 20 to 40 years.

Trees are normally planted at least 20 feet from buildings to ensure normal crown development.

Tree roots do not seek out and plug sewer or water lines. However, tree roots grow much faster when they encounter the extra moisture and/or fertilizer from leaky or cracked water and sewer lines. Soon, an individual rootlet will find its way through the leak or crack. Then, the root grows at an accelerated rate, and the normal swelling of the growing root breaks the line and the rapid growth of rootlets plugs it up. Since people can't see the original leak down under the ground, the tree is blamed for breaking the line.

Neither do trees deliberately break foundations. If a foundation has excess moisture around it because of bad drainage, tree roots will grow rapidly into the wet area.

Some trees (for example, soft or silver maple) develop massive brace roots. If such a tree is planted too close to a sidewalk, the normal root development will raise and break the sidewalk.

Common sense suggests that trees that are known to plug water lines should not be planted where there are underground water or sewer lines. But, don't blame a tree if it clearly demonstrates that your water or sewer line was already leaky.

Spacing of Shrubs

It is wise to plant shrubs a little more than their full spread away from a building. This allows natural branch development. It also allows a little space next to the building for normal maintenance without injuring the shrubs.

Shrubs make excellent snow fences. Think twice before planting a hedge or line of shrubs too near the north or west side of a driveway or sidewalk. Your summertime "thing of beauty" might keep you busy all winter shoveling big snowdrifts.

Planning Shrub and Flower Borders

Shrub Borders

Shrub borders are used as background and screen for privacy for outdoor living. Plants in a shrub border should be varied in height, texture, and numbers. As indicated in the diagram the tallest shrubs should be selected because they will look well together and be interesting throughout the year (when in bloom, in fruit, in fall color, and in the winter without foliage). Small ornamental trees, such as crabapples, tree lilacs, hawthorns, and/or large shade trees, may be planted in front of the border for added interest and contrast in size and form and to provide shadow patterns on the lawn.

A fence with vines on it or a clipped hedge may be substituted for an informal shrub

border. If the grounds are small, usually a fence is the best enclosure. Individual shrubs and/or flowering trees may be put in at focal points to add interest along a fence or hedge. Flowers may be planted in front of shrub borders, hedges, and fences.

Flower Borders

Flowers usually look best when arranged in borders either along a boundary line fence, hedge, or shrub border, or in an enclosed garden and with an adequate foreground to provide attractive color combinations throughout the growing season. Plant in groups of several of one variety. Plant those with good foliage in front of those with poor foliage. White and yellow blooming flowers reflect sunlight and moonlight, which gives a border added interest and sparkle. The diagram gives a suggestion for a repeat unit for a border.

Wildlife Plantings

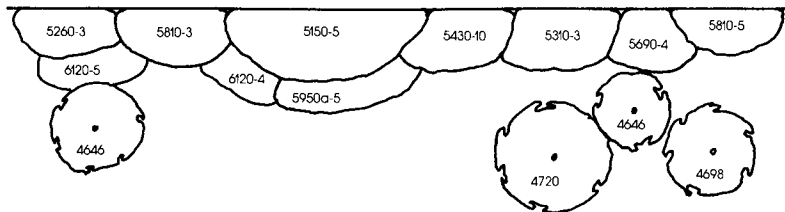
The seeds and berries produced by many plants are valuable foods for wildlife. A great variety of wildlife will be attracted to areas with a diversity of plants that provide food and cover. Vertical diversity is just as important as horizontal diversity. Different animals feed and nest at different heights in vegetation. Try to plant some desirable vegetation that is not already available nearby. Ideal plantings should include plants of all sizes that are beneficial to wildlife and also provide an appealing landscape design.

Plantings Near Solar-Heated Buildings

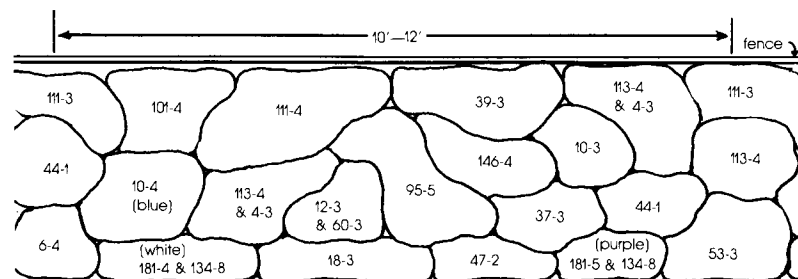
Tree and shrub plantings must be planned very carefully near solar-heated homes. Before planting any woody plants near a solar home, get advice from a landscape architect, a building architect with solar experience, or an independent solar consultant. The "solar window," which is an area of the southern sky that the sun travels in during the year, must be kept clear. The exact location of this window depends upon your location and upon the exact location and orientation of your solar collection devices. Ideally, it should be calculated on site for your individual situation before any plantings are made.

In general, it is fairly safe to plant trees outside a pair of lines extending 45 degrees from the southern corners of the building. This roughly corresponds to the location of the solar window, which should be kept clear.

Shrub border



Flower border



The Plant Catalog

The catalog section of this publication is designed to help you select plants that fit properly into your landscape, will grow successfully in your site, and will meet other requirements.

Plants are listed in groups. First, they are grouped by ultimate size.

This allows you to go immediately to the section of the catalog that lists only plants that grow to the size you wish. For example, Large Deciduous Trees lists the really big shade trees. Small Ornamental Trees lists only small trees (such as redbud and flowering crabapples) suitable for limited spaces.

The Key can be used on planting plans instead of the plant's name. This allows a significant savings in space. The key numbers in this edition of *Landscape Plants for Iowa* are new. They are not interchangeable with key numbers in earlier editions of Pm-212.

More than one name is given for each plant. The first name is the scientific or botanical name. Beneath the botanical name are one or more common names.

Different plants sometimes share similar common names. This is why the botanical name is given. Each plant has only one botanical name that is accepted throughout the world. It is wise to use both common and botanical names when buying plants to ensure that you get the plant you expect. It could be quite disappointing to find out, years after planting, that a plant was not at all what you expected. This could happen when you rely on only the common name.

When possible, popular cultivars are listed with their characteristics. Cultivar is the accepted name for man-made "cultivated varieties" of trees, shrubs, and other plants. Cultivar information will be updated in future editions.

Next, the growth rate and the usual ultimate size and spread are given for all plants except the smaller shrubs. This information also will be updated in future editions.

The description section gives additional information such as seriously disfiguring, life-threatening diseases and/or insect pests, fall color, flowers (and the color and the time of bloom), unusual foliage, or any special site requirements.

This publication is intended to give enough information to make plant selection fairly simple and easy. No catalog listing of plants can contain all possible plants, and only a small amount of information can be included. Users are encouraged to consult other sources of information and to consult with their local Iowa certified nurseryman, forester, arborist, or licensed professional landscape architect before making final decisions. Some additional sources of plant information are listed in Appendix A.

Explanation of Terms

Growth Rate

The average growth rate of the plant under average to good conditions indicates how rapidly a similar plant may grow, with good soil, weather, and post planting care.

The actual growth rate of a plant depends upon many factors. A plant grown at the very limit of its hardiness range or grown in poor soil or with too little (or too much) water will not grow as fast as a similar plant growing under ideal conditions. A plant that has been carelessly handled during digging and packing will not grow as well as a plant that has been carefully dug and properly cared for before transplanting. Similarly, improper or careless handling of a plant during or after transplanting can severely reduce its growth rate or even cause it to die.

Size

The expected ultimate height and spread of the plant at maturity constitute size.

Large trees may take from 40 to 100 years to attain their ultimate height. Smaller species may mature in 20 to 30 years, while shrubs may be considered mature in from 10 to 30 years.

Even with the wide variation in growth rates and ultimate sizes, it is wise to carefully consider the ultimate size of all landscape plantings. For example, planting a sycamore where a redbud should be used will ultimately result in a tree that is grossly out of proportion to its surroundings. A small flowering crabapple (for example, sargent) would never grow large enough to serve satisfactorily as a street tree. Always select plants that will ultimately fit the space allotted to them.

The ultimate size of a plant also depends upon the site and conditions under which it grows. A plant growing on the extreme edge of its hardiness zone, or growing with poor soil or too little (or even too much) water, will not attain the same size as a similar plant grown under good conditions.

Hardiness

A statement such as "Hardy Zone 5b" refers to the U.S. Department of Agriculture plant hardiness zones illustrated in the plant hardiness zone map (inside back cover). A plant hardiness zone is an area where a particular range of winter temperatures (such as -10 to -15 degrees F.) can normally be expected. Although other factors are also involved, the minimum winter temperature is the most significant factor in determining whether a plant will thrive, just survive, or perish during the winter.

Microclimate effects also may significantly increase or decrease a plant's chance of success in any landscape planting. For example, a courtyard sheltered by two-story buildings on the north, east, and west but open to the south might be warm and protected during the winter for a normally nonhardy small tree to grow quite nicely. Or, a tree that would grow well on average sites might not survive if planted on the top of a windy hill with no protection.

Other Characteristics

This information, though not complete, is to help you select plants suited to your requirements. Complete information would take perhaps a page per plant. Users are encouraged to consult other sources of information before making final plant selections. Local Iowa certified nurserymen, foresters, arborists, botanists, and landscape architects could be consulted to be sure that the selected plants are suitable for the intended purpose and can be expected to do well in your area.

large evergreen trees

40 to 100 feet tall at maturity



2000	Abies balsamea Balsam fir	slow	40' x 25'	Cold Hardy Zone 4. Requires neutral to acid soil. Worth a try on cool, moist soils with a north slope. Experimental in Iowa.
2010	Abies concolor White fir Concolor fir	medium	50' x 30'	Hardy Zone 4 in Iowa. Color often resembles Colorado blue spruce, but concolor fir is considerably more adaptable. Very hardy and desirable. Soft appearing. Very few problems. Cone-shaped. Does best in well-drained soils but does not tolerate polluted air. Reliable and generally recommended.
2020	Picea abies Norway spruce	fast	80' x 40'	Hardy Zone 3. Very fast growth in moist soils. Distinctive pendulous branchlets. Dark green, cone-shaped, large evergreen.
2030	Picea engelmanni Engelmann spruce	slow	45' x 20'	Cold Hardy Zone 3. Does well in moist, acid, clay-loam soils in full sun. Shallow-rooted and does not tolerate wind. Not very drought or heat tolerant. Will not tolerate dry, alkaline soils. Experimental in Iowa.
2040	Picea glauca White spruce Skunk spruce	slow	50' x 25'	Hardy Zone 2. Does best in moist, well-drained, gravelly soils. Very narrow cone when young; spreads and becomes rather pyramidal when mature. Quite tolerant to Iowa's hot, dry summers. Needles give a very distinctive, slightly skunky odor when crushed.
2040a	Picea glauca densata Blackhills spruce	slow	40' x 25'	Hardy Zone 2. This popular cultivar is more dense than the species and is darker green. Otherwise identical. Better adapted to western Iowa than white spruce. Ornamentals are often heavily infested with pine needle scale.
2050	Picea omorika Serbian spruce	slow	60' x 25'	Hardy Zone 4. Quite cold tolerant when grown in reasonably moist, well-drained soils. Quite tolerant to polluted air and cold dry winds. Sometimes misnamed Siberian spruce. Several named cultivars are available. Should do very well in Iowa, but we have little experience with Serbian spruce at present.
2060	Picea pungens Colorado spruce	slow	40' x 25'	Hardy Zone 3. Generally quite adaptable to differing soils, but clearly prefers moderately rich, moist, well-drained, gravelly soils. Loses lower limbs when mature. Cytospora canker, a serious disease, is common on older specimens.
2060a	Picea pungens glauca Colorado blue spruce	slow	40' x 25'	Hardy Zone 3. Basic characteristics of Colorado blue spruce are identical to the species. Colorado blue is only a name for individual plants that show a distinct blue color. Such plants may be selected from random seedlings or carefully propagated from cuttings from specially selected trees.
2060b	Picea pungens glauca cv. Colorado blue spruce cultivars	slow	40' x 25'	Some named cultivars include argentea, with silver-white needles; hoopsii, densely pyramidal with silvery gray needles; koster, with drooping branches and brightly silvered needles; and moerheim, with noticeably brighter silver-blue needles than the parent species. Other cultivars are sometimes available.
2070	Pinus banksiana Jack pine	slow	75' x 25'	Hardy Zone 4. Jack pine is most often planted for wildlife or erosion control. Somewhat open and loose appearing at maturity, jack pine is extremely hardy, especially on dry, sandy soils. Not a good lumber tree. Rather oval in outline at maturity. Rather short-lived.

key name

growth rate

height and spread

description

2080	Pinus cembra Swiss stone pine	slow	40' x 25'	Hardy Zone 4. Shaped like a narrow pyramid. Generally adaptable, but little used. Worth trying on an experimental basis.
2090	Pinus densiflora Japanese red pine Umbrella pine Japanese umbrella pine	slow	35' x 25'	Hardiness uncertain. Selected strains have been hardy into Minnesota, but with winter needle burn. A very picturesque-shaped tree. Well worth a try. Experimental at present.
2100	Pinus flexilis Limber pine	slow	40' x 30'	Hardy Zone 4. Narrow pyramid when young, but quite broad and round-topped with age. May winterburn when young. Branches are extremely flexible and rubbery when young. An interesting tree. Worth a try as a specimen or in mass plantings. Experimental.
2110	Pinus nigra Austrian pine Austrian black pine	medium	60' x 50'	Hardy Zone 4. Readily adaptable to almost all conditions, but does not tolerate soggy soil. Tolerates polluted air quite well. Pyramidal when young, flat-topped when old. Does not tolerate reflected heat from buildings or pavements. Can be badly damaged by various needle diseases that make it drop its foliage and may kill the tree. Also a favored host for pine needle scale, a sap feeding insect that causes varying amounts of damage. Sapsucker, a species of woodpecker, often damages the tree by drilling many holes in the bark of the trunk.
2120	Pinus ponderosa Ponderosa pine Western yellow pine Bull pine	fast	80' x 40'	Hardy Zone 3. A very large tree. Pyramidal when young, irregularly cylindrical when mature. Good as a large specimen, in mass plantings, or in windbreaks. Often damaged by needle diseases.
2130	Pinus resinosa Red pine Norway pine	medium	50' x 25'	Cold Hardy Zone 3. Norway was the name of a small town in Maine where a large number of this native pine was cut for lumber. Readily adaptable to most soils, but does best in moist, well-drained soils. Tolerates air pollution but does not tolerate salt. Does not tolerate hot, dry winds. Has red bark and is a broad, open pyramid when young, but a dense, symmetrical oval when mature. Sapsucker (see 2110) is a pest.
2140	Pinus strobus White pine Eastern white pine	medium	75' x 50'	Hardy Zone 3. Transplants easily. Grows well in almost any rich, moist soil, but does best in moist, sandy loams. Its shape is a soft appearing, narrow cone when young, with tiered branches. Becomes broadly irregular with age, with the lower trunk and branches bare. Can become quite picturesque. Several cultivars occasionally are available. Susceptible to white pine blister rust. The alternate hosts for this disease are gooseberries and other Ribes species. Will not tolerate air pollution or salt. Also bothered by the pine needle scale.
2150	Pinus sylvestris Scots pine Scotch pine	fast	60' x 50'	Hardy Zone 3. Widely adaptable, handsome tree with orange bark on younger trunks and branches. An open pyramid when young, becoming broadly oval or irregular and round-topped with age. Tolerates air pollution. At least one cultivar, sentinel, can sometimes be found. Frequently infested with pine needle scale. Sapsucker (see 2110) can be a pest.
key	name	growth rate	height and spread	description



2160	Pinus thunbergiana Japanese black pine	medium	40' x 20'	Hardy Zone 5. Crooked and asymmetrical at all ages. Roughly pyramidal, but irregular. Tends to be quite picturesque. Tolerates salt, cold winds, and dry soils, but is normally grown in climates with moist winds. Worth a try if you want something unusual. Experimental in Iowa.
2170	Pseudotsuga menziesii (Pseudotsuga taxifolia) Douglas fir	medium	80' x 40'	Hardy Zone 5. Authorities differ on hardiness; some have hardiness listed as Zone 4. Seems to do quite well in all of Iowa if grown in well-drained, good soils with adequate moisture. Will not tolerate soggy soils. Usually grows into a broad, dense cone. Large cones often are used as Christmas decorations. At least one cultivar, fastigiata, is occasionally available. Trees on poor sites may be prone to Swiss needlecast disease.
2180	Tsuga canadensis Canada hemlock Eastern hemlock	medium	70' x 40'	Hardy Zone 3. Broadly pyramidal, dense, feathery appearing, but dark green evergreen. Theoretically very hardy, but seems to do best in Iowa in cool, moist sites protected from hot summer winds. Several cultivars available, with hardiness and adaptability often much different from the species. Best used as either an unusual specimen or in groups in protected locations.
2180a	Tsuga canadensis 'Pendula' Weeping dwarf hemlock	medium	not known	Hardy Zone 3. This cultivar is weeping in habit and seems to be hardier than the parent. Worth experimenting with if you want something different.
2190	Tsuga caroliniana Carolina hemlock	medium	40' x 20'	Hardy Zone 5. The shape is a graceful, compact cone. Tolerates polluted air but requires acid soil, which severely limits its use in Iowa. Dark, red-brown bark. Experimental.

key

name

growth
rate

height
and
spread

description

medium evergreen trees
15 to 40 feet tall at maturity

2200	Ilex opaca American holly	not applicable	not applicable	Hardy Zone 6. Not hardy anywhere in Iowa. Listed because it is listed in catalogs. Expert gardeners in southeast Iowa sometimes keep a woebegone specimen alive for a few years.
2210	Juniperus chinensis Chinese juniper	fast	20' x 8'	Hardy Zone 4. Tolerates very poor soils, considerable dryness, and some shading. Better known as the parent of many cultivars. Susceptible to damage from some herbicides.
2210a	Juniperus chinensis cv. Columnaris Blue columnar juniper	fast	20' x 6'	Hardy Zone 5. Blue columnar juniper is a good description of this old, well-known cultivar. Foliage is dense, silvery bluish green, mostly juvenile and prickly. Narrowly columnar in shape. Some authorities feel this cultivar is hardy for all of Zone 4.
2210b	Juniperus chinensis cv. Keteleer juniper	medium	15' x 6'	Hardy Zone 5. This well-known, old cultivar forms a loosely dense pyramid with generous annual fruiting of 1/2-inch, gray-green cones.
2210c	Juniperus chinensis cv. Fairview juniper	medium	15' x 5'	Hardy Zone 5. Reported to be free of cedar-apple rust, but this cannot be confirmed at this time. Is a dense, blue-green cone that is reported to shear quite well.

2210d	Juniperus chinensis cv. Ames juniper	slow	15' x 5'	Hardy Zone 4. Named after Ames, Iowa, this very hardy cultivar is quite dwarfed when young, but later begins to grow much faster and matures normally. Its colorful blue-green foliage in spring turns to plain green as summer progresses.
2210e	Juniperus chinensis cv.	medium	not known	Many other named cultivars are known. Consult your Iowa certified nurseryman. Examples of other upright cultivars of the Chinese juniper include perfecta, Iowa, mountbatten, obelisk, tortuosa, and many others.
2220	Juniperus scopulorum Rocky mountain juniper	medium	30' x 10'	Hardy Zone 3. Does best on well-drained, average soils. Very drought tolerant. Alternate host to cedar-apple rust, but many cultivars are reported to have resistance to this disease. Subject to phomopsis blight on soggy wet soils. Narrowly upright and dense when young. Matures to a broad pyramid. Often loses its lower limbs with age. Many cultivars available.
2220a	Juniperus scopulorum cv. Welchii Welch juniper	medium	15' x 5'	Hardy Zone 4. The Welch juniper grows into a narrow, upright, dense, bluish-green cone. Needs little pruning.
2220b	Juniperus scopulorum cv. Blue haven juniper	medium	15' x 5'	Hardy Zone 4. Sometimes listed as blue heaven. Is a neat pyramid with dense, deep, blue-green leaves.
2220c	Juniperus scopulorum cv. Moffett juniper	medium	15' x 5'	Hardy Zone 4. Requires full sunlight or only very light shade. Pyramidal shape with a heavy base. Mixed green and silver color.
2220d	Juniperus scopulorum cv. Sutherland juniper	slow	15' x 5'	Hardy Zone 4. Forms a narrow, bright green pyramid that requires very little shearing. There are many more cultivars. Consult your Iowa certified nurseryman.
2230	Juniperus virginiana Eastern redcedar Red cedar	medium	40' x 15'	Hardy Zone 3. Very hardy and tough. Grows in almost any soil. Freely seeds itself and may come up almost anywhere. Well-known alternate host of cedar-apple rust. Fairly dense, fast-growing pyramid with ascending branches when young. Growth slows greatly, and tree becomes very open when old. Dull brown color in winter. Not too popular; still, its extreme hardiness highly recommends its use for backgrounds, specimens, and windbreaks. Many cultivars are available. Its fragrant, red heartwood is often used in cedar chests. Has light red-brown to gray bark that peels in slender, fibrous, vertical strips.



key

name

growth rate

height and spread

description

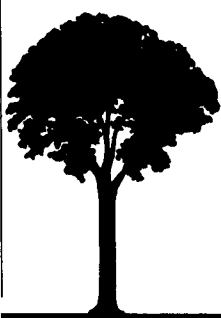
2230a	Juniperus virginiana 'burkii' Burk redcedar	medium	20' x 6'	Hardy Zone 4. A male cultivar that grows into a narrow, dense pyramid with steel blue foliage that turns purplish in winter.
2230b	Juniperus virginiana cv. Canaerti Canaert redcedar	medium	20' x 10'	Hardy Zone 4. A generously fruiting female cultivar that grows into an erect cone. Foliage is yellow-green in summer, turning deep green in winter. Its branches are open and tufted at the ends, giving the tree a tiered appearance. This is the only juniper so shaped.
2230c	Juniperus virginiana cv. Glauca Silver redcedar	medium	30' x 6'	Hardy Zone 4. A narrowly columnar, dense cultivar. Has very gray leaves; hence the name, silver.
2230d	Juniperus virginiana cv. Hilli Hill juniper Dundee juniper	medium	20' x 6'	Hardy Zone 4. The hill cultivar, also known as the dundee juniper, grows into a tight cone with slightly prickly, gray-green summer foliage. Winter foliage is plum-colored.
2240	Pinus bungeanus Lacebark pine	slow	30' x 20'	Hardy Zone 5. This rather rare pine has very distinctive, quite beautiful, multicolored, peeling bark. The needles are held for 5 years, giving the branches a rather open, bottlebrush appearance. Quite plain and ordinary at a distance, spectacular up close. Best used as a specimen where the extraordinary bark can be easily seen. Size is estimated, based upon a few specimens at Iowa State University.
2250	Taxus cuspidata capitata Japanese yew	medium	20' x 8'	Hardy Zone 5. Under ideal conditions may grow much larger than indicated. Does best on deep, moist, well-drained soils. Will winterburn badly if exposed to dry, cold winds and sun at the same time.
2260	Thuja occidentalis Eastern arborvitae American arborvitae White cedar and other names	medium	40' x 10'	Cold Hardy Zone 3. Perhaps because of alkaline soils and dry winter winds, does poorly and winterburns badly over much of Iowa. Does best in Zone 5b in Iowa, but is satisfactory in other areas when grown in rich, moist soils and/or protected locations. Many cultivars are available. Only a few listed.
2260a	Thuja occidentalis 'pyramidal' Pyramidal arborvitae	medium	20' x 4'	Hardy Zone 5. Culture requirements are identical to the species. The common name is odd because this is a very cylindrical cultivar. Known as "cemetery tree" in some sections of eastern Iowa because of the large numbers planted in cemeteries years ago. When hardy, makes an excellent specimen. Can be used for very dense background plantings, privacy fences, or as an excellent windbreak. Generally recommended where hardy. Many cultivars are available. Some are trees, others are regarded as shrubs.
2260b	Thuja occidentalis cv. Techny Techny arborvitae	medium	25' x 8'	Hardy Zone 5. This cultivar is quite hardy and grows rapidly into a bright green, narrow cone. Has soft foliage that is easily pruned into a very regular, formal shape. This and the cultivar nigra are the only arborvitae we know of that can be relied upon to develop only one leader. Thus, it does not break with heavy wet snows. A very good arborvitae.
2260c	Thuja occidentalis cv. Wareana arborvitae Ware arborvitae Siberian arborvitae	slow	20' x 10'	Hardy Zone 5. This popular cultivar grows slowly into a dense, bright green pyramid. Very hardy and has the reputation of not suffering from winterburn nearly as much as the species.
2260d	Thuja occidentalis cv.	medium	not known	Hardy Zone 5. Many cultivars are available. Consult with your Iowa certified nurseryman for cultivars and availability. Some commonly available cultivars include alba, douglasii, elegantissima, lutea (George Peabody), nigra, and pendula.
key	name	growth rate	height and spread	description



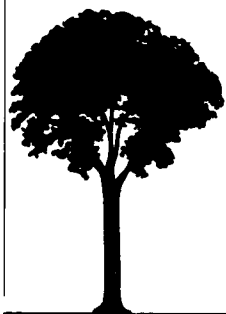
very large deciduous trees
75 to 100 feet tall at maturity

3000	Acer saccharinum (dasycarpum) Silver maple Soft maple White maple River maple	very fast	100' x 75'	Hardy Zone 3. Very hardy, fast-growing native tree, that, after 50 years of age, often develops heart rots that seriously weaken the tree. Weakened trees shed large limbs that can blow down on cars, houses, or power lines. It also is affected by maple bladder galls, which form red bumps on the upper leaf surfaces, that are esthetically displeasing, but are harmless. Despite its faults, there is no better fast-growing, hardy tree. Several cultivars are available.
3000a	Acer saccharinum cv. Blair soft maple	very fast	100' x 75'	Hardy Zone 3. This well-established cultivar has 90-degree crotches that are very strong. As a result, it is much more storm-resistant than the species. Recommended. Will get very large at maturity.
3000b	Acer saccharinum cv. Silver queen soft maple	fast	75' x 60'	Hardy Zone 3. A male cultivar with no seeds to sprout in flower beds. Very round mature shape. Many other named cultivars occasionally are available.
3010	Acer saccharum Sugar maple	medium	80' x 50'	Hardy Zone 3. This large native maple does best in deep, rich, evenly-moist, well-drained soils that are moderately acid such as in the eastern edge of Zone 5 in Iowa. Depending upon local soil chemistry and moisture, sugar maple may vary greatly in height and length of life.

3010a	Acer saccharum cv. Green mountain ash	medium	75' x 50'	Hardy Zone 5 in Iowa. This cultivar has an oval crown and leathery, dark green foliage. Little experience in Iowa, but the heavy foliage might indicate tolerance to our dry summers. Experimental.
3020	Fraxinus americana (alba) White ash	medium	80' x 60'	Hardy Zone 4. This large native ash grows best in full sun on deep, rich, constantly-moist soil. Its purple fall color allows a novice to tell it from green ash, which has yellow fall color. Is somewhat brittle in windstorms. Male and female trees are available. Only females have seeds. Large (1/2 inch) irregular galls form on the staminate (male) flowers. They are harmless, but rather conspicuous, especially in winter.
3020a	Fraxinus americana cv. Rosehill ash	fast	70' x 50'	Hardy Zone 4. A fairly recent cultivar with sturdy branches and a distinct bronze-red fall color. Tolerates low fertility alkaline soils better than the species. A seedless male cultivar.
3020b	Fraxinus americana cv. Autumn purple ash	medium	70' x 50'	Hardy Zone 4. Another seedless male cultivar with distinct deep purple fall color. We have heard reports that this cultivar sometimes suffers from graft incompatibility, which girdles the tree at the soil line and kills it. This may be caused, or at least aggravated, by planting the young tree too deeply, so the graft is below the soil line.
3030	Juglans cinerea Butternut	slow	80' x 50'	Hardy Zone 3. Most often planted for its nuts, this still is a fairly good shade tree. Requires good soil and consistent moisture. A relatively new disease or group of diseases known as butternut decline is seriously injuring or killing the native stands of butternut in the eastern states. We do not know how this might affect butternuts in Iowa, but we believe it is a serious threat and will probably eliminate butternut as a native timber tree.



key name growth rate height and spread description



key	name	growth rate	height and spread	description
3040	Juglans nigra Walnut Eastern walnut Black walnut	fast	100' x 60'	Hardy Zone 4. Native. Often planted for reforestation purposes, this fairly fast-growing hardwood does best in deep, rich, well-drained soils. A fair shade or lawn tree, but the nuts are not always wanted. (Unfortunately, the tree does not know this and produces and drops them anyway.) The leaves and roots produce a plant poison that may kill or reduce the growth of plants within the drip zone of the crown. Is frequently defoliated in late summer by the walnut caterpillar. Fungal leaf spot diseases may be a problem, especially in wet seasons.
3050	Juglans regia English walnut Persian walnut Carpathian walnut	medium	80' x 40'	Hardy Zone 5. A fairly large, broadheaded tree at maturity. Needs soils similar to native black walnut, but is not as hardy. Only the Carpathian strain (grown from seeds of a local strain found in the Carpathian mountains) should be tried in Iowa. Fairly reliable in Zone 5, experimental in Zone 4.
3060	Liquidambar styraciflua Sweet gum American sweet gum Red gum	medium	80' x 50'	Hardy Zone 6. Becomes a huge tree in southern states. Distinctive star-shaped leaves. Beautiful scarlet to purple to gold fall color. Best chance of success in Iowa in deep, very rich, moist soils in protected river valleys in Zone 5b. Worth trying in such sites. Experimental elsewhere.
3070	Liriodendron tulipifera Tulip tree Tulip poplar Yellow poplar	fast	100' x 80'	Hardy Zone 5. This is one of North America's largest trees when grown in deep, rich, neutral to acid soils with consistent and plentiful moisture. Not recommended for street tree use because of high moisture requirements. Best in Iowa in deep, rich soils in Zone 5b. Worth trying in selected good sites in Zone 5a in Iowa. Experimental elsewhere. Its name describes its large, yellow, tulip-shaped flowers that are so far up in the air on mature trees they can barely be seen.
3080	Metasequoia glyptostroboides Dawn redwood	very fast	75' x 25'	Hardy Zone 5. Extremely fast-growing where successful. Tolerates mildly alkaline soils, but is much hardier and grows best on deep, mildly acid, rich, well-drained, moist soils. Makes a beautiful and interesting specimen tree. Suggested for use on good sites in Zone 5b in Iowa; experimental in Zone 5a.
3090	Platanus occidentalis American planetree Sycamore Buttonwood	medium	100' x 50'	Hardy Zone 4 in Iowa. Fully hardy in Zone 5. Success in Zone 4 in Iowa depends upon seed source and soil conditions. If the seed is from northern trees, and the soil is good, this very large, spreading to rounded, open-shaped tree does quite well. Known for its unique, creamy white to gray peeling bark. Suffers badly from anthracnose, a fungus disease, in cool, wet springs. Nearly always infested with lace bug, which causes a bleached appearance on the leaves, but is not fatal.
3100	Populus alba White poplar (sometimes called silver maple, which is very wrong)	very fast	100' x 60'	Hardy Zone 3. Very hardy and adaptable with very fast growth. Has beautiful, round, spreading crown. Undersides of leaves are coated with bright white hairs. Shimmers in the wind. Most trees send up hundreds of suckers. Its roots invariably grow into leaky water and sewer lines. Recommended where this can be tolerated.
3110	Populus deltoides Eastern poplar	very fast	100' x 60'	Hardy Zone 3. Very hardy, fast-growing, huge tree with broad crown. Beautiful golden yellow fall color. Tolerates drought because its roots go deep for water. Somewhat brittle, it can be damaged by severe storms. Disliked for the "cotton" surrounded seeds the female trees freely scatter. Several cultivars are available, including seedless "cottonless" male trees. Too large for most home grounds and many other sites.

3110a	Populus deltoides cv. Robusta cottonwood	very fast	80' x 50'	Hardy Zone 3. This seedless male cultivar is extremely fast growing and has an upright shape.
3110b	Populus deltoides cv. Siouxland cottonwood	very fast	80' x 50'	Hardy Zone 3. Another very fast-growing male cultivar, but this northern selection has larger, greener leaves than the species. Quite uniform in shape and very hardy.
3110c	Populus deltoides cv. Cottonless cottonwood	very fast	80' x 50'	Hardy Zone 3. The term "cottonless" can refer to almost any male selection. Several cultivars are not listed for lack of space but most are similar to the species.
3120	Populus canadensis 'eugenei' Carolina poplar	very fast	80' x 40'	Hardy Zone 5. A very fast-growing, seedless poplar. Beautiful bright gold fall color. Oblong shape with quivering foliage.
3130	Quercus alba White oak	slow	80' x 60'	Hardy Zone 4. A very large, wide-spreading native oak. Very deep rooted and hardy. Transplant only young trees because older trees are very difficult to move. Very sensitive to compaction and other root damage. Such stress leads to secondary attack by the two-lined chestnut borer, a cause of death with no cure—only prevention. Fall color varies from brown to rich burgundy reds. Some leaves often hang on all winter. An excellent lawn, shade, or street tree. Extremely long lived.
3140	Quercus borealis Northern red oak Red oak	medium	80' x 60'	Hardy Zone 4. A very large, spreading native oak. Quite fast growing for an oak. Oval in shape at maturity. Bright red fall color. An excellent lawn, shade, or street tree.
3160	Tilia platyphyllos Bigleaf linden	medium	100' x 50'	Hardy Zone 5. A rather coarse foliaged, very large, pyramidal tree with fragrant flowers in early summer. Yellow fall color.
3170	Ulmus americana American elm	medium	100' x 80'	Cold Hardy Zone 3. American elm is listed for information only. A few isolated specimens still exist and regularly produce seeds. There is always hope that Dutch elm disease, which almost extinguished this beautiful vase-shaped native tree, will be overcome.
3170a	Ulmus americana 'molini' Moline elm	medium	80' x 50'	Cold Hardy Zone 3. This cultivar was reputed to be somewhat resistant to Dutch elm disease. It was distinctly rounded in shape. Not recommended because of Dutch elm disease.
3180	Ulmus carpinifolia cv. Christine Buisman elm	medium	70' x 50'	Cold Hardy Zone 4. Another cultivar that was hoped to be resistant to Dutch elm disease. Most specimens succumbed. This cultivar was oval in shape, and did not resemble the American elm it was intended to replace. Not recommended.
3190	Zelkova serrata Japanese zelkova Saw-leaved zelkova Japanese keaki tree	medium	75' x 70'	Hardy Zone 5. Often cited as a replacement for the American elm but is more squat and round in outline. Transplants easily into deep, rich, evenly-moist soil. Grows quite fast in good soils when young. Has attractive, flaking bark quite similar to Ulmus parvifolia , the true Chinese elm. A very adaptable, handsome tree that should be used more in Zone 5. Generally recommended.
key	name	growth rate	height and spread	description

large deciduous trees

60 to 75 feet tall at maturity



3200	Acer nigrum Black maple	medium	75' x 60'	Hardy Zone 4. Native. A close relative of sugar maple, but much hardier, especially in Iowa's predominately alkaline, dry conditions. Does well in poor, dry soils, but grows faster in good soils with plenty of moisture. Beautiful red to bright gold fall color. Oval-shaped dense crown. An excellent lawn, shade, or street tree. Generally recommended.
3210	Acer platanoides Norway maple	medium	75' x 30'	Hardy Zone 4. Tolerates poor soils and air pollution, but does very poorly in dry soil with hot, dry summer winds. Rather showy yellow flowers in mid-spring. Poor fall color that develops very late. Broken off leaf petioles ooze a milky sap, which is a positive identification of Norway maple and its many cultivars.
3210a	Acer platanoides cv. Crimson king maple	medium	50' x 30'	Hardy Zone 4. This cultivar keeps its deep purple-red leaf color throughout summer. Very susceptible to sun scald and bark splitting in winter. Often suffers transplant shock.
3210b	Acer platanoides cv. Schwedler maple	medium	45' x 30'	Hardy Zone 4. Leaves are bright red when they come out in spring, but rapidly turn to an ordinary green.
3210c	Acer platanoides cv. Harlequin maple	medium	50' x 30'	Hardy Zone 4. A round-headed cultivar with distinct variegated leaves with light yellow margins. Occasionally may grow some plain leaves that should be promptly removed.
3210d	Acer platanoides cv. Columnar maple	medium	50' x 20'	Hardy Zone 4. A very narrowly columnar cultivar. Develops quite a noticeably twiggy, narrow, cone-shaped outline at maturity.
3210e	Acer platanoides cv. Summershade maple	fast	60' x 35'	Hardy Zone 4. A very rapidly-growing cultivar with deep green, large, leathery leaves. We have little experience with it, but it may be more tolerant of hot summer winds than other cultivars. Worth experimenting with in areas of Iowa where other cultivars fail.
3210f	Acer platanoides cv. Emerald queen maple	medium	45' x 30'	Hardy Zone 4. An emerald green, upright cultivar with ascending branches.
3210g	Acer platanoides cv.	medium	not known	Hardy Zone 4. There are many more named cultivars of Norway maple. Some examples are fassens red, Cleveland, royal red, and jade glen.
3220	Acer rubrum Red maple Scarlet maple Swamp maple	medium	70' x 40'	Cold Hardy Zone 3. Found native on swampy, acid soils or slightly acid, sandy loams with plenty of moisture. This very desirable tree should not be planted on tight, dry clay or alkaline soils. Buds and new leaves are bright red, immediately turning clear green. Excellent brilliant red fall color on acid soils. Frequently bothered by maple bladder gall, which causes red bumps on the upper surfaces of the leaves. Although esthetically displeasing, the gall is harmless. Many cultivars are available.
3220a	Acer rubrum cv. Autumn flame maple	medium	50' x 35'	Hardy Zone 3. A typical cultivar. Excellent fall color, slightly smaller than the parent species.
3220b	Acer rubrum cv. October glory maple	medium	60' x 35'	Hardy Zone 3. A typical red maple cultivar. Bright red fall color. Bark splitting sometimes is a problem in winter.
3220c	Acer rubrum cv. Armstrong columnar maple	medium	60' x 20'	Hardy Zone 3. A very columnar-shaped cultivar with very poor fall color.
3220d	Acer rubrum cv.	medium	60' x 40'	Hardy Zone 3. There are many more cultivars of red maple. Consult your local Iowa certified nurseryman for additional information.

key name

growth rate height and spread

description

3230	Alnus glutinosa European alder Black alder	fast	50' x 30'	Hardy Zone 4. Grows vigorously in rich soils. Extremely tolerant of wet soils. Oval in form, becoming open and somewhat rounded with maturity. Prominent catkins in April. Often grown for firewood because of its extremely rapid growth, this tree is underused in the landscape. Worth a try, especially in wet, soggy soils. May winterkill, but the various cultivars seem to be hardy.
3240	Betula lutea (pumila) Yellow birch	medium	60' x 40'	Hardy Zone 3. Native to Iowa, but very rare. Rounded to spreading crown with distinctly drooping branches. Best in moist, well-drained upland soils. Twigs and buds have a wintergreen flavor. Shiny, yellow-orange-gray bark that sometimes peels in thin layers. Rusty yellow fall color, the catkins remain in winter.
3250	Carya glabra Pignut hickory	slow	80' x 35'	Hardy Zone 5. Native on dry, upland soils. Has smooth bark and forms a tall, narrow crown with drooping branches. The nut meats are very bitter. Best used for reforestation in far Southeast Iowa. Interesting if you want something unusual.
3260	Carya illinoensis Pecan	slow	70' x 50'	Hardy Zone 5. Does best in deep, rich soils in protected locations in Zone 5b in Iowa. Normally found in bottom-land soils near streams. Becomes a huge tree in states south of Iowa. Plant only trees grown from northern seedstocks. If hardier seed stocks were developed, the sweet nuts of pecan could be grown over at least a fourth of the state. Worth trying in Zone 5b; experimental in Zone 5a; chancy in Zone 4 in Iowa.
3270	Carya laciniosa Shellbark hickory	slow	70' x 30'	Hardy Zone 5. Native, occasionally found in deep, rich soils along river bottoms where flooding occurs. Has a large, straight trunk with a narrow crown. Bark peels off in long, narrow strips. Yellow fall color.
3280	Carya ovata Shagbark hickory	slow	75' x 30'	Hardy Zone 4b. Native over most of the state and very adaptable. Found in soils varying from wet bottomlands to dry ridge tops. A distinctly oblong, tall, narrow tree. The nuts are sweet and edible. The bark peels in long, vertical shaggy strips.
3290	Carya tomentosa Mockernut hickory	slow	75' x 40'	Hardy Zone 5. A tall native hickory with a narrow crown found on drier uplands or ridges. Has tight-fitting bark with low, narrow ridges in a diamond pattern. Best in Zone 5b, but worth trying in Zone 5a.
3300	Castanea dentata American chestnut	medium	not applicable	Hardy Zone 5. Because of chestnut blight—carried by native white oak and spread by wind-blown spores—this beautiful native tree is nearly extinct. Only a few isolated individuals survive. As long as a few trees continue to produce seeds, a disease tolerant strain may appear. Not recommended at this time.
3310	Celtis occidentalis Common hackberry Hackberry	medium	70' x 50'	Hardy Zone 3. This fairly fast-growing native tree matures into a vase shape quite similar to the American elm. Younger trees have a more globular shape. All have distinctively warty bark. Fall color varies from lemon yellow to no color. Thrives on almost any good soil. Somewhat sensitive to damage from herbicide drift. Branches are very strong and survive very strong winds. Often affected by hackberry nipple gall, a common but harmless wart-like growth on the leaves. The gall-forming insects, which emerge in the fall, can also be a household nuisance.
3320	Fagus grandifolia American beech	slow	70' x 40'	Cold Hardy Zone 4. Very difficult to transplant and establish, even when quite young. Does quite well in deep, rich, moist, well-drained, acid, humusy soils protected from wind. Tolerates some shade. Cold hardy, but is very difficult to grow in most of Iowa because of its requirements for acid soils and protection from dry winds. Well worth the effort if you have a suitable site. This beautiful specimen or shade tree has smooth, gray bark that is a temptation for initial carving.
key	name	growth rate	height and spread	description



3330	Fagus sylvatica European beech	slow	60' x 40'	Hardy Zone 5. Much easier to transplant than American beech but not nearly as cold tolerant. Since it normally does well on alkaline, limestone soils, this beech should be tried in sheltered sites in Zone 5b. Experimental in Zone 5a.
3340	Fraxinus nigra Black ash	medium	70' x 40'	Hardy Zone 3. Found native on lower floodplain soils. Does best on deep, rich, moist soils and tolerates wet soils. Grows into a tall, irregular round to oval crowned tree. Has yellow fall color and very dark, scaly bark.
3350	Fraxinus pennsylvanica Red ash	fast	60' x 50'	Hardy Zone 3. Native to moist, loamy soils on the upper floodplains. Develops a rounded to oval crown at maturity. Often has a twisted trunk and stiff branches with curving ends. Tolerates both salt and alkaline soils.
3360	Fraxinus pennsylvanica lanceolata Green ash	fast	60' x 50'	Hardy Zone 2. Very hardy and adaptable. Found native on the rich, moist, bottomland soils of the upper floodplain. Quite drought tolerant when planted on good soils. Oval to irregular crown. Often has twisted trunk. Has clear yellow fall color and shiny green leaves. This distinguishes it from white ash, which has purple fall color. Male trees have cones; female trees bear many seeds. Many cultivars. Occasionally bothered by ash borers. Along with all of its cultivars and all other ash species, the green ash occasionally suffers from leafcurl ash aphid, which deforms the terminal leaflets. Fairly tolerant of alkaline soils and salt. Generally recommended.
3360a	Fraxinus pennsylvanica l. cv. Marshall's seedless green ash	fast	60' x 50'	Hardy Zone 3. This well-known, popular cultivar has excellent yellow fall color and very dark green, shiny leaves. Is seedless because it is male. Generally recommended.
3360b	Fraxinus pennsylvanica l. cv. Summit green ash	fast	50' x 30'	Hardy Zone 4. Tolerant of partial shade and excessively moist soils. Heavy, green foliage with good yellow fall color. Very straight, upright growth habit, developing a nicely rounded, spreading crown when mature. A female cultivar; it may have seeds.
3370	Gleditsia triacanthos Honeylocust Thorny honeylocust	fast	75' x 50'	Hardy Zone 4b. This native tree has perhaps the most vicious thorns known that are capable of penetrating everything from tractor tires to people to livestock. Most of the disease and insect pests of the thornless cultivars leave this species alone. Acceptable only in areas where humans are not expected or wanted.
3380	Gleditsia triacanthos inermis Thornless honeylocust	fast	75' x 50'	Hardy Zone 5. A naturally occurring thornless variety with many cultivars, is very hardy and adaptable. Its irregular, lacy crown casts relatively light shade. Along with all of its thornless cultivars, it suffers from many insect pests, including plant bugs, leafhoppers, pod gallmakers, and mimosa webworm. Webworm damage generally is not fatal, but it can cause severe esthetic disfigurement twice a summer and may require chemical prevention. Generally recommended with the understanding that it may require more than average maintenance.
3380a	Gleditsia triacanthos i. cv. Imperial honeylocust	fast	35' x 30'	Hardy Zone 5. A smaller cultivar with very stiff, strong, horizontal branches and dark green foliage.
3380b	Gleditsia triacanthos i. cv. Moraine honeylocust	fast	60' x 40'	Hardy Zone 5. One of the earliest and best known cultivars. Seedless, with a broad crown. Grows with a weak, wobbly main stem that requires staking until it develops strength.
3380c	Gleditsia triacanthos i. cv. Rubylace honeylocust	fast	60' x 40'	Hardy Zone 5. A seedless cultivar with wine red new growth that leaves the tips of each branch red, contrasting with the green of the older foliage. Gets a lot of attention. Use with caution.

key	name	growth rate	height and spread	description
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3380d	Gleditsia triacanthos i. cv. Shademaster honeylocust	fast	50' x 40'	Hardy Zone 5. A distinctly vase-shaped cultivar with dark green foliage that lasts noticeably longer in the fall. Has a good central leader and an upward branching habit.
3380e	Gleditsia triacanthos i. cv. Skyline honeylocust	fast	60' x 30'	Hardy Zone 5. A narrowly pyramidal cultivar that has very few seed pods. Develops a strong central leader and has an upward branching habit.
3380f	Gleditsia triacanthos i. cv. Sunburst honeylocust	fast	60' x 45'	Hardy Zone 5. Called sunburst because the bright yellow new growth at the ends of the branches contrasts with the normal green of the older foliage farther in on the branch. Broad-headed and quite graceful, but has been known to lose many branches in ice storms. Gets a lot of attention, use with caution.
3380g	Gleditsia triacanthos i. cv.	fast	not known	Hardy Zone 5. Many cultivars are available and more are being developed every year. Consult your local Iowa certified nurseryman.
3390	Gymnocladus dioica Kentucky coffeetree	medium	75' x 50'	Hardy Zone 4. Female trees have interesting stout pods with hard, shiny seeds from which erzats coffee can be brewed. Has bipinnately compound leaves which give it a lacy, ferny appearance in summer and a very coarse, rugged look in winter. Does best in rich soils but is adaptable almost anywhere. An excellent tree that deserves to be used more. A bit difficult to transplant. Recommended.
3400	Larix decidua European larch	fast	75' x 50'	Hardy Zone 3. Very hardy and widely planted in shelterbelts in western Minnesota and the Dakotas. Too large for a small yard. Larches are conifers, but shed their needles in the fall like broadleaved deciduous trees. This confuses some people who wonder if their new "evergreen" has died. The new spring needles are bright, light green with bright, rose pink, 1-inch-long, female cones that are very pretty. At first pyramidal, but open and irregular with age. Bright yellow fall color. Does best in moist soils. Not drought tolerant. Transplants well.
3400a	Larix decidua cv. Pendula	fast	60' x 35'	Hardy Zone 3. A very interesting cultivar with distinctive weeping branches. Worth a try.
3410	Larix kaempferi (leptolepis) Japanese larch	fast	60' x 30'	Hardy Zone 4. Native to Japan, one of the most handsome larches. A narrow pyramid when young, but rapidly develops into a very wide-spreading, open pyramid. Often quite irregular and picturesque. Yellow fall color. Rapidly becomes a fine specimen but needs a lot of room.
3420	Larix laricina American larch Tamarack	medium	60' x 30'	Hardy Zone 3. An extremely hardy native tree normally found in bogs, but surprisingly drought tolerant. Often planted in shelterbelts. Somewhat slower growing than the other larches, it develops a narrow, pyramidal head with rather short, horizontal branches.
3430	Magnolia acuminata Cucumber tree magnolia	fast	65' x 35'	Hardy Zone 5. Does best on rich, moist, acid to neutral soils. Suffers badly from constant winds. Will not do well on dry, alkaline soils. Grows quite rapidly when young. Narrowly pyramidal when young, but becomes broadly rounded to spreading when mature. Makes a very attractive lawn or shade tree on suitable soils. Recommended in Zone 5b. Experimental in Zone 5a.
3440	Populus gradidentata Bigtooth aspen	fast	60' x 35'	Hardy Zone 3. Native to the eastern half of Iowa, but rarely planted. Grows to a tall, narrow, round top with large, coarse teeth on the leaves. Often found on moist, sandy, or gravelly soils. Not shade tolerant. Clear yellow fall color.
key	name	growth rate	height and spread	description



key	name	growth rate	height and spread	description
3450	Quercus bicolor Swamp white oak	slow +	70' x 50'	Hardy Zone 4. A very adaptable, sturdy oak, native to rich, moist bottomlands along streams and swamps in the eastern half of Iowa. A handsome, easily transplanted large shade, lawn, or street tree with dense, rich, glossy green foliage and good red, brown, and yellow fall color. Not well known or much offered in commerce, this tree should be used more. Recommended.
3460	Quercus ellipsoidalis Northern pin oak	slow +	60' x 35'	Hardy Zone 3. A heavily branched, round-topped oak, native to the moist to dry sandy soils and clay uplands of the northeastern three-quarters of Iowa. Fall color varies from brown to flaming red. A fine native oak that is well worth a try in reforestation and for background plantings. Susceptible to oak wilt disease.
3470	Quercus macrocarpa Bur oak Mossycup oak	slow	70' x 50'	Hardy Zone 3. Extremely long-lived and sturdy, this magnificent native oak is often found standing alone in a pasture or field, a relic of the virgin Iowa prairie. Such trees often predate white settlement and plowing of the prairie. If planted in deep, rich soils with plenty of moisture, a bur oak can grow quite rapidly. Has sturdy, picturesquely twisted, wide-spreading branches and dark green foliage. Poor fall color. Often neglected in landscape plantings because of its reputation for slow growth, this sturdy native should be used more. Established trees are very sensitive to root disturbances such as housing or other construction activities. Such stresses allow attack by the two-lined chestnut borer, for which there is no treatment—only prevention. A highly recommended tree.
3480	Quercus palustris Pin oak	medium	70' x 35'	Hardy Zone 4. Very popular. Widely propagated, sold, and planted because of its relatively rapid growth rate, neat pyramidal form when young, and ease of transplanting. Will not tolerate alkaline soils! Found native in the neutral to acid poorly-drained bottomlands of the southeastern corner of Iowa. Cold hardy over the entire state. Must be planted in the right soils to survive. Excellent fall color in proper soils. Recommended for lawn and specimen tree use where adapted. Because of the persistently drooping lower branches, not recommended for shade or street tree use. Susceptible to oak wilt disease.
3480a	Quercus palustris cv. Sovereign pin oak	medium	60' x 35'	Hardy Zone 4. This fairly recent cultivar has the same soil requirements as the species. Its distinctive, upswept branching habit keeps the lower branches out of the way of people, lawnmowers, and vehicles. In suitable soils, recommended for experimental use for lawn, shade, specimen, and street trees. Susceptible to oak wilt disease.
3490	Quercus robur English oak	medium	60' x 35'	Hardy Zone 5. Transplanted with relative ease when young, this oak grows into a very nice, broadly pyramidal, spreading crowned lawn, specimen, or street tree. Grows best in deep, slightly acid, moist soils. Will tolerate moderately alkaline soils if the soil is otherwise deep, rich, and moist. Moderately tolerant of air pollution. Recommended in Zone 5b, experimental in Zone 5a.
3490a	Quercus robur cv. Fastigiata Pyramidal english oak	medium	60' x 20'	Hardy Zone 5. A very distinctive upright, narrow pyramid to column-shaped cultivar that is reputed to be somewhat more cold tolerant than the parent species. Prone to heavy mildew attacks in hot, muggy weather. We have little experience with it. Experimental in Iowa.
3500	Quercus velutina Black oak	medium	70' x 40'	Hardy Zone 4. Native to all but the far northwest corner of Iowa on soils ranging from dry, sandy, upland ridges to moist sites. Develops a wide, irregular oval, spreading crown. Good red to orange fall color. Named for its very dark bark. Rarely offered by nurseries and hard to find. A desirable tree that should be used more in reforestation and as a group or background planting. Susceptible to oak wilt disease.

3510	Salix alba White willow	fast	60' x 50'	Hardy Zone 2. This large willow is native to Europe, where it is grown for timber. It requires wet soils, grows very fast, and is very brittle and easily damaged by wind and ice storms. Its roots often find the slightest leaking crack in a water or sewer line and rapidly plug and rupture the already defective line. Best used for background plantings near water in large parks or pastures.
3520	Tilia americana American linden Basswood Linwood tree Linn tree	fast	80' x 40'	Hardy Zone 3. A large, round-topped, spreading tree native to rich, moist, well-drained soils all over Iowa. Has very fragrant, pale yellow flowers in June. Rapid growing with a tall, straight trunk. Easy to transplant and establish. Rather shallow rooted and may blow down in a severe storm, especially if any nearby mature trees have recently been removed. Has several cultivars, including dakota, which is a round-headed tree suitable for street tree use.
3530	Ulmus fulva Slippery elm Red elm Moose elm	medium	65' x 50'	Hardy Zone 4. Grows with an irregular, broad, arching, open head somewhat similar to American elm. Native over the entire state in the rich bottomland soils along streams and slopes. Not recommended because of Dutch elm disease.
3540	Ulmus glabra Scotch elm Wych elm	medium	70' x 30'	Hardy Zone 5. Not well known or widely planted, this rather large, tall elm from Europe is similar in shape to a narrow American elm. Best known for its cultivar, camperdown elm. Not recommended because of Dutch elm disease.
3540a	Ulmus glabra cv. Camperdown elm	slow	variable	Hardy Zone 5. This odd-appearing cultivar was popular as a specimen tree in the yards of Victorian mansions. It is weirdly contorted and drooping, with a rather flat top. Its height depends upon where the graft is placed on the trunk of the host tree. Reputed to be quite resistant to Dutch elm disease, but so rare that we may not find out. Not recommended, but warrants experimental use.
3550	Ulmus pumila Siberian elm (often called Chinese elm, which is not only wrong, but is a serious disservice to the true Chinese elm, Ulmus parvifolia , which is an excellent tree)	fast	65' x 40'	Hardy Zone 3. Very hardy and adaptable to almost any Iowa soil. Very fast growing, its somewhat weak wood easily splits and splinters. Reseeds itself prolifically. Many of the growth faults can be traced to the use of seeds from poor stock. Careful seed stock selection and upgrading could give a much sturdier, more desirable tree. Some resistance to Dutch elm disease. Not recommended because of disease and other faults. Attacked by the elm leaf beetle, which does little harm to the tree, but can be a nuisance in the home.
3560	Ulmus thomasi Rock elm	medium	75' x 30'	Hardy Zone 4. Native all over Iowa on variable soils from lowlands to dry uplands. Often found on limestone bluffs or ridges. Has an oblong crown with many small, lateral branches. Rarely propagated or sold. Not recommended because of Dutch elm disease.
key	name	growth rate	height and spread	description

medium deciduous trees

45 to 60 feet tall at maturity

3565	Acer negundo Boxelder	fast	45' x 40'	Hardy Zone 2. Native to the entire Great Plains, cultivated since 1688. Very drought and cold resistant and will grow almost anywhere. Grows wild everywhere. Unfortunately, boxelder is very short-lived and has very weak, brittle wood that is easily damaged in storms. It also harbors the harmless but quite annoying boxelder bug. A variegated leaved cultivar exists, but it is only hardy in Zone 5. Even though almost no one plants boxelder, existing wild trees can give good shade while waiting for longer-lived trees to grow.
3570	Aesculus hippocastanum Common horse chestnut European horse chestnut	slow	50' x 30'	Hardy Zone 3. Has prominent, late spring clusters of flowers and exotic summer foliage. Is tolerant of air pollution and salt. This native to the Balkans in Europe has long been a popular medium shade, lawn, and specimen tree. Unfortunately, its summer foliage is often badly disfigured by disease and insect pests, and the fall color is very poor. The sizeable and prolifically dropped fruits are called "conkers" in England. Several double-flowered, fruitless cultivars are available and are better choices in public areas.
3580	Betula nigra River birch Black birch Red birch	fast	60' x 40'	Hardy Zone 5. Easily transplanted and extremely adaptable. Native on deep, rich, river bottom soils along streams in the southeast quarter of Iowa. Will grow successfully on almost any soil. Hardy in Zone 4 in Iowa if on deep, rich, moist soils and in somewhat sheltered areas. Its salmon pink, peeling bark on young trunks and branches turns black on older trunks. Very fast growing on good soils when young. Susceptible to ice damage. Appears to be immune to attack from the bronze birch borer that decimates white-barked birches. An excellent tree. Highly recommended.
3580a	Betula nigra cv. Heritage river birch	fast	60' x 40'	Hardy Zone 5. A new cultivar of river birch that has very pale, almost pure white bark. Bark peels just like the parent tree.
3590	Betula papyrifera Paper birch Canoe birch White birch	fast	60' x 30'	Hardy Zone 2. Native to the northeastern quarter of Iowa on rich, deep, evenly moist soils on north or east-facing slopes. Its chalky white, papery bark becomes black with age. Bark peels easily, and was used to make canoes in older times. A popular but poor choice for a lawn or specimen tree. Very attractive, but grows under great stress when planted in a lawn. The stress attracts the bronze birch borer, which promptly finishes killing the tree that was doomed before the borer arrived. If you want a birch in your lawn, either plant a river birch or resign yourself to losing your white-barked birch rather soon.
3600	Carya cordiformis Bitternut hickory Bitternut	slow	55' x 25'	Hardy Zone 4. Native on moist sites on upper floodplains and bottoms of slopes in all but the far northwest corner of Iowa. Grows much taller than it is wide. Good yellow fall color. Rarely propagated or sold, this tough native Iowa hickory with its distinctive, large, sulfur yellow buds is badly underused. Has tight, smooth, gray bark. Recommended.
3610	Castanea mollissima Chinese chestnut	medium	45' x 30'	Hardy Zone 5. A rather shrubby tree native to China and Korea. Not affected by chestnut blight, which has nearly extinguished the native American chestnut. Planted for its sweet, edible nuts, it does not seem to be completely reliable. Plant on rich, deep soils in protected locations. Recommended only in Zone 5b at this time. Experimental in Zone 5a. Might be worth trying in good soils and protected locations in Zone 4.



key name

growth rate height and spread

description

3620	Catalpa speciosa Western catalpa Northern catalpa Cigar tree	fast	50' x 25'	Hardy Zone 5. Once widely planted for fence posts and wind breaks, its wood is very durable and resistant to rot when in contact with soil. Very fast growing in almost any soil. Grows into a rather tall, narrow, irregular pyramid. Its early summer flowers are quite spectacular, but they fall off and make a deep pile on the soil under the tree. Has huge heart-shaped leaves from 8- to 12-inches long. An interesting tree that is more desirable than its reputation would indicate. Sometimes defoliated by large, rather repulsive-looking, gray, wrinkled hornworm caterpillars but damage is seldom serious to the tree.
3630	Catalpa bignonioides Common catalpa Indian bean Southern catalpa	fast	45' x 35'	Hardy Zone 5. Not quite as hardy as Catalpa speciosa . Grows into a broader, more rounded, spreading tree with a crooked trunk. It tolerates almost any conditions in Zone 5. Has spectacular white flowers with small purple spots like Catalpa speciosa . An interesting tree.
3640	Cercidiphyllum japonicum Japanese katsura-tree Katsuratree	medium	40' x 40'	Cold Hardy Zone 4. Seems to prefer moist, rich, neutral soils. Its success north of Zone 5b in Iowa cannot be reliably predicted. Young trees tend to be very narrow and rather columnar in shape. Fully mature katsura-trees are quite broad, rounded, and spreading. Has small heart-shaped leaves that resemble those of the redbud. Fall color varies from yellow to a very nice, bright red. Recommended for Zone 5. Experimental in protected sites in Zone 4.
3650	Fraxinus quadrangulata Blue ash	medium	50' x 30'	Hardy Zone 4. Native to the far southeast corner of Iowa. A rare tree in the state. Very rarely propagated or sold. A very adaptable, hardy tree suitable for a lawn or medium-sized shade tree. Has a nicely rounded crown. Well worth a try, if you can find one.
3660	Ginkgo biloba Maidenhair tree Ginko	slow +	60' x 35'	Hardy Zone 4. Long known as a "living fossil." Will grow on almost any soil, but does best on deep, perfectly-drained, rich sandy or gravelly soils. Fairly easy to transplant when quite small. Young trees have an odd, asymmetrical, upright branching growth habit. Mature trees have a firm, broadly pyramidal outline. Female trees have evil-smelling fruit. Unless you plant a male cultivar, you won't know the sex of your tree for at least 30 years. Generally reliable and recommended.
3660a	Ginkgo biloba cv. Autumn gold ginko	slow +	50' x 40'	Hardy Zone 5. A distinctly broad, spreading cultivar with nice, clear, yellow fall color. A male cultivar, hence no fruits.
3660b	Ginkgo biloba cv. Princeton sentry	slow +	50' x 20'	A nice columnar cultivar.
3670	Nyssa sylvatica Sour gum Tupelo Black gum	medium	45' x 25'	Hardy Zone 5. If grown from northern seed sources, it should be hardy on good soils in Zone 4 in Iowa. Grows into a unique, flat-topped cylinder shape. Native to the Eastern states on very wet, poorly-drained, acid soils. Cannot survive dry, alkaline soils. Where soils are suitable, makes an interesting specimen tree that will have perhaps the most brilliant dark red fall color known. Because of its deep taproot, it can only be transplanted when quite small.
3680	Pawlonia tomentosum Royal pawlonia Princess tree Empress tree	very fast	not applicable	Not hardy anywhere in Iowa. Listed because it is often offered by out-of-state nurseries under various names with claims of very fast growth and statements like "root hardy." The roots are hardy, the tree does grow 12 feet per year, and it has beautiful lilac-blue fragrant, flowers. But it dies every winter. Not recommended.
key	name	growth rate	height and spread	description

3690	Populus alba bolleana Bolleana poplar	very fast	60' x 8'	Hardy Zone 4. Grows best on rich, light, deep, moist soils, but will grow quite well almost anyplace in Iowa. Very narrow, upright, and fast growing but short-lived, partly due to canker diseases. Only recommended with the understanding that this is a short-lived tree. Roots invade leaky water and sewer lines. Leaves are white beneath and quiver in the wind. Good yellow fall color.
3700	Populus nigra italica Lombardy poplar	very fast	60' x 8'	Hardy Zone 4. Faster growing and more narrow and columnar than bolleana poplar, but shorter lived because of canker diseases. Useful for very rapid screens while waiting for a slower-growing, more long-lived hedge to replace it. Only recommended for a quick, temporary effect.
3710	Populus tremuloides Quaking aspen	fast	65' x 30'	Hardy Zone 2. One of the widest native ranges of any North American tree—from Manitoba to Texas. Native in the northeastern half of Iowa. Has smooth gray-green (sometimes almost white) bark on a slender, straight trunk with slender branches with nearly circular, flat-stemmed leaves that "quake" in the slightest breeze. Beautiful clear golden yellow fall color. Slender, narrow crown. Quite unimpressive as an individual tree, but is quite lovely as a grove or background planting. Use only northern grown stock.
3720	Prunus serotina Black cherry Whisky cherry Rum cherry	medium	65' x 30'	Hardy Zone 4. Native over all but the far northwest corner of Iowa on rich, moist slopes along streams. Forms a rounded to irregular crown with lustrous leaves. Produces conspicuous white flowers in racemes in early summer, followed by large quantities of dark blackish red fruit that falls off and makes a mess on any road, drive, sidewalk, or patio under the tree. Not often planted because of this. The source of cherry lumber, which is much admired in fine furniture. An excellent tree, if planted where the fruit will not bother.
3730	Quercus coccinea Scarlet oak	slow +	60' x 50'	Cold Hardy Zone 4. Native in acid, moist to rather dry sandy soils along the Mississippi River in Iowa. Develops a lovely spreading crown with glossy foliage closely resembling that of pin oak. Excellent scarlet fall color when planted in neutral to acid soils. Tolerates somewhat alkaline soils but will not grow as fast or as well or have good fall color if the soil is too alkaline. An excellent lawn, shade, or street tree where soils are suitable. Plant only northern grown, young, small trees for the best chance of success. Recommended.
3740	Quercus imbricaria Shingle oak	slow	60' x 35'	Hardy Zone 5b. Native in the rich, moist uplands and lowlands and along streams in the far southeast corner of Iowa. Narrow to rounded top, with the lower branches drooping. Leaves are glossy and have smooth edges with neither lobes nor teeth. Many leaves hang on all winter. Recommended in Zone 5b. Hard to find.
3750	Quercus muhlenbergi Chinkapin oak	slow	65' x 45'	Hardy Zone 4. Native on bottomlands along streams. Also found on limestone ridges in the southeastern half of Iowa. Does not do well in the dry, alkaline soils and cold, dry winds of northwest Iowa. Develops a crooked, round-topped, very spreading crown with maturity. Leaves are sharply toothed. Recommended, but rather hard to find commercially. Should be used more often.
3760	Robinia pseudoacacia Black locust	medium	55' x 35'	Hardy Zone 3. Shape is similar to American elm when mature. Tends to grow many suckers when young, forming dense thickets. A borer kills most trees while they are still quite small, but large, mature trees are occasionally found on drier sites. Not often found in nurseries because of the borer problem. Has small, vicious, paired thorns at the nodes of the twigs.



key	name	growth rate	height and spread	description
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3770	Salix nigra Black willow	fast	50' x 35'	Hardy Zone 3. Develops an irregular, open head, frequently with multiple, clustered trunks. This fast-growing native willow will tolerate dry soils, but does best in very wet sites along streams and in swamps. Recommended over the entire state as a fairly large tree in soggy sites.
3780	Taxodium distichum Bald cypress	medium	50' x 30'	Cold Hardy Zone 5. Often found native in acid swamps in the southeastern states, this deciduous conifer is quite cold hardy in suitable soils. Easy to transplant and fairly tolerant of neutral to mildly alkaline soils. Has the best chance of success in deep, very moist to wet, acid soils in Iowa. Growth rate, hardiness, and ultimate size are very dependent upon soil chemistry. Recommended for trial use in Zone 5b. Experimental in Zone 5a.
3790	Tilia cordata Littleleaf linden Small-leaved European linden	medium	60' x 35'	Hardy Zone 4. Native to Europe and Great Britain, this handsome lawn, specimen, shade, or street tree is the latest linden to bloom. A broad pyramid when young to middle aged, the tree ultimately matures to a broad, symmetrical oval. Very hardy in deep, moist soils, it does poorly in droughty situations. Very tolerant of air pollution. Generally recommended where soils and moisture are adequate. Several cultivars are available.
3790a	Tilia cordata cv. Greenspire linden	medium	60' x 35'	Hardy Zone 4. A very straight trunked, symmetrical cultivar with a very regular form adapted to difficult sites. Other cultivars also are available. Consult with your local Iowa certified nurseryman.
3800	Tilia euchlora cv. Redmond linden	medium	60' x 40'	Hardy Zone 4. This popular cultivar is very adaptable and hardy. A neatly tight, broad pyramid when young, it eventually matures to a rounded, spreading top. An excellent lawn, shade, specimen, or street tree. Authorities disagree on its parentage. Some feel it is a cultivar of Tilia americana , the American linden. Recommended.
3810	Ulmus parvifolia Chinese elm True Chinese elm Lacebark elm	medium	50' x 40'	Hardy Zone 5. With mottled bark and wide-spreading, broad, rounded head, this rather rare tree is underused. Apparently, it is immune to Dutch elm disease. Does best on moist, well-drained, deep soil, but tolerates poor drainage and alkaline conditions. Also adapts to cold, wind, heat, high humidity, and dryness. This very desirable tree shares its common name with Ulmus pumila , which is very inferior. Blooms and has seeds in the fall. Attacked by elm leaf beetle, which is more serious as an autumn household invader than as a defoliator of the tree. Highly recommended in Zone 5.
key	name	growth rate	height and spread	description

**small
deciduous
trees**

30 to 45 feet tall at maturity



3820	Aesculus cv. Carnea Red horse chestnut	medium	40' x 25'	Hardy Zone 4. This hybrid was created more than 120 years ago by crossing Aesculus pavia and Aesculus hippocastanum . It is useful as a small shade or specimen tree in restricted spaces. Rather pyramidal when young, but maturing into a broad, rounded, spreading oval. Showy red blossoms start when the young tree is only 6 to 8 feet tall. Bothered by many disfiguring diseases and insect pests.
3830	Aesculus glabra Ohio buckeye	medium	35' x 20'	Hardy Zone 3. Native to the moist bottomlands in the southeast third of Iowa. Adapted to most soils, but will not tolerate drought. Upright growth with a low-branching, irregular oval crown. Produces conspicuous yellow-white flowers in May, followed by large compound leaves that unfold before other trees leaf out. Fruits (toxic if eaten) are the well-known "buckeye" and can be messy if unwanted. Leaves often are disfigured by a variety of diseases and insects.
3840	Asimina triloba Common paw paw Pawpaw	medium	30' x 15'	Hardy Zone 5b. Native to the far southeast and southwest corners of Iowa. Grows in openings in the woods in rich, moist soils of the upper floodplains. Quite shade tolerant, the leaves are up to 12 inches long. Its edible fruit tastes remarkably like bananas. Recommended only in Zone 5b. An interesting, odd, small, native tree.
3850	Allanthus altissima Treeofheaven ailanthus Tree of heaven Paradise tree Stink tree Chinese elm	very fast	40' x 30'	Hardy Zone 4. Well known, but under many names. Noted for its tolerance to almost any level of air or soil pollution and its very fast growth. Very weak wood; breaks easily in storms. Leaves have an unpleasant odor when crushed. Flowers of male trees smell like carrion. Some old cultivars were pleasantly fragrant, but were just as fragile. Thrives where nothing else will.
3860	Amelanchier laevis Allegheny serviceberry Juneberry	slow	30' x 20'	Hardy Zone 2. Native in southeastern half of Iowa in moist upland soils. Can be considered either a small tree or a very large shrub. Difficult to tell apart from other Amelanchiers. Has slender, gracefully sinuous, smooth barked, gray trunks. Is topped with slender twigs with small, green, elliptical leaves. Very showy, fragrant flowers in early spring, followed in June by sweet, edible berries, which are eaten by birds if not harvested. Very desirable and highly recommended.
3870	Betula lenta Sweet birch Cherry birch	medium	45' x 30'	Hardy Zone 3. Rather rare and not often available commercially. Branches are smooth, shiny, and red-brown at maturity. Bark is dark red-brown, fissured into thick plates on older trunks. Seems quite resistant to bronze birch borer. Pyramidal when young, becoming round-headed and open at maturity. Young twigs have a strong wintergreen flavor when chewed. Recommended.
3880	Betula pendula laciniata Cutleaf weeping birch European birch	medium	40' x 30'	Hardy Zone 3. A popular white barked cultivar with a graceful, weeping form. Rarely reaches maturity because the bronze birch borer attacks it while still young. Expect to replace it every few years. Several cultivars are available.
3890	Carpinus betulus European hornbeam	slow	35' x 25'	Hardy Zone 4. Conical to oval when young, becomes broadly pyramidal when mature. Has dense, twiggy growth that makes a very good screen. Quite tolerant to soil types. Transplants well when small. Size varies according to richness of soil and available moisture. Several cultivars are available.

key name

growth rate height and spread

description

key	name	growth rate	height and spread	description
3900	Cladrastis lutea American yellowwood Yellowwood	slow +	40' x 30'	Hardy Zone 4. A beautiful, graceful tree native to the southeast states, but hardy in Iowa. Grows well in almost any deep, fertile, Iowa soil with adequate moisture. Rather drought tolerant once well established. Has a smooth, gray trunk with gracefully arching branches, rather like a miniature American elm. Marvellously fragrant flowers in conspicuous drooping clusters in late spring. Is very brittle and is severely damaged by ice storms. Not often available commercially. Generally worth the risk of ice storm damage if grown in a sheltered spot. Recommended.
3910	Crataegus mollis Downy hawthorn	slow	35' x 35'	Hardy Zone 4b. Native throughout Iowa in soils varying from low, rich bottomlands to dry slopes. Develops a broad, open crown at maturity. Covered with white flowers in late spring, has orange fall color. An alternate host to cedar-apple rust, which it tolerates well. Generally recommended.
3920	Elaeagnus angustifolia Russianolive Russian olive	medium	40' x 30'	Hardy Zone 4. Has silver-gray foliage. Tree size can vary greatly according to site conditions. Seems to do best in the western third of Iowa. Adaptable to dry, difficult sites, and has long been used in windbreaks. Its fragrant flowers are followed by olive-like fruit relished by birds. Seriously threatened by several canker diseases, including phomopsis canker, which can kill the tree. Recommended, with caution about possible disease problems.
3930	Maclura pomifera Osage orange Bois d'arc (bow dark) Hedge apple	slow	30' x 20'	Hardy Zone 4b. Often planted in tight, impenetrable hedge fences in earlier days. Very tough, stout trunks with deeply furrowed orange bark. Prominent, softball sized, green, bumpy fruit. Good wildlife cover. Not often used as an ornamental, but would be rather interesting.
4570	Malus baccata Siberian crabapple	medium	35' x 30'	Hardy Zone 3. A round-headed crabapple that has been widely used in shelterbelts and wildlife plantings. Birds scatter the seeds and volunteers can be found in pastures and fields all over Iowa. Suffers from scab and fire blight.
4578	Malus cv. Dolgo crabapple	medium	30' x 20'	Hardy Zone 4. Its early bloom is followed by a heavy crop of bright crimson fruits that make excellent jelly. Unused fruit drop and are messy.
3940	Morus alba White mulberry Russian mulberry	fast	30' x 25'	Hardy Zone 3. Native to Russia, this is the hardiest of the mulberries. Most often used in windbreaks and wildlife plantings. Grows rapidly into a small tree with a rounded, often somewhat irregular head. Produces lots of small, pink, sweet fruits that are relished by birds and other wildlife. The fruit can stain sidewalks and automobiles. Volunteers can come up all over. Recommended, but use with caution. Very hardy and adaptable.
3950	Ostrya virginiana American hophornbeam Ironwood Leverwood	slow	35' x 25'	Hardy Zone 4. Native to dry, shaded slopes and ridges all over Iowa. This is perhaps the most underused small native tree we know of. Extremely hardy, tough, and tolerant of almost any soil and very drought tolerant. Most often found growing native in the deep shade under oaks and maples. Grows equally well in full sun. Is an excellent small shade, specimen, or ornamental tree. Leaves are very similar to those of elm, and turn to a nice clear yellow in fall. Most of the leaves hang on all winter in interesting horizontal layers. The tree grows somewhat slowly into a lacy, graceful, pyramidal to rounded crown with many slender branches. Because of its rather sparse root system, it can only be transplanted when young and must be balled and burlapped. Well worth the trouble, because it is tough, graceful, and extremely hardy. Highly recommended.



key	name	growth rate	height and spread	description
3960	Phellodendron amurense Amur corktree Amur cork tree	fast	40' x 45'	Hardy Zone 4. An excellent tree, just recently becoming readily available. Easy to transplant when young. Has male and female individuals. Females have interesting clusters of shiny, black, ¼-inch fruit, which often persist through winter but stain paving. Young cork trees may pop up in flower beds. Tolerates alkaline soils, air pollution, and drought. A flat-topped inverted pyramid when young, it soon develops into a massively branched, wide-spreading, open and round-topped small tree. Compound leaves give it a lacy, graceful, tropical appearance in summer, but leave a rugged winter appearance. Grass grows well under it. Native to China and Japan. Too low-growing for street tree use. Highly recommended for lawn, shade, and ornamental plantings. Clear yellow fall color, deeply furrowed, interesting corky bark.
3970	Phellodendron sachalinense Sakhalin cork tree	fast	35' x 25'	Hardy Zone 4. Rarely available, which is unfortunate, because it is hardier than Amur corktree and should be widely grown. A rather distinctly vase-shaped tree that holds its branches up out of the way. Has corky bark, like the Amur corktree. Recommended.
3980	Prunus maackii Amur chokecherry Amur cherry	medium	30' x 20'	Hardy Zone 3. An interesting upright tree native to Manchuria and Korea, requires well-drained soil. Beautiful white flowers in mid-May, followed by a large crop of very small, black cherries that are devoured by birds. Most effective when grown in a clump. Attractive and hardy. Generally recommended.
3990	Prunus padus commutata Harbinger birdcherry May day tree May tree	fast	35' x 35'	Hardy Zone 4. There appears to be some disagreement as to proper identification of this tree. Two different trees with similar sizes, shapes, and bloom patterns are being sold. One has dull to slightly shiny, smooth, finely toothed, oval, dark green leaves. The other has quite dull, roughly toothed, larger, longer, and narrower leaves with glaucous undersides and wavy margins. Authorities disagree on hardiness; some give Zone 4 and others give Zone 3. Regardless, both varieties are hardy in Iowa, and both share the same appearance. What is sold as May day tree grows fairly rapidly into an irregular, open, rounded silhouette with upright to spreading branches, often with drooping ends. Often blooms the first day of May and is covered with dense racemes of intensely fragrant white flowers, followed by a large crop of tiny, shiny, red to black, very bad-tasting cherries that are eagerly devoured by birds. Hardy and very adaptable. Generally recommended.
4000	Prunus sargentii Sargent cherry	fast	35' x 25'	Hardy Zone 5. Grows vigorously into an upright, rounded crown with dense foliage that is bronze toned when young but dark, glossy green later in the summer. Early May rose colored flowers are followed by small, purple-black fruits. Shiny, mahogany brown bark that peels in coarse, curly strips. Vivid red to orange-red to bronze fall color, appears early. An interesting, hardy, very adaptable, small ornamental tree. Generally recommended.
4010	Prunus virginiana Common chokecherry Choke cherry	medium	30' x 10'	Hardy Zone 3. Can be grown as a freely suckering shrub or as a small tree. Grows native over the entire state. Does best on good soils, but is often found growing vigorously along fence rows, in waste areas, and on the edges of woods. Hardy and reliable. Conspicuous white flowers in May, followed by huge crops of purple, bitter fruits that make excellent wines and jelly. Good bronze-yellow fall color. Has a crooked, upright trunk and a rather narrow crown. Can be successfully used as a small ornamental, but better suited to background and clump plantings where its strong suckering habit of choking out other plants is an asset.

4010a	Prunus virginiana melanocarpa cv. Shubert cherry Canada red cherry	medium	30' x 20'	Hardy Zone 3. Very similar to the parent species, but has reddish, shiny bark. Mature leaves are rich, purplish red throughout the summer. Sold pruned into tree form. An attractive, hardy cultivar. Recommended.
4020	Pyrus calleryana cv. Bradford ornamental pear Bradford pear	medium	35' x 25'	Hardy Zone 5b. Widely promoted and sold, this popular cultivar has shown variable hardiness in Iowa. If grown in deep, rich, wet soils in sheltered locations, it should be quite satisfactory in all of Zone 5. Known to do better on heavy soils, it is tolerant of dryness, polluted air, and snow melting chemicals. Generally conical and dense-growing with a very upright trunk and upright branching habit. Perhaps its best use is in patios and next to large buildings in cities, where its growth habit and tolerance to city conditions are an asset, along with the winter protection offered by the masonry of the large building radiating warmth at night. Almost completely fruitless, with attractive flowers and good fall color.
4030	Quercus marilandica Black jack oak	slow	35' x 30'	Hardy Zone 5. Native along the far southern edge of Iowa on dry, sandy, barren lands with poor, infertile soils. Grows into a very gnarled, stout, irregular, spreading, ragged-shaped crown. Very rare in the wild and rare in commerce. Well worth keeping if you have one, and worth trying in really difficult sites in far southern Iowa if you can locate any stock.
4040	Quercus stellata Post oak	slow	35' x 35'	Hardy Zone 5. Native to the limestone hills, dry ridges, and dry, sandy plains along the eastern half of the southern edge of Iowa. Also found on moist bottoms, is quite rare in Iowa in the wild and in commerce. Slow growing, it closely resembles a small version of the bur oak with its rounded, spreading, dense crown. A very attractive small oak with an interesting, sturdy appearance. Well worth keeping if you have a wild one, and worth planting in a small yard in Zone 5 if you can find one. Transplant only when quite young.
4050	Salix amygdaloides Peachleaf willow	fast	30' x 15'	Hardy Zone 4. Native across the entire state bordering lakes and streams. Has a rather slender, open habit, growing into a fairly small tree. A typical, small, wild willow, best used in native plantings in wet areas.
4060	Salix x blanda Wisconsin weeping willow Niobe weeping willow	very fast	45' x 35'	Hardy Zone 4. Originated around 1830, this popular weeping willow grows very quickly into a broad, rounded crown with gracefully pendulous branches. Best used near water where its growth will be best and its weeping outline will be reflected. Not a good lawn tree. Very messy.
4070	Salix alba tristis Golden weeping willow Niobe weeping willow	very fast	45' x 40'	Hardy Zone 2. Very rapid growing at all ages. Develops a sturdy, upright, broad crown with long, bright yellow, pendulous branches that often touch the ground. Often planted as a lawn tree, it is a bit messy. The roots often find cracked water or sewer lines. Hardy and very adaptable. Needs lots of room. Best used near water. Rather brittle and often disfigured by storm damage. Note the confusion over common names; be sure of what you are getting.
4080	Salix alba vitellina Yellowstem willow	very fast	45' x 35'	Hardy Zone 3. Slightly smaller than the parent species. Its chief difference is the bright yellow stems that are prominent in winter and very early spring. Otherwise identical to the species.
key	name	growth rate	height and spread	description

4090	Salix matsudana cv. Tortuosa willow Corkscrew willow	fast	30' x 25'	Hardy Zone 5. The parent species, Pekin willow, is very rarely planted. Rapid growing, it develops a nice, round crown in a very short time. Often sold and planted only for its strangely twisted, corkscrew-shaped trunk and branches. This small asiatic native is a nice lawn or shade tree. Hardy and completely reliable only in Zone 5b in Iowa. Not long-lived, but quite satisfactory if you don't have the time to wait for a slower tree to mature.
4100	Salix missouriensis Diamond willow Missouri river willow	fast	35' x 30'	Hardy Zone 4. Native in moist bottomlands all over Iowa. Most common in the western half of the state; also found along many streams in central Iowa. Develops a nice, oval, open crown. Useful for native and wildlife plantings and screens.
4110	Sorbus alnifolia Korean mountain ash	medium	45' x 35'	Hardy Zone 5. Grows best in well-drained, moist, slightly alkaline soil of only average fertility. Although we have little experience with this tree, it should do very well in Zone 5. Grows rapidly in a pyramidal shape when young. As it approaches maturity it grows much slower into a broad, symmetrical oval. Good scarlet to orange fall color. Conspicuous bright red to orange fruit that lasts most of the winter. Susceptible to fire blight but resists borers. Still experimental, worth a try.
4120	Sorbus americana American mountainash	medium	30' x 25'	Hardy Zone 3. A little-known, small, slender, native tree found in varying sites from the borders of swamps to rocky, well-drained hillsides in the far northeast corner of Iowa. Yellow-green fall color. Conspicuous orange fruit, hanging in clusters into the winter. Rare in the wild and in commerce. Best used as a background for the shrub border or for wildlife.
4130	Sorbus aucuparia European mountainash Rowan tree Quickbeam	medium	35' x 30'	Hardy Zone 2. Grows rather rapidly into an oval, dense, graceful spreading to pendulous crown on deep, well-drained, moist, acid soil. Much slower growing and shorter lived on alkaline soils. A popular ornamental tree, prized for its bright orange clusters of fruit since Colonial times. Much troubled by fire blight, sun scald, wood decay, and trunk borers in warmer areas and on alkaline soils. Does better where the summers and winters are cold. Not recommended south of Highway 30 or on alkaline soils. Several cultivars are available.
4140	Sorbus decora Showy mountainash	medium	30' x 25'	Hardy Zone 3. Native in areas north of Iowa. Fruits are larger and showier than those of American mountainash. Develops into a nicely-rounded, small tree. Rare, hard to find. Grows best in northeast Iowa in woodland soils.
4150	Sorbus x hybrida Oak-leaved mountain ash	medium	30' x 20'	Hardy Zone 3. First introduced into North America in 1779. A naturally occurring hybrid between Sorbus intermedia and Sorbus aucuparia . It grows into a nice, upright tree with interesting oak-leaved foliage and the typical clusters of red mountainash fruit. Suggested for the northeastern part of Iowa in woodland soils.
4160	Sophora japonica Japanese pagoda tree Chinese scholar tree	medium	45' x 45'	Hardy Zone 5. Not well known in North America, but planted in oriental temple gardens for at least a thousand years. Blooms from late July through August and sometimes into September. Produces up to 15-inch-long sprays of yellow, pea-like, nonfragrant flowers. Very well adapted to the drought and high heat of city conditions if planted in well-drained, sandy loam soils. Tends to branch too low to the ground for street tree use. Several cultivars are available. Highly recommended for hot, dry sites.



key name

growth rate height and spread

description

very small deciduous trees
under 30 feet tall at maturity

4200	Acer campestre Hedge maple	slow	25' x 25'	Hardy Zone 5. Common in Europe; rather rare in this country but carried by some larger nurseries. Grows rather slowly into a dense, rather twiggy, round, little tree. Can be readily pruned into either a tree form or a shrub. Grows best on rich, well-drained soils, but is extremely tolerant of dry, alkaline, or low fertility soils and air pollution. Interesting corky bark on twigs. Petioles have milky sap, a characteristic shared with the Norway maple. Several cultivars are available. We have very little experience with hedge maple, but its characteristics seem to fit Zone 5 where it is recommended for trial.
4205	Acer ginnala Amur maple	medium	20' x 20'	Hardy Zone 2. Extremely hardy, reliable, and will grow well almost anywhere. Grows rapidly when young, slower with maturity, becoming as wide as it is tall. Has brilliant red and orange fall color, and smooth gray, often multi-stemmed trunk. Often used as a windbreak because of its hardiness. This excellent small, ornamental tree is highly recommended. Some trees have bright red seeds, similar to Acer tataricum , but this is not reliable.
4210	Acer spicatum Mountain maple	slow	20' x 15'	Hardy Zone 3. Will grow only in acid soils, which severely limits its use in Iowa. Where soils are suitable, grows rather slowly into a rounded to spreading large shrub or small tree. Young branches are purplish red and hairy. Fall color is bright red. Best used naturalized in partial shade.
4220	Acer tataricum Tatarian maple	medium	25' x 15'	Hardy Zone 3. Introduced to North America in 1759. Grows fairly quickly when young, very slowly as it approaches maturity. Often grown as a multi-stemmed tree. Bark is smooth gray with lighter vertical striations. Seeds are bright red. Hybridizes readily with amur maple. Both seed prolifically and young trees are often found growing in flower beds. Grows well in any sandy loam soil that is not too alkaline. Highly recommended.
4230	Alnus rugosa Speckled alder Smooth alder	medium	20' x 15'	Hardy Zone 3. Grows best in very wet soils high in organic matter. Interesting, horizontally-layered leaves. Best used for naturalizing or backgrounds in wet, soggy soils.
4240	Amelanchier canadensis Shadblow serviceberry Shadbush Downy serviceberry Shadblow	slow +	30' x 15'	Hardy Zone 3. Native to the well-drained, wet soils along the edges of oak-hickory woods, along streams, and on uplands in the eastern three-fifths of Iowa. Very adaptable to full sun or shade on either acid or alkaline soils that are well drained and reasonably moist. Usually multi-stemmed, with smooth, gray, sinuous trunks and slender, upright to gracefully nodding branches with upright but nodding clusters of pure white flowers appearing very early in the spring. Produces clusters of blue to purple, sweet, edible berries in June, which are often stolen by birds. Fall color is excellent yellow through apricot-orange to rusty red. Bark has lighter streaks that are most noticeable in winter. Use as a specimen, a very small patio tree in a shady area, as a background, or as a fine screen. Highly recommended.
4240a	Amelanchier x grandiflora cv. Apple serviceberry Robin Hill serviceberry Rubescens serviceberry	slow +	25' x 20'	Hardy Zone 3. Amelanchiers will hybridize with each other. This appears to be a natural hybrid between Amelanchier laevis and Amelanchier arborea . Two cultivars are occasionally found on the market, robin hill, with pink tinged buds that open white, and rubescens, with purplish pink buds and pink tinged flowers. Sometimes it is budded onto crabapple roots, which may give problems with suckers, which will be crabapple trees.
4250	Aralia elata Japanese angelica	medium	25' x 20'	Hardy Zone 5. Native to northeast Asia. Introduced into North America in 1830. Not readily available in Iowa. We have little experience with this in Iowa. Experimental. Normally grown as a specimen tree in small yards. Huge bipinnately compound leaves. Large and showy flower clusters in August.



key	name	growth rate	height and spread	description
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4260	Aralia spinosa Hercules club Devil's walking stick	medium	25' x 15'	Hardy Zone 5. Some authorities report this odd, small tree to be native to eastern Iowa. Large bipinnately compound leaves. Huge, hairy panicles of small white flowers in August, followed by small, round, black fruits in September and October. Stems and trunks have few branches and are very prickly. Leaves are prickly. Use in the back of a shrub border for the bold leaves.
4270	Carpinus caroliniana American hornbeam Blue beech Ironwood Muscle wood	slow	25' x 20'	Hardy Zone 3. Native in woodlands and in the rich, moist soils along streams in the eastern half of Iowa. Not easy to locate in commerce, but very desirable. Very shade tolerant, but does quite well in full sun if soil is evenly moist and well drained. Develops an irregular, rounded crown with slender, spreading branches. Excellent orange to red fall color. Bark of the trunk is very smooth and gray, with odd, deep, rounded fluting that closely resembles muscles. Highly recommended. May be hard to find.
4280	Cercis canadensis Eastern redbud Judas tree Red bud	slow +	25' x 20'	Hardy Zone 5. Native in the humus soils of bottomlands and along stream edges along the southern edge of Iowa. Hardiness depends upon soils and source of seed. A few healthy mature trees in far northwest Iowa bloom reliably and have perfectly hardy seedlings popping up in every nearby flower bed. Grows rather slowly into a spreading, round topped specimen tree. Conspicuous, rosy pink flowers in early May before the leaves, followed by fruit in the form of little, flat, pea pods. Very desirable. Very sensitive to many common herbicides that seem to weaken the tree so it winterkills. Plant only northern grown stock. Recommended in Zone 5. Experimental in Zone 4.
4280a	Cercis canadensis 'alba' Whitebud	slow	15' x 12'	Hardy Zone 5b. Several cultivars are available. This white-flowered cultivar is interesting enough to mention. Somewhat smaller than the species and not as hardy. Recommended in Zone 5b. Experimental in sheltered locations in Zone 5a.
4290	Chionanthus virginicus White fringetree Fringetree Old man's beard	slow	15' x 15'	Hardy Zone 4. Hardiness is variable in Iowa. Reliable in Minnesota probably because of seed stock source. Can be grown as either a small tree or a large shrub, depending on how it is pruned. Noted for its large, white panicles of fragrant flowers in June that resemble the fringe on a white lace shawl. Male plants have larger flowers; females have dark blue fruits in September. Recommended in Zone 5. Experimental in Zone 4, depending on source of stock. An interesting specimen or background tree.
4300	Cornus alternifolia Pagoda dogwood	slow	20' x 15'	Hardy Zone 4. Native as an understory tree in rich, moist soils over all but the far northwest corner of Iowa. Very shade tolerant in moist, rich soils. Also tolerates full sun. Grows slowly into a flat, open crown with a distinctive horizontal-layered effect like a Japanese pagoda roof. The only reliable tree-form dogwood for the entire state. An excellent small background or specimen tree. Has showy yellowish white flowers in early spring, followed by fruits that change from green to red to blue-black as they mature. Highly recommended.
4310	Cornus asperifolia Rough-leaved dogwood	slow	15' x 10'	Hardy Zone 4 in Iowa. Native in a wide variety of soils, in thickets along streams, and edges of woods over the entire state. Tends to be rather shrubby in form, but can be pruned into a nice, small tree. Has an irregular, open crown, cream colored flowers, and red-stemmed, white berries. Often used for wildlife plantings.



key name

growth rate height and spread

description

4320	Cornus florida Flowering dogwood	slow	25' x 20'	Hardy Zone 5. Fairly reliable in Zone 5b. Seems quite touchy to soils and exposure in Zone 5a. Grows native in deep, evenly-moist, acid soils throughout most of its range. Alkaline Iowa soils cause problems. Normally has spectacular, horizontally-layered white flowers in very early spring. There are many named cultivars, most of which have been selected for pink flowers. Beautiful scarlet fall color. Recommended only for Zone 5b. Experimental in Zone 5a.
4330	Cornus kousa Kousa dogwood Japanese dogwood	medium	20' x 20'	Hardy Zone 5. Grows best in deep, moist, well-drained, acid soils. Does not grow well in alkaline, dry soils. Hardiness in Iowa is mostly a matter of planting in proper soils. Recommended in protected locations with neutral to acid soils in Zone 5. Rather slow-growing, rounded to spreading, small, specimen tree. Noted for its conspicuous flowers that appear at least a month later than flowering dogwood.
4340	Cornus mas Cornelian cherry dogwood	slow	20' x 15'	Hardy Zone 5. Cultivated since ancient times. Native to central and southern Europe and western Asia. Does fairly well in Ames. Small, yellow flowers appear before the leaves in April. Grows slowly into a round-topped to spreading small tree or large shrub. Recommended in Zone 5b. Recommended for sheltered sites in Zone 5a. Trial in sheltered sites in Zone 4.
5030	Cotinus coggyria Smoketree Smokebush	slow	15' x 12'	Hardy Zone 5. Dies back to the ground over winter in Minnesota. Fairly reliable in Zone 5. Very reliable in Zone 5b in Iowa. Has been cultivated since 1656. Several cultivars are available. Some are hardier than the species. Grown for its odd, feathery, smoke-like flowers and its yellow to purple fall color. Can be grown as a shrub or pruned into an interesting small specimen tree.
5030a	Cotinus coggyria cv. Royal purple smoketree	slow +	15' x 15'	Hardy Zone 5. Sometimes listed as "the best Cotinus cultivar that can be grown." Specimens at Ames are very nice, and appear to be somewhat sturdier than the species. Very deep, rich purple foliage throughout the growing season, with clear, light purple flowers. Attracts a lot of attention. Use with caution. Generally recommended in Zone 5.
4350	Crataegus crusgalli Cockspur hawthorn	slow	25' x 20'	Hardy Zone 4. At least 1,000 species grow wild or in cultivation. Only a very few are listed. This popular species is native to the rich, moist soils in the southeastern half of Iowa. Is relatively free of cedar-apple rust and tolerant of dry soils. Makes a nice, round-topped to spreading small specimen tree with white flowers in late May, followed by bright red haws in September. Fall color is a nice orange to scarlet. Has long, curved thorns. A thornless cultivar is sometimes available. Generally recommended.
4360	Crataegus intricata Thicket hawthorn	slow	20' x 15'	Hardy Zone 4. Grows slowly into a nice, round-topped, small tree with quite glossy foliage.
4370	Crataegus x lavelli Lavalle thorn	slow	25' x 20'	Hardy Zone 5. Noted for its tolerance to air pollution and its handsome foliage, flowering, and fruit. Dark green, glossy foliage with copper to bronze-red fall color and only a few 1-inch thorns. Grows erect and fairly open into a nice oval crown. Produces large clusters of white flowers in spring, followed by clusters of bright red, 1/2-inch fruit, which persist through the winter. Often disfigured by cedar-apple rust.
4380	Crataegus margareta Margaret hawthorn	slow	20' x 20'	Hardy Zone 4. Native on open hillsides and along streams in the eastern half of Iowa. Smaller than downy hawthorn, with thin, erect branches and an open, spreading crown. Has white flowers and dusty red to rusty orange fruit.
key	name	growth rate	height and spread	description

4390	Crataegus monogyna 'stricta' Fastigiata single-seed hawthorn	slow +	25' x 8'	Hardy Zone 5. The parent species is little seen or used. Easily transplanted and grows into a very dense, columnar-shaped specimen tree. Sometimes used for very tall hedges. Fragrant white flowers in clusters, followed by bright red, small fruit.
4400	Crataegus nitida Glossy hawthorn	medium	25' x 25'	Hardy Zone 5. Grows into a densely, but irregularly-branched, broadly-rounded crown with both ascending and horizontal limbs. Dark green, glossy leaves on thin twigs with very few thorns. Has white flowers in loose clusters in late spring. Good bright orange to red fall color. Red fruit persists into winter.
4410	Crataegus oxycantha English hawthorn Paul's scarlet hawthorn	medium	20' x 12'	Hardy Zone 5b. Grows slowly into a nicely-rounded oval. Best known for its very popular cultivar, Paul's scarlet, which has double pink flowers and large clusters of bright red fruit. The species is also widely available, but has white flowers. Generally recommended in Zone 5b. Touchy in Zone 5a.
4420	Crataegus phaenopyrum (cordata) Washington hawthorn	slow	20' x 15'	Hardy Zone 5. Appears to have some resistance to fire blight. Mostly upright and rather columnar, but eventually develops a more rounded, irregular crown. Often multi-stemmed. Lustrous, bright green foliage turning rich scarlet to orange in autumn. White flowers in June followed by bright, shiny red-orange fruit that is devoured by birds and persists into winter. A few cultivars are occasionally available.
4430	Crataegus punctata Dotted hawthorn	slow	25' x 25'	Hardy Zone 3. Native to the woodlands and pastures of the southeast half of Iowa. Grows into a low, spreading, horizontal, flat top with long branches. White flowers, followed by dull red, dotted fruit in clusters. A very common wild hawthorn in Iowa, but badly affected by cedar-apple rust. Not currently recommended. Useful if rust problems are tolerable.
4440	Diospyros virginiana Persimmon	medium	not applicable	Often listed in catalogs as hardy in Zone 5b but is not completely reliable anywhere in Iowa. Best chance of success is in protected, sunny sites with rich soil in extreme southern Iowa. Experimental. Usually grown for its sweet, delicious fruits.
5040	Euonymus atropurpurea Eastern wahoo Wahoo	medium	15' x 8'	Hardy Zone 3. Often considered a shrub, but can be grown as an interesting small tree. Fairly smooth greenish gray multiple trunks with 4-angled stems. Purple flowers in June, followed by popcorn-shaped purple and crimson fruits in October. Fall color is lovely gold. Very attractive, native, small tree or large shrub. Often suffers from powdery mildew in the fall. Generally recommended.
5050	Euonymus europaea European spindle tree	medium	15' x 8'	Hardy Zone 4. Can be grown either as a large shrub or as a small tree. Yellowish green flowers followed by red to pink, 4-lobed, popcorn or bittersweet-type fruits with orange seeds. A good background small tree or large shrub grown mostly for the colorful fruit. The species is not planted as often as its cultivars, which include aldenhamensis, with pink fruits, and red caps, which is a free-fruited selection with bright red capsules. May be the same as red cascade, another listed cultivar.
4450	Halesia carolina Carolina silverbells	medium	25' x 18'	Hardy Zone 5. Theoretically the hardest of the silverbells, we have no experience with it. Cultivated since 1756 and native to North America, it grows into an upright to spreading small tree or large shrub, noted for its clusters of pretty, white, bell-shaped flowers in May. Sometimes heavily promoted as lily-of-the-valley tree. Experimental, with the best chance of success in Zone 5b. Plant only in acid soils.



key

name

growth
rateheight
and
spread

description

4460	Halesia monticola Mountain silverbell Lily-of-the-valley tree Snowdrop tree	medium	25' x 20'	Hardy Zone 4. Requires acid soil. A small tree, pyramidal when young, round topped when mature. Grown for its interesting, profuse, white, bell-shaped flowers. Does well in Minnesota, so we presume the limiting factor in Iowa is its requirement for acid soil. Well worth a try in deep, rich, moist soils in protected sites in Zone 5. Experimental in Zone 4.
5060	Hippophae rhamnoides Sea buckthorn	slow	15' x 10'	Hardy Zone 4. Quite unusual and little known. Can be grown as a very small tree or a large shrub. Bears a striking resemblance to a miniature Russian olive. Branches and leaves are silvery appearing. Requires well-drained soil. Hard to find in commerce. Worth a try.
4470	Koeleruteria paniculata Goldenrain tree Varnish tree	fast	25' x 20'	Hardy Zone 5. Hard to grow in Iowa. Grown for its bright gold flowers in late spring, which hang in large chains. Deep rooted and tricky to transplant. Grows fairly rapidly from a loose, irregular pyramid when young into a rounded to flat-topped mature, small tree. Best chance of success in Zone 5b in Iowa.
4480	Maackia amurensis Amur maackia	medium	25' x 25'	Hardy Zone 5. Grows from a low-branching, irregular, shrubby, young tree into a rather flat-topped to gently-rounded adult. Blooms conspicuously in late summer with big spikes of pea-like, creamy white flowers. Very adaptable to almost any loose, well-drained soil. Tolerates alkaline and acid soils. Very rare in commerce.
4500	Magnolia x soulangiana Saucer magnolia	medium	20' x 20'	Hardy Zone 5. Does not do well north of Highway 30 in Iowa. Often multi-trunked and low branched. Not easy to prune high enough to mow or sit under. Very rounded crown. Grown chiefly for its big pink and white cup-shaped blooms in early spring. Looks and grows best when its lowest branches are allowed to touch the ground. Generally recommended where hardy. Several cultivars are available.
4510	Magnolia stellata Star magnolia	slow	15' x 15'	Hardy Zone 5b. Quite slow growing, with many meandering stems and small twigs. Twigs are silvery gray with small, furry, winter buds that open very early in spring with fairly large, pure white, fragrant, flop-eared flowers. Often nipped by late frosts. Well worth a try in protected areas of Zone 5b. Touchy and experimental in Zone 5a.
note:	4550-4724, including flowering crabapples, are listed at the end of this section.			
4800	Morus rubra Red mulberry Mulberry	medium	35' x 30'	Hardy Zone 4b. Males trees have catkins in spring, but no fruit. Females have heavy crops of deep purple fruit that vary in size and flavor. Some trees have 3/4- to 1-inch long, very tasty, sweet fruit; others have 1/2-inch insipid fruit. All are eagerly devoured by birds. If the area is not stained by fallen fruit, the purple bird droppings will foul the neighborhood. Very desirable for wildlife, may be desired for the edible fruit. Either plant male trees, or be prepared for the annual fruit crop.
4810	Oxydendron arboreum Sourwood Sorrel tree Tifi Lily-of-the-valley tree	slow	30' x 20'	Hardy Zone 5b. Often sold and heavily promoted by mail as the lily-of-the-valley tree. Requires an acid, humusy soil, which severely restricts its use in Iowa. Grows slowly into a slender pyramid with drooping branches on mature trees. Very late summer flowers in sprays that resemble the lily-of-the-valley. Difficult to establish, even when young and on suitable soils. Not recommended, except as an experiment in Zone 5b.
key	name	growth rate	height and spread	description

4820	Prunus americana American plum Wild plum	fast	18' x 15'	Hardy Zone 3. Rather common in wild thickets along fence rows, this native plum is well known for its intensely fragrant, small, white flowers very early in the spring. There are many cultivars, grown for their delicious fruit, but the wild trees have relatively small, red to yellow, somewhat plain flavored fruits eaten by wildlife. Because the fruits fall off and make a bit of a mess, perhaps the best use is for backgrounds or in wildlife plantings.
4820A	Prunus americana cv. Newport plum Purple-leaved plum	fast	15' x 10'	Hardy Zone 4. Authorities disagree as to whether this well-known, purple-leaved cultivar is Prunus americana or Prunus cerasifera . Flowers and leaves are quite purple, with the flowers a lighter tint.
4830	Prunus pennsylvanica Pin cherry Wild red cherry	fast	25' x 15'	Hardy Zone 2. Native to moist, rich soils in the northeastern half of Iowa, but tolerates sandy soils. Not tolerant of shade. Grows fairly fast into a narrow, open head. Fragrant, white flowers in early spring, followed by red, edible fruit. Yellow to orange to red fall color. Good for naturalizing, background plantings, or for wildlife.
4840	Ptelea trifoliata Wafer ash Hop tree	slow	18' x 12'	Hardy Zone 4. Can be grown as a large shrub or as a small, round-headed tree. Interesting trifoliolate leaves and odd, broadly winged 2- or 3-seeded fruits. Cultivated since 1724. Best used as a background shrub or as an odd, small, specimen tree.
4850	Robinia pseudoacacia cv. Umbracelifera black locust Globe black locust	medium	variable	Hardy Zone 3. This is an odd, globe-shaped, grafted cultivar of black locust. Its height depends upon where the graft is made on the main stem, and could be from 10 to 25 feet. The spread also can vary from 10 to 25 feet. Seldom flowers, and is rather short-lived. Very susceptible to the borer. Not recommended, but listed because some gardeners may wish to try it as an experiment.
5120	Rhus typhina Staghorn sumac	medium	24' x 12'	Hardy Zone 3. Often listed as a large shrub, can also be grown as an interesting, small, specimen tree. The pinnately compound leaves give a ferny, tropical appearance in summer, with a very coarse, staggy appearance in winter, helped by the fuzzy bark on the young branches. Excellent fall color, varying from yellow to brilliant red. Native over the northeastern four-fifths of Iowa. Has large, erect, prominent, fuzzy fruit clusters. Recommended.
5120a	Rhus typhina 'lanceolata' Cutleaf staghorn sumac	medium	20' x 20'	Hardy Zone 4. This popular cultivar has deeply cut leaflets, giving an exceptionally ferny summer effect. Tends to grow into a broader, more spreading head than the parent species; the fall color and winter twigs are identical. Can be grown as a large shrub or as an interesting small specimen tree. Recommended.
4870	Salix amygdaloides Peachleaf willow	fast	30' x 25'	Hardy Zone 3. Native over the entire state bordering lakes and streams. Grows very rapidly into a slender, open head. Has typical willow catkins in early spring. The name describes the leaves. Planted in windbreaks and for screens.
4880	Salix caprea Goat willow Pussy willow	fast	18' x 12'	Hardy Zone 5. Often confused with Salix discolor , this willow was introduced into North America by early settlers. The leaves are much broader than the native tree. This is the commercial pussy willow whose branches are often sold in early spring by florists. To get the largest "pussies," the plants are cut to the ground each spring so the new growth will be quite succulent with large buds. When allowed to grow naturally, makes a rather graceful, small, round headed, upright-branched tree.



key name

growth rate

height and spread

description

4890	Salix discolor Pussy willow	fast	20' x 15'	Hardy Zone 3. This very hardy, native, North American willow is occasionally planted for its display of "pussies" followed by bright yellow, drooping, fragrant, yellow catkins in early spring. Has typical willow shape and leaves. The best, largest "pussies" are obtained by cutting the entire plant to the ground each spring, which prevents it from becoming more than a densely suckering shrub. Much harder than the introduced goat willow, and just as attractive in bloom.
4900	Salix interior Sandbar willow	fast	25' x 25'	Hardy Zone 4. Native over the entire state on the lower floodplains and on sandbars. Very fast growing, forms a wide, gracefully spreading head if grown singly, but most often forms dense, almost impenetrable thickets. Very slender leaves; flowers continuously almost all summer.
4910	Salix lucida Shining willow	fast	20' x 15'	Hardy Zone 3. Found native on moist soils near water in the far northeastern corner of Iowa. Has an open crown and very lustrous leaves.
4920	Salix pentandra Laurel willow	fast	35' x 30'	Hardy Zone 3. Native to Europe in the Caucasus Mountains. Forms a small to medium tree, depending upon site conditions. A rather handsome willow, often planted in shelterbelts and for screens by early settlers, and still useful today. Beautiful, shining, dark leaves, but sometimes disfigured by leaf diseases.
4930	Sassafras albidum Common sassafras Sassafras	medium	30' x 20'	Hardy Zone 5b. Native on the rich, sandy, well-drained slopes along the Mississippi Valley in the far southeastern corner of Iowa, this is the source of commercial sassafras bark. The orange colored inner bark of the roots can be steeped to make sassafras tea. Grows into a broad based pyramidal to spreading, flat-topped, open-crowned tree with a quite crooked trunk. Sassafras has oddly 1-, 2- or 3-lobed large right- or left-handed leaves with smooth margins. Orange, red, and yellow fall color. Not reliably hardy north of Zone 5b, but recommended as an interesting specimen tree on suitable soils in that zone. Experimental in Zone 5a. Trial in sheltered sites along the eastern edge of Zone 4b.
4940	Sorbus americana American mountainash	slow	25' x 15'	Hardy Zone 3. Found native on moist, well-drained, rocky slopes in the far northeastern corner of Iowa. Has large clusters of bright red to orange fruit in fall, quickly eaten by birds. Apparently quite fussy about its soil and the amount of moisture in the summer and winter winds. Best used as a background tree in a native border. Try only on well-drained soils with plenty of moisture and no hot, dry summer winds.
4950	Syringa amurensis japonica (reticulata) Japanese tree lilac	medium	20' x 20'	Hardy Zone 3. Native to Manchuria and Northern China, introduced into North America in 1855. Grows into a fine, upright to horizontal-branched small tree, from round-headed and irregular in form to broadly pyramidal. Very reliable, large, creamy white trusses of flowers in late June and early July, with a heavy fragrance. Younger branches and trunks have shiny bark with prominent, horizontal lenticels, but older trunks have vertically fissured gray bark. Very desirable and recommended. At least two cultivars occasionally are available, one of which, amur lilac, is a rather shrub-like smaller variety from Manchuria.
4960	Syringa pekinensis Pekin lilac	medium	20' x 15'	Hardy Zone 4. Another Northern China native, introduced into North America in 1881. Rarely found, except in arboreta. It is quite hardy, blooms reliably and beautifully, and is more graceful in effect than the better known Japanese tree lilac.
key	name	growth rate	height and spread	description

flowering crabapples

Only a few of the more than 600 presently named flowering crabapple cultivars are listed alphabetically here. You are encouraged to seek additional information from extension publication, NCR 78, *The Flowering Crabapple—A Tree for All Seasons*, available at your county extension office.

A column for growth rate is not given for flowering crabapples because all crabapples grow at approximately a medium rate.

Flowering crabapples are a very hardy, sturdy, reliable group of very small ornamental trees. But they are often seriously bothered or disfigured by various disease and insect pests. For example, all flowering crabapples are attacked by the eastern tent caterpillar, an early season defoliator that makes large, dense webs, or tents, in branch crotches. The damage is unsightly but usually does not kill the tree. Many other major problems are mentioned in the listing. Consult your local Iowa certified nurseryman for additional information on the availability and characteristics of flowering crabapples.

4550	Malus 'adams'	20' x 20'	A rounded, dense tree with clusters of carmine buds that open into single, carmine flowers that become clear pink. An annual bearer of 5/8-inch red fruit that persists until spring or until devoured by birds. Resistant to scab, fire blight, and cedar-apple rust. Only slightly susceptible to powdery mildew. Recommended.
4552	Malus 'aldenham'	25' x 20'	Reddish tinge to the foliage; semi-double crimson flower; dark purple fruit. We have no experience with it.
4554	Malus 'almey'	25' x 20'	A Canadian introduction with very large, purple-red flowers with nearly white centers. Very susceptible to scab. Not recommended.
4556	Malus 'American beauty' (plant patent 2821)	20' x 15'	Exceptionally large, clear red, double flowers. Foliage is bronze-red when young, changing to bronze-green at maturity. New, we have no experience with this cultivar.
4558	Malus 'arnold'	15' x 15'	Fast to moderate growth rate, depending upon soil. A dense, half-round crown with very fragrant, 2-inch pink flowers that fade to white. Fruit is about 1/2-inch across and yellow, with a faint blush of red. Susceptible to both fire blight and scab. Not recommended.
4560	Malus 'bechtel'	15' x 10'	Blooms late with double, pink, fragrant flowers. A cultivar of Malus ioensis (prairie crab), it grows slowly into an oval crown on rich soils. Very susceptible to cedar-apple rust and scab. Not recommended.
4562	Malus 'beverly'	25' x 25'	An upright-spreading tree with dark red buds that break into clear white, single flowers. Small, light green leaves, giving a finer texture than many crabapples. An annual crop of bright red, 1/2- to 3/4-inch fruit. May be pruned for ease of mowing, walking, or sitting. Susceptible to fire blight. Recommended, with caution.
4564	Malus zumi 'bobwhite'	20' x 15'	Dense and rounded in form, has pink buds opening in mid-season to 1-inch white flowers, followed by 5/8-inch yellow fruit that is relished by birds. Moderately susceptible to fire blight. Recommended.
4566	Malus 'candied apple' (plant patent no. 4038) Weeping candied apple	15' x 15'	Branches grow in a horizontal to weeping manner. Red buds open to single pink flowers, followed by bright cherry red, 5/8-inch fruit that persists into December. Slightly susceptible to fire blight. A good substitute for red jade crab, which is severely affected by both scab and fire blight. Recommended.
4568	Malus atrosanguinea 'carmine'	15' x 15'	Grows at a medium rate into a dense, half-round crown with carmine buds that open into deep pink, single flowers, followed by small, red to yellow fruit. Recommended in Zone 5.
4570	Malus baccata 'centennial'	20' x 15'	Has bright red, 2-inch diameter fruit and oval-shaped crown.



key name

height
and
spread

description

4572	Malus 'centurian'	15' x 5'	New, grows into a very narrow, upright form. Indicated size is estimated because there are no fully mature trees to measure. Glossy, dark green leaves. Red buds open into rose red blossoms, followed by 3/8-inch cherry red fruit in August, persisting for 2 months. Recommended.
4574	Malus 'coralburst' (plant patent no. 2983)	8' x 8'	New. Double budded onto a 30- to 36-inch stem. Grows into a dainty, dwarfed specimen tree with coral-pink buds that open into semi-double rose pink flowers. Very sparse fruit, which is bronze colored and less than 1/2-inch across. Very rounded form. Slightly susceptible to scab. Recommended.
4576	Malus 'david'	not known	Relatively new. No mature trees to measure. Now growing into a round topped, compact tree, with light pink buds opening into 1 1/2-inch single flowers in mid-season. Scarlet red, 1/2-inch fruit. Slightly susceptible to fire blight. Recommended.
4578	Malus 'dolgo'	30' x 20'	A very rapid-growing, well-known cultivar that blooms early with pinkish white buds opening into 1 1/2- to 1 3/4-inch fragrant, white flowers. Flowers and fruit crops tend to be heavy every other year. Fruits are bright red and egg-shaped, 1 1/2 inches across and noted for the excellent jelly that can be made from them. Only slightly susceptible to scab and fire blight. An excellent ornamental. Be sure you want the fruit. Dolgo crab is very reliable and will not stop producing unwanted fruit that will drop from the tree and make an unpleasant mess. Recommended.
4580	Malus 'Donald Wyman'	15' x 15'	A compact, rounded tree with dark green leaves. Pink buds open into 1 3/4-inch white flowers, followed by a heavy crop of bright red, 3/8-inch fruit that hangs on well into winter. Resistant to scab, cedar-apple rust, and fire blight. Only slightly susceptible to powdery mildew. An excellent crabapple for specimen or mass plantings. Highly recommended.
4582	Malus 'dorothea'	15' x 15'	Grows into a very irregular-shaped crown. Has double, pink flowers, followed by small, yellow fruit.
4584	Malus echtermeyer	15' x 10'	A half-rounded, distinctly weeping crabapple with pale pink to purplish, single flowers. Bronze-green foliage; small reddish fruit.
4586	Malus purpurea 'eley'	15' x 15'	Very round-topped crabapple with purplish green leaves that turn a distinct purplish fall color. Light purplish flowers; purple-red fruit.
4588	Malus 'flame'	25' x 20'	Round-headed; fairly rapid growth. Produces white flowers with red fruits that hang on well into the winter. Introduced by the University of Minnesota. Very disease resistant.
4590	Malus sieboldii 'fuji'	28' x 46'	A very broad-headed, rounded tree with an irregular, ascending and descending branching habit. Too large for many home grounds. Pinkish red buds open into 1 3/4-inch greenish white to white flowers, followed by 1/2-inch orange fruits. Strikingly beautiful, with a dramatically exotic, spreading appearance. Moderately susceptible to scab and powdery mildew. A big, different crabapple. Recommended.
4602	Malus 'gibbs golden gage'	20' x ?	An older cultivar, now growing in the National Arboretum. Pink buds open into white, single flowers, followed by 1-inch waxy, almost translucent, yellow fruit. Disease resistant. Not currently available, but may be available soon. Recommended when available.
key	name	height and spread	description

4604	Malus 'golden hornet'	20' x ?	An upright-growing cultivar with pink buds opening to white flowers. Yellow fruits remain on the tree all winter. Very disease resistant.
4606	Malus 'gorgeous'	30' x 30'	An older cultivar first introduced into the United States in 1925. Grows into a dense, rounded crown with pink buds that open into white, single flowers, followed by an annual crop of crimson to red 1-inch fruit. Moderately susceptible to scab, severely susceptible to powdery mildew, slightly susceptible to fire blight and cedar-apple rust.
4608	Malus 'henningi'	25' x 10?'	Relatively new, and may be difficult to locate. A distinctively upright, spreading tree with single, white flowers followed by 5/8-inch red fruit. Disease resistant.
4610	Malus 'Henry F. DuPont'	30' x 30'	An open, spreading, somewhat irregular, informal tree with rosy red flowers and maroon-red young foliage. Small, purplish red fruit that hang on all winter or until eaten by birds. Very disease resistant.
4612	Malus 'Henry Kohankie'	not known	New; ultimate size not yet known. Presently a nicely rounded tree with pale pink buds that open into pinkish white, single flowers 1½-inches across. Glossy, red fruit, 1¼-inches across that hang on throughout most of the winter. Disease resistant.
4614	Malus 'hopa'	30' x 25'	A well-known, large, spreading crabapple famous for its reliable, beautiful, rosy pink flowers. Notorious for huge annual crops of bright red, 1-inch fruits that fall to the ground and make a terrible mess. Very susceptible to scab. No longer recommended.
4616	Malus 'Indian magic'	not known	A rounded crabapple with red buds opening into single, rose pink flowers 1½-inches across, followed by ½-inch, glossy, red fruit that change to golden orange. Severely affected by scab. Leaves hang on until autumn.
4618	Malus 'Indian summer'	not known	Too new to know mature size. A rounded tree with red buds opening into rose red flowers followed by 5/8- to ¾-inch fruit that turns bright red in August. Disease resistant; looks very promising.
4620	Malus baccata 'Jackii'	30' x 25'	A well-known cultivar that grows into a large, upright, spreading crab. Pinkish white buds open into pure white, single flowers, 1½-inches across. Fruit is ½-inch across and purplish red on the south side. Slightly susceptible to fire blight and powdery mildew.
4622	Malus floribunda Japanese flowering crab	20' x 12'	Has a broadly-rounded, dense, irregular top with deep rose red to pink buds and small, single, fragrant, mid-season, white flowers. Hardy only in Zone 5 in Iowa, and does best in protected locations. Not popular with nurseries because of its spreading, irregular growth habit. Homeowners like its odd shape. Slightly susceptible to powdery mildew; moderately susceptible to fire blight.
4624	Malus purpurea 'Jay Darling'	20' x 20'	Named for the late artist and cartoonist of the <i>Des Moines Register</i> . Round-topped, showy, red flowers and fruits.
4626	Malus 'katherine'	20' x 20'	Hardy Zone 5. Grows rather slowly into an outward-spreading, open and irregular crabapple with rosy red buds that open into 2-inch diameter, double, pink flowers that fade to white. Fruits are dull, deep red and only ¼-inch across. Extraordinarily picturesque, spectacular in bloom. Resists scab and fire blight.



key name

height
and
spread

description

4628	Malus 'kelsey'	18' x 12?'	A Canadian cultivar that grows into an upright crabapple with semi-double, purplish red flowers with a pure white marking at the base of each petal. Fruits are a little less than 1-inch across, bright dark red, and persist into winter.
4630	Malus 'kibele'	8' x 4'	A very small, upright cultivar with dark red buds that open into rose pink flowers. Slightly glossy, purplish red leaves that are 2- to 3-inches long. Fruit is ½-inch across and dark burgundy-red. Slightly susceptible to scab, moderately susceptible to fire blight. Combination of small size, pink flowers, and dark foliage is quite striking against a white building or fence.
4632	Malus 'liset'	15' x 5'	A columnar crabapple with bright crimson buds, opening to rose red flowers that produce glossy, dark crimson ⅝-inch fruit. Authorities differ on shape of this crab. One lists it as rounded; one lists it as columnar. We suggest you check with your local Iowa certified nurseryman before ordering. Resistant to scab and cedar-apple rust, moderately susceptible to powdery mildew, and slightly susceptible to fire blight.
4634	Malus 'Makamik'	35' x 25'	Developed in Canada in 1921 and named for the Makamik Lake in Quebec. A large crabapple, growing rapidly; quite upright when young but rounding when mature. Dark red buds open to purplish red, single flowers 1¼ inches in diameter and fade to a lighter tint. Carmine colored ¾-inch fruit that colors around the middle of May. Slightly susceptible to scab, but severely susceptible to powdery mildew.
4636	Malus baccata 'Manchurian'	30' x 20'	The very first crab to bloom each spring. A fairly large crab with pink buds opening to 1½-inch, pure white, very fragrant flowers. Fruit is ½-inch yellow ellipsoid. This cultivar is hardier and has greater resistance to scab and fire blight than the parent species.
4638	Malus 'Mary Potter'	10' x 18'	Very shrub-like, resembling a large sargent crab in shape. Could be pruned into an interesting bonsai effect. Pink buds open into ½-inch white flowers followed by ½-inch red fruit. Moderately susceptible to scab, powdery mildew, and fire blight. Use with caution if fire blight is present in your area.
4640	Malus 'Ormiston Roy'	30' x 20'	Upright when young but more spreading with age. Pale pink to white single flowers 1½-inches across. Fruit is yellow, ⅜-inch across, and lasts until the following March, providing excellent winter bird food. Slightly susceptible to fire blight and cedar-apple rust. The original tree was found in Des Moines, Iowa in 1933.
4642	Malus halliana 'parkmanii'	15' x 15'	One of the best, low growing, pink, flowering crabs. Quite rounded in habit, has bright rose red buds opening very late, at the end of the bloom season, into semi-double, rose pink flowers in pendulous clusters on long, deep crimson pedicels. Sets only a very few, ¼-inch purple fruit. Very useful to extend the flowering season a full week. Moderately susceptible to cedar-apple rust and fire blight.
4644	Malus x robusta 'persicifolia'	40' x 30'	Upright, spreading, dense, and one of the tallest flowering crabapples. Covered with single, white flowers that are followed by a large crop of ¾-inch bright red fruit that make fine jelly. The slightly glossy, dark green foliage resembles peach leaves. Foliage stays bright green into the fall after the other crabapples have become bare. Basically disease free, but commercially rare. Apparently, few people consider planting a crabapple for its outstanding foliage.
key	name	height and spread	description

4646	Malus 'pink perfection' (plant patent no. 2912)	15' x 15'	Rounded in shape, has red buds that open into large, clear pink, double flowers. Has thick, lustrous foliage.
4648	Malus 'pink spire'	25' x 15'	An upright, pyramidal tree with single, light magenta flowers in mid-May, dark crimson to maroon-red fruits, 5/8-inch in diameter. Good disease resistance.
4650	Malus 'ioensis' Prairie crab	25' x 15'	A native crabapple that grows slowly. Flowers are single and pale pink. Fruits are rather large, green, and "crabby" tasting. Suffers from all crabapple diseases. Native, with fragrant flowers. Tough, but not recommended except for wildlife and prairie areas.
4652	Malus 'Professor Sprenger'	15' x 15'	Grows so densely that its upright, spreading form may not be noticed. Pink buds open into showy, white, single flowers. Fruits are 1/2- to 3/8-inch across, orange-red in color, and last from mid-September until at least the first hard frost and sometimes until Christmas. Disease resistant.
4654	Malus 'profusion'	not known	Named for its abundance of rosy pink flowers each May, followed by small, red fruits that last all winter. Disease resistant. Ultimate size is not yet known.
4656	Malus 'purpurea' Purple crab	20' x 15'	This well-known, old species is best remembered for its deep purplish red flowers, followed by purple fruit. Even the fall color is purple. Formerly very dependable and recommended, but authorities disagree on whether it is resistant to scab or is highly susceptible to scab.
4658	Malus 'radiant'	20' x 20'	A nicely-rounded tree with red buds that open into reddish pink flowers. Bright red, 1/2-inch fruits cling to the tree. Quite popular and sold by many nurseries. Not recommended. Severely susceptible to apple scab.
4660	Malus 'red jade'	15' x 15'	A distinctively "weeping" crab with gracefully pendulous branchlets. Pink buds open in mid-May to white flowers. Bright red 3/8-inch fruits. Severely susceptible to scab and fire blight. Candied apple (key no. 4566) is a good substitute where these diseases are present. We no longer recommend red jade because of disease problems.
4662	Malus 'red jewel' (plant patent no. 3267)	15' x 18'	A new, compact, upright, spreading crabapple with horizontal branches. White, single flowers produce bright cherry red, 1/2-inch fruit that darkens when frozen but is quite prominent into late winter. Shape is strikingly similar to flowering dogwood. Moderately susceptible to apple scab.
4664	Malus 'red silver'	15' x 15'	Purplish red leaves with silver-white hairs. Dark red, single flowers in mid-May, followed by purplish red fruit.
4666	Malus 'red splendor'	20' x 20'	An upright, spreading, open crabapple that appears dark reddish green in summer because the dark green leaves have prominent red veins. Red buds open into showy, 1 3/4-inch, single, deep pink flowers, followed by dark red, 1/2-inch fruit. Pleasing reddish-purple fall color. Moderately susceptible to scab and fire blight; not recommended where these diseases are present.
4668	Malus zumi calocara 'redbud'	20' x 25'	A well-known, older cultivar with a rounded, spreading crown and deep red buds opening into 1-inch white, single flowers followed by bright red, 3/8-inch fruits that persist into winter. Tends to have heavy fruit crops every other year. Too small to use as a street tree, but very satisfactory as a boulevard, park, or lawn tree. Very resistant to scab, but very susceptible to fire blight, and should not be planted if fire blight is present.



key name

height
and
spread

description

4670	Malus 'redflesh'	25' x 20'	Has a half-round crown and spirea red flowers that produce fairly large, bright red fruit with deep red flesh. Makes good jelly, but is otherwise quite messy.
4672	Malus 'ringo'	15' x 10'	A semi-upright crabapple with pink buds and white flowers that produce yellow fruits that drop before October. Disease resistant.
4674	Malus 'robinson'	25' x 20'	Upright to somewhat spreading crown that is very dense at maturity. Many deep pink, single flowers that produce dark red, 3/8-inch fruit. The dark green leaves have red veins, giving the effect of purple foliage at a distance. Disease resistant and grows quite rapidly.
4676	Malus 'royal ruby' (plant patent no. 3052)	15' x 10'	Fast, upright growth with dark red, double flowers. New; very little known about this crabapple.
4678	Malus 'royalty'	15' x 15'	Flowers and fruits are dark red, but rather sparse. Grown for its very shiny, varnished appearing, reddish leaves that gradually turn purplish during summer. Very hardy. Authorities disagree on whether it is susceptible to fire blight or has some resistance to the disease.
4680	Malus 'sargentii'	8' x 18'	An extremely low, spreading crab. Well known and widely available, sargent crab is most often grown as a very wide, spreading shrub because its normal form is much wider than its very short height. Its slightly pink buds open into a profusion of pure white, single flowers that completely cover the plant. Very dense-growing; could be pruned into a bonsai if desired. Its dark red, 1/4-inch fruit is quite showy against the bright dark green leaves. An interesting specimen, also good for mass plantings on slopes in parks. Somewhat susceptible to fire blight.
4682	Malus 'sargentii tina'	4' x 12'	An extremely dwarf cultivar of the sargent crabapple. Bright yellow stamens protrude from the bright red buds. This unusual effect is followed by white flowers and red fruit identical to the parent sargent crab. Disease resistant. Use as a novelty, in a rock garden, in a planter on the patio, as a naturally dwarfed bonsai, as a nice, low, but very wide shrub, or as a specimen.
4684	Malus 'schiedecker'	20' x 15'	Pale pink, 1 1/2-inch double flowers that cover the tree are followed by pale yellow, 3/4-inch fruit. Slow growth into a nice oval. Well known. Susceptible to many diseases. Not recommended.
4686	Malus 'selkirk'	15' x 10'	A vigorous tree with bright red, persistent fruit. We know very little about this Canadian cultivar.
4688	Malus 'sentinel'	not known	Very new, we have not seen any mature trees yet. Appears to be a very upright, narrow (a sentinel, like the name implies) crabapple. Pale pink, single blossoms followed by bright red, 1/2-inch fruit that colors up in August. Slightly susceptible to scab and fire blight.
4690	Malus 'baccata' Columnar Siberian crab	20' x 10'	Pink buds and mid-spring, white, single, very fragrant flowers. A very columnar cultivar, but is very susceptible to fire blight. Not recommended if fire blight may be present.
4692	Malus 'silver moon'	not known	Relatively new, and not well known. Flowers heavily in alternate years so far. Has light pink buds and single, 1 1/2-inch, white blooms very late in the bloom season. Purplish red fruit. Moderately susceptible to scab; severely susceptible to fire blight. The late bloom is very desirable. Not recommended.
key	name	height and spread	description

4694	Malus 'snowcloud' (plant patent no. 2913)	15' x 10?'	A rapid, upright grower with pink buds opening into pure glistening white, double flowers. Quite new; we have not seen any mature trees yet. Reported to be disease resistant.
4696	Malus 'snowdrift'	20' x 20'	Grows vigorously into a dense, rounded crown with upright branches. Red buds open into single 1½-inch flowers in mid-season, followed by plentiful ¾-inch orange-red fruit. A very nice crabapple, but susceptible to fire blight.
4698	Malus 'sparkler'	15' x 25'	A very wide, spreading, flat-topped crab from the University of Minnesota. Abundant, bright rosy red flowers followed by ¾-inch dark red fruit. Quite disease resistant.
4710	Malus 'spring snow' (plant patent no. 2667)	20' x 20'	A very dense, upright crabapple with a profusion of white flowers. Has no fruits. Quite disease resistant.
4712	Malus 'strathmore'	20' x 15'	A very narrow, pyramidal to rather columnar crabapple. Has single, pink blossoms but blooms are not reliable. Leaves are reddish to purplish all summer. Susceptible to scab.
4714	Malus 'thundercloud'	not known	A very new variety from Canada. Has purplish red foliage. Is reported to be resistant to fire blight. We know very little about this crabapple.
4716	Malus 'tschonoskii'	30' x 25'	An old cultivar, with unusual foliage that appears white to silvery gray all summer, turning to many shades of rich yellow, orange, red, and purple in the fall. The flowers are small, white, and not particularly effective. A quite large crabapple, but very susceptible to fire blight and not recommended.
4718	Malus 'vanguard'	20' x 15'	A vase-shaped crabapple with rose red flowers in mid-May, followed by ⅝- to ¾-inch red fruits that persist into the winter. Susceptible to scab.
4720	Malus 'white angel'	25' x 25'	A slightly irregular, upright, spreading, somewhat open crabapple with excellent blooms. The white, single flowers completely cover the tree in late April and are followed by ½-inch scarlet red fruit that persists into late winter. An excellent specimen, drawing a lot of attention when in bloom. Slightly susceptible to apple scab; moderately susceptible to fire blight.
4722	Malus 'white candle'	15' x 5?'	Occasionally listed in catalogs. Very narrow and upright in growth and with white flowers. We know very little about this cultivar.
4724	Malus 'winter gold'	20' x 20'	A rounded tree with deep carmine colored buds that open into 1-inch white, single flowers late in the bloom season. Bright yellow, ½-inch fruit that holds its color until a hard freeze. Moderately susceptible to scab and fire blight; slightly susceptible to powdery mildew.



key name

height
and
spread

description

large evergreen shrubs
5 to 10 feet high at maturity

2500	Juniperus chinensis 'maneyi' Maney juniper	medium	6' x 6'	Hardy Zone 3. A semi-erect, spreading juniper with a bluish cast to its foliage. Very hardy, tolerates dry soils, resists winterburn. Its open top sometimes causes limb breakage when snow is very deep. Often gets larger than indicated unless regularly pruned.
2510	Juniperus chinensis pfitzeriana Pfitzer juniper	fast	6' x 15'	Hardy Zone 4. Popular and very well known. Can get larger than most homeowners expect. Can be pruned to maintain a height of about 4 feet with a spread of about 6 feet, if pruned regularly. Quite reliable, sometimes suffers from winterburn. Open, spreading habit with irregular branching. Resists cedar-apple rust.
2510a	Juniperus chinensis pfitzeriana cv. Aurea juniper Gold tip pfitzer juniper	fast	4' x 8?'	Hardy Zone 4. The tips of the new growth are quite gold in color and slowly turn bright green as summer progresses. Somewhat smaller and slower-growing than the parent. Resistant to cedar-apple rust.
2520	Juniperus sabina cv Von Ehron juniper	fast	8' x 8'	Hardy Zone 4. A well-known cultivar introduced in 1912 by the Von Ehron Nursery of Hamburg, Germany. Fine, bright green foliage. Grows into an upright, spreading, rather loose vase shape.
2530	Juniperus squamata 'meyeri' Meyer's singleseed juniper Fishtail juniper	slow	8' x 6'	Hardy Zone 4. Foliage is striking blue-white to silver above and exotic appearing when young, but the old, dead needles persist and the shrub becomes rather unsightly. Grows into a rather unpredictable, odd, irregularly-shaped shrub. Not often available in nurseries. Hard to use in the landscape except as an interesting oddity, but does have beautiful, stout, spreading branches. Resistant to cedar-apple rust.
2540	Pinus mugho mughus Dwarf mugho pine Mugho pine	slow +	15' x 15'	Hardy Zone 3. Native to the mountains of central and southern Europe. Often listed in catalogs as "very dwarf; grows 2 to 3 feet tall." Mature size varies from about 4 feet to over 15 feet. Easily pruned to almost any desired height. Recommended if you are willing to invest some time each spring pruning it. Attacked by pine needle scale and European pine sawfly larvae.
2550	Taxus cuspidata cv. Spreading Japanese yew	slow +	10' x 15'	Hardy Zone 4. Quite variable in growth rate and size. Many cultivars are available. The term "spreading yew" generally refers to a series of selections that, although rather different in mature, unpruned size, can easily be pruned into gracefully spreading, twice or three times as broad as they are tall, dark green foliaged evergreen shrubs. Although yews do very well in shady, moist sites, they will not tolerate "wet feet," and also can winterburn badly if exposed to strong winter winds and bright sun. Consult your local Iowa certified nurseryman as to cultivars of spreading Japanese yew for your particular use.
2560	Taxus x media cv. Hicks anglojap yew Hicks yew Hicksii yew	medium	12' x 8'	Hardy Zone 4. A very columnar cultivar with male and female plants. Only female plants bear the colorful, bright red fruits. Tolerates shade very well, can be easily pruned to 6 feet tall by 5 feet broad. Very susceptible to winterburn. Like all yews, requires good drainage.



key

name

growth rate

height and spread

description

2570	Thuja occidentalis cv. Ware arborvitae Robusta arborvitae Siberian arborvitae	slow	8' x 5'	Hardy Zone 2. Sold both as ware arborvitae and as robusta arborvitae. This winterburn resistant cultivar grows slowly into a dense pyramid with bright green foliage. Very hardy and generally recommended, but suffers from bagworm, heart rot, and spider mites.
2570a	Thuja occidentalis cv. Techny arborvitae	medium	15' x 10'	Hardy Zone 2. Many authorities list this as "the best arborvitae that can be grown." Noted for its dark green foliage that can be sheared very successfully. Authorities differ on whether it is slow growing like the other arborvitae, or is fast growing. We suspect fast growth to be unusual enough for an arborvitae that the "fast" votes are correct. Desirable and generally recommended. Can grow a lot bigger than desired, but can be easily pruned to keep it under control. Also listed as a tree under key no. 2260b, but often planted as a shrub with the expectation that regular pruning will keep it the desired size.



key	name	growth rate	height and spread	description
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small evergreen shrubs
under 5 feet high at maturity

2600	Juniperus chinensis cv. Compact pfitzer juniper	medium	4' x 6'	Hardy Zone 4. A very popular and readily available hardy cultivar with a rather dense, bushy, spreading form and bright green foliage. Generally recommended for sunny locations with well-drained soils. There are many named cultivars of <i>Juniperus chinensis</i> ; not all are listed here. Consult your local Iowa certified nurseryman for information on additional cultivars.
2610	Juniperus chinensis 'sargentii' Sargent juniper	medium	2' x 6'	Hardy Zone 4. A reliable, old cultivar with a very formal, very low, spreading, mounded form. Silver-blue to green foliage. Several named cultivars of this cultivar are available, including <i>sargentii compacta</i> , <i>sargentii glauca</i> , and <i>sargentii viridis</i> . All are somewhat more compact than <i>sargentii</i> , with foliage of differing shades of blue-green and green. Many are susceptible to cedar rusts.
2620a	Juniperus chinensis cv. Blaauws juniper	medium	4' x 4'	Hardy Zone 4. Very dense and compact with rich, blue-green foliage. Grows into an irregular vase shape.
2620b	Juniperus chinensis cv. Hetz juniper	fast	15' x 15'	Hardy Zone 4. An old cultivar that grows rapidly into an upright, spreading shape with branches going off in all directions. Too large for most situations unless pruned regularly.
2620c	Juniperus chinensis cv. Hetzii glauca juniper Blue hetz juniper	fast	8' x 8'	Hardy Zone 4. Plumy, quite bluish green foliage growing rather rapidly into a flat-topped, upright, spreading shrub. Gets quite large and requires regular pruning.
2620d	Juniperus chinensis 'maneyli' Maney juniper	medium	6' x 6'	Hardy Zone 3. Quite resistant to winterburn, but subject to snow breakage. Grows fairly rapidly into a semi-erect, bushy form, as broad as it is high. Distinct bluish, bloomy foliage. Easily obtained from nurseries, is very hardy and generally recommended. Also listed as key no. 2500.
2620e	Juniperus chinensis cv. Mint julep juniper Sea green juniper	medium	4' x 5'	Hardy Zone 4. A compact, spreading shrub with gracefully arching, brilliant mint green branches. Its low, fountain form resembles a bright green dwarf pfitzer. The identical cultivar is sold both as mint julep and as sea green.
2620f	Juniperus chinensis cv. San Jose juniper	medium	1' x 8'	Hardy Zone 4. An extremely low, creeping juniper with grayish green foliage and an irregular, spreading shape.
2620g	Juniperus chinensis cv. Sea spray juniper	medium	1' x ?	Hardy Zone 4. Very new, reputed to be a better ground cover than better known cultivars such as blue rug, bar harbor, or <i>tamariscifolia</i> . We have no experience with it. Listed for information only.
2630	Juniperus communis cv. Depressa juniper Oldfield juniper Old field juniper	very slow	3' x 9'	Hardy Zone 4. Native to practically all of North America and much of Europe and Asia. The species is so variable that one could easily propagate hundreds of distinct cultivars. Most naturally occurring forms are quite sprawly and prostrate. This cultivar grows very slowly into a dwarf, dense, spreading shrub. The oil from the fleshy cones is used for medicinal flavorings and for making gin. Many cultivars are available. Ask your local Iowa certified nurseryman about locally available cultivars. Resistant to cedar rusts.
2640	Juniperus horizontalis admirabilis Prostrate juniper	quick	½' x 9'	Hardy Zone 3. An old cultivar introduced by Plumfield Nurseries of Fremont, Nebraska. A dense, dwarf, very low, spreading shrub with bluish green, creeping branches. Reported to be quite resistant to winterburn in Minnesota. Resistant to cedar rusts.



key	name	growth rate	height and spread	description
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2650a	Juniperus horizontalis plumosa Andorra creeping juniper Andorra juniper	quick	1' x 9'	Hardy Zone 3. This very old cultivar is well known for its gray-green summer foliage and purplish winter foliage. It is also well known for developing a ratty, completely bare-branched center as it matures. Popular and easily obtained, fast growing and reliable, but short-lived and no longer recommended unless you just want a quick, immediate effect. Is susceptible to cedar rusts.
2650b	Juniperus horizontalis cv. Bar Harbor juniper	medium	1' x 9'	Hardy Zone 4. Very low-growing, spreading form; bluish green foliage that turns purplish in winter.
2650c	Juniperus horizontalis cv. Blue chip juniper	medium	1' x 8'	Hardy Zone 4. Selected by the Hill Nursery near Chicago for its low, compact growth and clear blue color throughout the year.
2650d	Juniperus horizontalis cv. Waukegan juniper Douglasii juniper	fast	1' x 9'	Hardy Zone 4. Discovered near Douglas Nurseries in Waukegan, Illinois, grows rapidly in a trailing form. Its steel blue foliage turns purplish in winter.
2650e	Juniperus horizontalis cv. Blue rug juniper Wilton's carpet juniper Wiltonii juniper	medium	½' x 6'	Hardy Zone 4. Its beautiful silver-blue foliage turns purplish in winter. Creeping, spreading habit that clings tightly to the ground, even changing direction of growth at the edge of a vertical wall to cling tightly to the vertical surface. Very dependable and generally recommended. Resistant to cedar rusts.
2650f	Juniperus horizontalis cv. Emerald spreader juniper	medium	½' x 6'	Hardy Zone 4. An exceedingly low, ground hugging, spreading juniper with feathery appearing, deep emerald green branchlets.
2650g	Juniperus horizontalis cv. Turquoise spreader juniper	fast	1' x 8'	Hardy Zone 4. A wide-spreading, vigorous-growing form with soft, feathery branchlets of turquoise green.
2650h	Juniperus horizontalis cv. Webber juniper	medium	½' x 6'	Hardy Zone 4. An extremely low, matlike, spreading juniper with fine textured, bluish green foliage.
2650i	Juniperus horizontalis cv. Hughes juniper	medium	½' x 8'	Hardy Zone 4. A silvery blue, very low-growing selection with distinct, radially upright spreading branches.
2650j	Juniperus horizontalis cv.	medium	1' x 9'	Hardy Zone 4. Many more cultivars of Juniperus horizontalis are available, and more are constantly being developed. Among them are: alpina, blue mat, dunvegan blue, Emerson, jade spreader, plumosa compacta, and sun spot. Consult your local Iowa certified nurseryman.
2670	Juniperus procumbens Japgarden juniper	slow	1' x 6'	Hardy Zone 4. Introduced into North America in 1843 from its native Japan. Has a reputation for being somewhat hard to transplant, but since virtually all stock for sale is container grown, we feel transplanting in suitable sites should be no problem. Reported to be tremendously susceptible to the Phomopsis disease in overly wet soils. Very distinctive, spiky, bluish to gray-green foliage, with a neat, dwarf growth habit. Thrives on limey, dry soils that are easy to find in Iowa. Generally recommended. Many cultivars are resistant to cedar rust.
2670a	Juniperus procumbens 'nana' Dwarf Japgarden juniper	slow	1' x 5'	Hardy Zone 4. Similar to the parent species but quite a bit smaller and slower growing. Very neat in habit, with overlapping branchlets. Excellent in rock gardens. Generally reliable and recommended. At least one other cultivar (variegata) is known.
2680	Juniperus sabina Savin juniper	slow	4' x 4'	Hardy Zone 4. Parent of many cultivars, the species is an upright, stiff, spreading, somewhat vase-shaped shrub. Branches are borne at a very distinctive 45-degree angle to the ground. Tolerates city conditions quite well.



key name

growth rate height and spread

description

2680a	Juniperus sabina cv. Arcadia juniper	slow	1' x 8'	Hardy Zone 3. A very low, spreading cultivar with horizontal branches and dark, grass green foliage.
2680b	Juniperus sabina cv. Blue Danube juniper	slow	3' x 9'	Hardy Zone 4. Introduced from Austria in 1956. A spreading shrub with upcurved branches and bluish green foliage. More horizontal than the species and has better foliage.
2680c	Juniperus sabina cv. Broadmoor juniper	slow	1' x 4'	Hardy Zone 4. A very dense, dwarf cultivar with soft, grayish green foliage. Has distinct, strong, horizontal branches with the branchlets curving vigorously upward to given an unusual effect resembling feathers held on edge. This cultivar was developed from seeds imported from near Petersburg, Russia in 1933. Resistant to cedar rusts.
2680d	Juniperus sabina cv. Scandia juniper Skandia juniper	slow	1' x 5'	Hardy Zone 4. Like Broadmoor juniper, was developed in 1933 from seeds imported from Russia. A low, spreading plant with somewhat spikey, dark green to dark grayish green foliage. Quite handsome. Resistant to cedar rusts.
2690	Juniperus virginiana cv. Kosteri juniper Koster redcedar	quick	4' x 30'	Hardy Zone 3. A low, spreading juniper that is capable of growing much wider than wanted. Its grayish green foliage turns purplish in fall like the parent species. Quite similar in shape and appearance to pfitzer juniper, and often mistaken for it. With careful and regular pruning, can be kept to only 6 to 8 feet wide.

2540	Pinus mugho mughus Mugho pine Dwarf mugho pine	slow +	3' x 3'	Hardy Zone 4. Mugho pine is listed here in this size class because it can be maintained at almost any size if regularly and skillfully pruned. Left to itself, a mugho pine often grows 10 to 12 feet tall and just as wide.
2700	Taxus canadensis Canada yew Canadian yew American yew	slow	4' x 5'	Hardy Zone 3. This yew is normally maintained with regular pruning at the size listed. Left alone, it will eventually reach almost twice the indicated size. However, this native yew is rarely allowed to straggle about naturally. Self roots the ends of the branches and spreads readily in cool, moist, shady areas. Does not tolerate sun or dryness, especially in winter.
2710	Taxus cuspidata 'nana' Dwarf Japanese yew	slow	4' x 8'	Hardy Zone 4 in shady spots. Grown unpruned, one 40-year-old plant is 10 feet high by 20 feet across. Easily pruned to a neatly rounded shrub, perhaps twice as broad as high. Very hardy and shows some resistance to winterburn.
2720	Taxus cuspidata cv. Cushion yew	slow	4' x 8'	Hardy Zone 4. This old cultivar has dark green, glossy foliage and is normally pruned to assist in keeping it to a nicely-rounded, compact cushion form.
2730	Taxus x media browni Brownii yew Brown's anglojap yew	slow	5' x 8'	Hardy Zone 4 if protected from winter sun and wind. This old cultivar is particularly susceptible to winterburn injury. On moist, cool, shady sites protected from winter injury, grows with little pruning into a neat, rounded shrub.
2730a	Taxus x media cv. Taunton yew	slow	3' x 6'	Hardy Zone 4. This is the only named cultivar of the Japanese yew that has shown any resistance to winterburn in Minnesota. It is a spreading yew, reported to grow about 3 feet tall by 6 feet wide.
2740	Thuja occidentalis globosa Globe arborvitae	slow	5' x 5'	Hardy Zone 4. This interesting cultivar seems to be a naturally appearing sport of our native American arborvitae. It grows without much pruning into a neat globe. Does best on wet soils, which is understandable, because the parent is a swamp tree.

key	name	growth rate	height and spread	description
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**very large
deciduous
shrubs**

12 or more feet high
at maturity

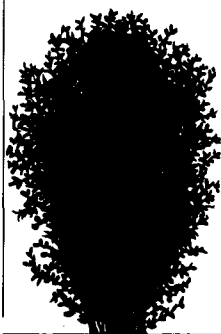


4230	Alnus rugosa Speckled alder Smooth alder	medium	15' x 12'	Hardy Zone 4. Native, cultivated since 1769. Excellent for naturalizing into wet, soggy, swampy soils. The branches are smooth, but are liberally peppered with very distinct, horizontally borne lenticels, accounting for the speckled name.
4260	Aralia spinosa Hercules club Devil's walking stick	medium	25' x 15'	Hardy Zone 5. Some authorities report this odd, small tree or large shrub is native to eastern Iowa. Has large bipinnately compound leaves. Huge hairy panicles of small, white flowers in August are followed by small, round, black fruits in September and October. Stems and trunks have few branches and are very spiny. Leaves also are very prickly. Use in the back of a shrub border for the bold leaves and interesting flowers.
5000	Caragana arborescens Siberian peashrub	fast	20' x 15'	Hardy Zone 3. Extremely tough and hardy, this large shrub or small tree (the name "arborescens" implies this is the small tree like of the peashrubs) is native to Siberia, Mongolia, and Manchuria. Rather coarse and scruffy in growth habit, but has bright yellow flowers in early to mid-May. Will grow well in almost any well-drained soil in full sun. Good for living snowfences, backgrounds, etc. Close up does not look like it has character—just looks scruffy. Useful and tough; not very ornamental.
5000a	Caragana arborescens cv. Pendula peashrub Weeping peashrub	fast	10' x 5?'	Hardy Zone 3. A very interesting grafted cultivar with an odd, weeping form. Tough as the parent, useful where a really odd-appearing specimen is needed in poor soil.
5000b	Caragana arborescens cv. Tidy	medium	15' x 10'	Hardy Zone 3. More upright than the parent species, with narrow leaflets and light yellow flowers. Quite a bit neater than the species in appearance.
5000c	Caragana arborescens cv.	fast	15' x 10?'	Hardy Zone 3. There are quite a few cultivars of Siberian peashrub. Among them are lorbergerii, sutherland, and walker.
5010	Cephalanthus occidentalis Buttonbush	medium	15' x 12'	Hardy Zone 4. Native to swamps and other very wet places. A rounded shrub of rather gangling proportions. Winter texture is rather coarse; has glossy, green, medium textured summer foliage. Young twigs are shining olive green, turning reddish in winter. The flowers in August are creamy white and intensely attractive to honeybees who collect a delicious, fragrant honey. Best used naturalized in very wet, poorly-drained, background areas.
5020	Chionanthus virginicus White fringetree Fringetree Old man's beard	medium	15' x 15'	Hardy Zone 5b, trial in protected locations in 5a. A very attractive, unusual, large shrub or small tree. Unusual, creamy white, fleecy, "fringe on a shawl like," fragrant flowers in 6- to 8-inch panicles in May. Quite tolerant of air pollutants. The very fine specimen just northeast of the front door of Bill Zuber's Restaurant in the Amanas is the farthest north growing specimen we are aware of in Iowa. Highly recommended for specimen or group plantings and borders and near large buildings in Zone 5b. Well worth a try in deep, moist, well-drained, fertile, neutral to acid soils in protected locations in Zone 5a. Not likely to do well in sharply alkaline soils anywhere in Iowa.
4340	Cornus mas Cornelian cherry dogwood	slow	20' x 15'	Hardy Zone 5. Cultivated since ancient times, native to central and southern Europe and western Asia. Does fairly well in Ames. Small, yellow flowers appear in May before the leaves. Grows slowly into a round-topped large shrub or small, spreading tree depending upon pruning and quality of the site. Recommended in Zone 5b, recommended for sheltered sites in Zone 5a. Trial in carefully evaluated sheltered sites in Zone 4b.

key	name	growth rate	height and spread	description
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5030	Cotinus coggyria Smoketree Smokebush	slow	15' x 12'	Hardy Zone 5. Dies back to the ground in the winter in Zone 4, fairly reliable in Zone 5. Very reliable in Zone 5b. Has been cultivated since 1656, introduced into the United States in 1882. Several cultivars, some of which are hardier than the species. Grown for its odd, feathery, smoke-like, purplish flowers and its yellow to purple fall color. Often grown as a large shrub, can be pruned into an interesting small specimen tree.
5030a	Cotinus coggyria cv. Royal purple smoketree	slow +	15' x 15'	Hardy Zone 5. Some authorities list this cultivar as "the best cotinus cultivar that can be grown." Specimens at Ames are very nice and appear to be somewhat sturdier than the species. Very deep, rich purple foliage throughout the growing season with clear, light purple flowers. Attracts a lot of attention. Use with caution. Generally recommended in Zone 5.
5030b	Cotinus coggyria cv.	slow +	15' x 15'	Hardy Zone 5. Quite a few cultivars of smoketree are available. Among them are flame, notcutt, purpureus, royal red, rubrifolius, and pendulus, a weeping form. Velvet cloak in particular maintains good color through the summer and develops excellent purple fall color.
5040	Euonymus atropurpurea Eastern wahoo Wahoo	medium	15' x 8'	Hardy Zone 3. Native to much of Iowa. Most often grown as a shrub, can also be pruned into an interesting small specimen tree with fairly smooth, greenish gray, multiple trunks and 4-angled twigs. Its purple flowers in June are followed by conspicuous, popcorn-shaped, purple and crimson fruits in October. Fall color is clear, lovely gold. A very attractive native shrub or small specimen tree. May suffer from powdery mildew in the fall. Generally recommended.
5050	Euonymus europaea European spindle tree European euonymus	medium	15' x 8'	Hardy Zone 4. Can be used either as a large shrub or as a small tree. Yellowish green flowers are followed by red to pink, 4-lobed popcorn or bittersweet type fruits with orange seeds. A good background large shrub or small tree grown mostly for its colorful fruits. The species is not planted as often as its cultivars, which include albus, with pure white fruits that are a striking contrast with either the species or the other cultivars; aldenhamensis, with pink fruits; intermedius, which is reported to produce enormous crops of fruit; pumilis, a dwarf, upright form reported to be about 3- to 4-feet high; and red caps, a free fruiting cultivar with bright red capsules. It may be identical to red cascade, another often listed cultivar.
5060	Hippophae rhamnoides Sea buckthorn	slow	15' x 10'	Hardy Zone 4. Quite unusual and little known. Can be grown as a large shrub or a very small tree. Bears a striking resemblance to a miniature Russian olive. The branches are very silvery appearing, as are the leaves. Requires well-drained soil and actually does better in poor soil than in better, more fertile soil. Very tolerant of salt spray, should do very well in areas such as along highways and freeways where salt is used for winter de-icing. Hard to find in commerce, but well worth a try. Has bright orange, 1/4-inch fruit in the fall.
5070	Lonicera x bella albida White belle honeysuckle	fast	12' x 10'	Hardy Zone 3. This hybrid was first grown in the Munden Botanic Gardens in Germany in 1878. It is widely planted all over Iowa for both landscape and windbreak purposes. Flowers are creamy, yellowish white, fading to white. It has red berries. Several cultivars are listed by various authorities, among them: albida, with white flowers fading to creamy yellow; atrosea, with dark pink flowers; candida, with pure white flowers; Dropmore, a white flowered selection from Dropmore, Manitoba; and rosea, with deep pink flowers. The cultivar candida is badly bothered by honeysuckle aphid. We do not know how the other cultivars are affected.
key	name	growth rate	height and spread	description

5075	Lonicera maackii Amur honeysuckle	fast	18' x 18'	Hardy Zone 2. Rarely planted now because it gets very large. Quite commonly used for shelterbelts and windbreaks years ago, this very large, tough honeysuckle grows rapidly into an upright, spreading, leggy shrub with white flowers followed by red fruit. The cultivar podocarpa is more often found. Quite resistant to honeysuckle aphid. Recommended, but remember its size.
4632	Malus cv. liset Liset crabapple		15' x 5'	A columnar crab with bright crimson buds, opening to rose red flowers that produce glossy, dark crimson, 5/8-inch fruit. Authorities differ sharply on the shape and size of this crabapple. One lists it as rounded, another lists it as very columnar. Consult your local Iowa certified nurseryman before ordering. Resistant to scab and cedar-apple rust; moderately susceptible to powdery mildew; slightly susceptible to fire blight.
4640	Malus cv. Ormiston Roy Ormiston Roy crabapple		30' x 20'	Authorities differ on the ultimate size of this crabapple. Some list it as 30 feet tall by 20 feet broad, others list it as only a very large shrub, 10 to 15 feet high by 10 feet broad. The original tree was found in Des Moines, Iowa, in 1933. Has pale pink to white flowers 1 1/2 inches across, with yellow, 3/8-inch fruit lasting until the following March and providing excellent winter bird food. Slightly susceptible to fire blight and cedar-apple rust.
4840	Ptelea trifoliata Wafer ash Hop tree	slow	18' x 12'	Hardy Zone 4. Can be grown as a large shrub or as a small, round-headed tree. Interesting trifoliolate leaves and odd, broadly winged 2- or 3-seeded fruits. Cultivated since 1724, best used as a background shrub or as an odd small specimen tree.
5100	Rhamnus cathartica Common buckthorn	fast	15' x 15'	Hardy Zone 3. Naturalized. Alternate host to crown rust of oats. By Iowa law cannot be sold or planted, and must be destroyed if discovered. Unfortunately, the buckthorn does not know this, and wild specimens can be found almost anywhere. Easily transplanted and adaptable to very difficult situations. Withstands urban environments. Fruits are a powerful laxative, and birds make quite a mess when feeding on them. Not recommended.
5110	Rhamnus frangula Glossy buckthorn Alder buckthorn	fast	12' x 12'	Hardy Zone 3. Glossy, dark green leaves; poor, greenish yellow fall color. Rather widely used for large hedges and background plantings, reportedly not a host to crown rust of oats. Very adaptable and transplants well, but does not tolerate soil compaction very well. Birds spread it everywhere. Since it is rather gangly in outline and not well behaved, it is not recommended.
5110a	Rhamnus frangula cv. Cutleaved glossy buckthorn	slow	12' x 8'	Hardy Zone 3. A slow-growing, cut leaved, ferny-appearing variety that is rather uncommon. Shares all the faults of the parent species. Not recommended.
5110b	Rhamnus frangula cv. Columnar buckthorn	fast	12' x 8'	Hardy Zone 3. A quite narrow, upright-growing, glossy-leaved buckthorn, widely promoted for hedge use. Our experience with it has been mixed. Not recommended.
5110c	Rhamnus frangula cv. Tallhedge Tallhedge buckthorn	fast	12' x 4+'	Hardy Zone 4. A very widely promoted cultivar, reputed to grow without trimming into a very narrow, neat, tall hedge. What few examples we have seen in Iowa have been unsatisfactory, growing very unevenly with much random dieback. Does well in Ohio, but not recommended for Iowa.



key name

growth
rate

height
and
spread

description

key	name	growth rate	height and spread	description
5120	Rhus typhina Staghorn sumac	medium	24' x 12'	Hardy Zone 3. Often listed as a large shrub, can also be grown as an interesting small specimen tree. The pinnately compound leaves give a ferny, tropical appearance in summer, with a very coarse, staggy appearance in winter, helped by the fuzzy bark on the young branches. Excellent fall color, varying from yellow to brilliant red. Native over the northeastern four-fifths of Iowa. Has large, erect, prominent, fuzzy fruit clusters. Very tolerant of dry soils and limited fertility, spreads vigorously from root suckers and can rapidly take over an area. Seems to be much larger and more aggressive in the wild than in the planted landscape. Easily pruned or otherwise controlled. Recommended.
5120a	Rhus typhina 'laciniata' Cutleaf staghorn sumac	medium	20' x 20'	Hardy Zone 4. This very common and justifiably popular cultivar has deeply cut leaflets, giving an exceptionally ferny summer effect. Tends to grow into a broader, more spreading head than the parent species; fall color and winter twigs are identical to the parent. Can be grown as a large shrub or as an interesting small specimen tree. At least one more cultivar—dissecta, with even more deeply cut, dissected leaves—is available. Recommended.
5130	Staphylea trifolia American bladdernut	medium	12' x 8'	Hardy Zone 4. Native. Reportedly first cultivated in 1640. Interesting 3-leaved compound leaves and quite intriguing 3-lobed, 1½-inch long inflated capsules for fruit that are bright pale green, changing to light brown. They rattle when shaken. Grows into an upright, heavily-branched, suckering shrub with greenish white, bell-shaped abundant flowers in nodding panicles in April and May. Historically interesting because of its long cultivation, is attractive and useful in wet, well-drained areas. May be hard to find. Recommended.
5140	Syringa oblata cv. dilatata Korean early lilac	medium	12' x 8'	Hardy Zone 3. Introduced into North America in 1856 but not often found in commerce now. Valued for its early blooms. A rather coarse-textured, large shrub, it can also be pruned into an interesting small tree.
5150	Syringa vulgaris Common lilac	medium	20' x 15'	Hardy Zone 3. The common lilac has been planted all over the Midwest. One can spot abandoned farmsteads by the still vigorous old lilac originally planted in the middle of the yard. Always becomes quite bare around the base with age, with a cloud-shaped top producing the well-known, lilac-purple colored clusters of intensely fragrant blooms. Suckers freely and is much used for windbreaks, wildlife plantings, and backgrounds. Often suffers from powdery mildew and borers. Many cultivars.
5160	Tamarix pentandra Tamarisk Five-stamen tamarix Saltbush	medium	15' x 8'	Hardy Zone 3. Very tough, but only does well in very poor, quite salty soils. Grown for its fine, fluffy summer foliage and its rosy pink flowers in large, dense, fluffy panicles. Recommended for tough, dry areas exposed to salt.
5170	Viburnum lantana Wayfaringtree viburnum Wayfaring bush Wayfaringbush	medium	15' x 10'	Hardy Zone 3. Naturalized (grows wild) but not native. Nice 3- to 5-inch diameter flat-topped racemes of white flowers with no fragrance. Conspicuous fruits in clusters, turning from green to red to finally black in August. Fall color is unreliable, but sometimes is a nice, vivid purplish red. Rather coarse-textured in winter. Generally reliable and recommended for background use.



key	name	growth rate	height and spread	description
5180	Viburnum lentago Nannyberry viburnum Sheepberry Nannyberry	medium	20' x 10'	Hardy Zone 3. Native, very durable and reliable. Grows into a large shrub or small tree with gracefully arching branches. Conspicuous, white, nonfragrant flowers almost identical to the preceding, followed by purplish-blackish clusters of edible, sweet, quite seedy fruit that have a date-like flavor after a frost. Those who raise or are familiar with sheep or goats will recognize the reason for the common name. Quite reliable. Recommended.
5190	Viburnum prunifolium Blackhaw viburnum Black haw viburnum	slow +	12' x 8'	Hardy Zone 4. Native to much of the United States in an area that should cover Iowa, but we are not certain whether it was present in Iowa. Grows into a stiffly branched multi-stemmed shrub or round-headed, very small tree quite similar to many hawthorns; hence, the name. Typical viburnum flowers and edible fruit. Fall color has been described by various authorities as shining red, deep red, dull deep red, or bronze. Reliable and generally recommended.
5200	Viburnum sieboldi Siebold viburnum	medium	20' x 12'	Hardy Zone 4. Typical viburnum flowers and fruit. Nice, bright green leaves, but they give off an unpleasant, fetid odor when crushed. Very adaptable to moist, shady locations. Makes a very nice specimen against large buildings and blank walls.

large deciduous shrubs
8 to 12 feet high at maturity

5210	Amorpha fruticosa Indigobush amorpha Bastard indigo	10' x 8'	Grows into a rather ungainly shrub with most of the foliage on the upper one-third of the plant, with bare shins sticking out at the bottom. Has interesting 3- to 6-inch tall, upright racemes of purplish blue flowers in mid-June on the new growth. Does well in extremely poor, dry, sandy soils. This appears to be its best landscape use. Spreads readily by seeds and could become a weed shrub.
5220	Aronia arbutifolia Red chokeberry	8' x 5'	Hardy Zone 5. Distinctly upright, weakly spreading shrub with many stems. Gets quite leggy at the bottom, best used in the background of a shrub border. Has conspicuous, red fruits in September and October after the leaves have fallen that persist into January. The fruit tastes terrible—even the birds don't like it.
5230	Cornus alba Tatarian dogwood	8' x 6'	Hardy Zone 3. Native to Siberia, northern Korea, and Manchuria. An upright, erect shrub, arching slightly with age. The long stems are rather sparsely branched. The younger branches are showy red in winter. The species is not propagated, planted, or sold as often as the many cultivars. An excellent background shrub, may be too vivid in winter for many uses. Use with caution.
5230a	Cornus alba 'sibirica' Siberian dogwood	8' x 6'	Hardy Zone 3. This popular cultivar is known for its conspicuous bright red winter twigs. Does not spread by suckers nearly so readily as Cornus stolonifera , which is an advantage. All of the red-stemmed dogwoods are very difficult to separate when young, even for experts. Consult your local Iowa certified nurseryman for information on red-twigged dogwood cultivars and their current availability.
5230b	Cornus alba cv. Argento-marginata Elegantissima Variegata Variegated red-twig dogwood Variegated dogwood	8' x 6'	Hardy Zone 3. This readily available cultivar has leaves with irregular, creamy white margins and pale, slightly bluish green centers. Winter stems are a nice clear red. The variegated leaves are quite prominent in the landscape, as are the red stems in winter. Use with caution; this very nice shrub attracts a lot of attention. Generally quite reliable and recommended. May be sold under any of the listed names.
5230c	Cornus alba cv.	8' x 6'	Hardy Zone 3. Several other cultivars may occasionally be available. Among them are coral beauty, with bright red stems in early spring; gouchaltii, which has variegated leaves with yellow and rose leaf margins and green and rose leaf centers; and spaethii, with variegated leaves with bright yellow borders and green centers. Use with caution; these shrubs tend to become very prominent.
5240	Cornus racemosa Gray dogwood	8' x 5'	Hardy Zone 3. Native over the entire state. Long cultivated, one authority says since 1827, another since 1758. Suckers freely and forms dense thickets, but can be confined by pruning if desired. Strongly multi-stemmed, has dull gray-green summer foliage. The winter effect is quite interesting: the 3-year-old branches are soft gray, the young stems are light reddish brown. The stems from the fruits are bright red and persist into December. Has nice, whitish, late May or early June clusters of flowers. An excellent native shrub for naturalizing and for background use and as masses against large buildings. Good for poor soil conditions. Reliable and generally recommended.
5250	Cornus sanguinea Bloodtwig dogwood	10' x 6'	Hardy Zone 5. Native to Europe, and long cultivated. A bit coarse and hard to use in a home landscape. The twigs are supposed to turn a deep blood red in fall, but this is not reliable. Tolerates both alkaline and wet soils very well, transplants easily, grows vigorously. Flowers have a fetid odor and are profusely produced in late May to early June. Two cultivars are occasionally available; atrosanguinea, with deep red branches, and variegata, with yellowish white mottled leaves.



key

name

height
and
spread

description



key	name	height and spread	description
5260	Cornus sericea 'flaviramea' (stolonifera 'flaviramea') Yellowtwig dogwood	8' x 5'	Hardy Zone 3. This well-known native yellow-twig dogwood grows fairly vigorously and tolerates wet sites fairly well. The foliage is medium to dark green in summer, followed by purplish fall color. The twigs are green in summer, but turn bright clear yellow in fall and are quite conspicuous in winter, especially if planted in groups with one of the red twigged dogwoods. Pruned twigs invariably die back to the next bud and turn black from there to the pruned end of the twig, leaving ugly black ends on bright yellow twigs. Prune with care; remove branches or twigs only at the ground line. Use with caution; this popular shrub attracts a lot of attention.
5270	Corylus avellana European filbert	12' x 6'	Hardy Zone 5. Native to Europe and cultivated there for centuries. Not often grown here and may be hard to find. Usually grows into a dense thicket of erect stems. You are much more likely to find and use one of its cultivars.
5270a	Corylus avellana 'contorta' Harry Lauder's walking stick	10' x 6'	Hardy Zone 5. This cultivar is relatively easy to find, and can be used either as a featured oddity or in groups as a background shrub. Has very weirdly twisted and contorted twigs, branches, and trunks. Very different and should be placed carefully.
5280	Cotoneaster lucida Hedge cotoneaster (Peking cotoneaster) (Pekin cotoneaster)	8' x 6'	Hardy Zone 3. A native of Siberia and northern Asia, cultivated since 1840. Most often used as a border or a clipped hedge, since its normal growth is fairly narrow and upright and it tolerates pruning quite well. Should only be transplanted balled and burlapped because it has a rather weak root system. Vigorous and very tolerant of poor soils once established. Cotoneaster acutifolia , the Peking cotoneaster, is often confused with hedge cotoneaster. However, hedge cotoneaster has hairy, shiny leaves and Peking cotoneaster has dull green leaves.
5290	Elaeagnus commutata Silverberry	10' x 5'	Hardy Zone 3. Not well known; native in Minnesota. Grows to an upright suckering shrub with reddish brown branches and fragrant, yellow flowers with silvery outsides in June. Could be a very nice ornamental and is well worth a try in dry sites. May require pruning to control its spreading suckering habit.
5300	Elaeagnus umbellata Autumn olive	12' x 12'	Hardy Zone 5. Recently very popular for windbreaks and wildlife plantings, but does not appear to be reliably winterhardy north of Zone 5 in Iowa. Native to China, Korea, and Japan and introduced into North America in 1830. Where it does well, it gets far too large for most home landscapes. Recommended for windbreaks and wildlife purposes and as a background planting for large areas in Zone 5b, with a cautious recommendation for limited plantings in Zone 5a in Iowa.
5310	Euonymus alatus Winged euonymus Winged wahoo	12' x 15'	Hardy Zone 3. Often listed as growing only 10 feet high, this very nice shrub can get quite a bit larger in good sites with sufficient time. This shrub is mounded to horizontally spreading and normally broader than it is high with odd, corky wings on the twigs. Transplants easily, thrives in full sun to deep shade on all but waterlogged soils, and withstands heavy pruning. Very reliable bright red fall color. A bit large for many home landscapes unless trained into a tiny tree. In sharp contrast to the evergreen euonymus and wahoo, it is not affected by euonymus scale. Highly recommended.

5320	Forsythia x intermedia Border forsythia	8' x 10'	Hardy Zone 4b but reliable for bloom only in 5b. A well-known, old variety, developed sometime before 1880. Very loose-growing and open in effect. Planted by optimists who believe the catalog illustrations showing a gorgeous fountain of yellow flowers. Unfortunately, the flower buds are killed by Iowa winters and the blooms are sparse. The plant's appearance has been described as having stuck its finger into an electric light socket. This shrub is highly overrated.
5320a	Forsythia x intermedia 'spectabilis' Showy border forsythia	8' x 8'	Hardy Zone 4. Flower buds are hardy only in Zone 5b. This popular cultivar has 2-inch diameter, bright yellow flowers. Blooms reliably in Zone 5b, may or may not bloom in Zone 5a, depending upon the site and the severity of the winter. Not recommended. Its chief asset is the very unreliable bloom. Rather large for most home landscapes.
5320b	Forsythia x intermedia cv. Beatrix Farrand	8' x 8'	Hardy Zone 4. Flowers are hardy only in Zone 5b. Since the flower buds of this cultivar are noticeably more cold hardy than others, it can be used in protected sites in Zone 5a with a reasonable expectation of a spring flower show. Summer characteristics are a bit coarse and ragged.
5320c	Forsythia x intermedia cv.	8' x 8'	There are several cultivars of this hybrid, among them densiflora, more upright in growth habit and with pale yellow flowers; Karl Sax, reported to be more flower hardy than others; lynwood gold, smaller and more upright in growth habit with flowers all along the stems; spring glory, and various dwarf forms commonly called nana.
5330	Forsythia ovata Early forsythia	8' x 6'	Hardy Zone 4. Flower hardiness is variable among this species. The University of Minnesota has a selection in their arboretum that blooms quite reliably, so there is yet hope for Iowa forsythia lovers. Consult your local Iowa certified nurseryman for information on available forsythia cultivars and their local bloom hardiness.
5340	Hamamelis vernalis Vernal witchhazel	10' x 8'	Hardy Zone 5b, in protected sites in Zone 5a. May be worth a try in very protected areas in Zone 4. Tends to die back during a severe winter in all of Iowa. Grows well in moist shady sites, but is a rather plain upright, suckering shrub. Grown for its extremely early blooms in late winter. Depending upon the site, may be in bloom anywhere from late January on. Flowers are intensely fragrant and effective for 2 to 3 weeks. The flowers roll up on very cold days.
5350	Hamamelis virginiana Common witchhazel Witchhazel	12' x 8'	Hardy Zone 5. Native to Zone 5b in Iowa. Trial in protected sites in Zone 4. Grows well in reasonably moist soils in either full sun or shade. A bit coarse in both winter and summer, but gives a nice show of yellow fall color that almost completely hides the very fragrant yellow flowers in late September and October.
5360	Hibiscus syriacus Shrub Althea Shrub Althea Rose-of-Sharon	10' x 5'	Hardy Zone 5b, may do fairly well in carefully selected protected areas in Zone 5a. Transplant only small specimens, take care that the soil is neither very wet nor very dry. Grown for the very large flowers that grow singly on the new year's growth. May die back badly in Iowa winters. Many cultivars. Use with caution for the spectacular flowers. Not reliably hardy.
5370	Kalmia latifolia Mountain-laurel kalmia Mountain laurel Mountain-laurel	10' x 10'	Not reliably hardy anywhere in Iowa. Although theoretically cold hardy in Zone 5, the mountain laurel requires acid, cool, moist, well-drained soil and does not tolerate hot, dry winds in summer or cold, dry winds in winter. If you have a perfect site in Zone 5b, you might have a slight chance for success. Not recommended.
key	name	height and spread	description

5380	Kolkwitzia amabilis Beautybush Beauty bush	10' x 6'	Hardy Zone 5, does well in Zone 4 in Iowa with some protection. Easily transplanted if balled and burlapped. Not particular as to soil or moisture conditions. A rather fast-growing, plain-appearing, upright-growing shrub except when in bloom, when it is quite spectacular. Completely covered with large, pink, bell-shaped flowers in late May to early June. Good for background hedges. A little too plain most of the year for specimen use. We are aware of two cultivars, pink cloud and rosea.
5390	Ligustrum amurense Amur privet	12' x 6'	Hardy Zone 5. Tends to continue to grow quite late in the fall, but this late growth is killed by the first severe cold of winter. Otherwise quite hardy in all of Zone 4. Inconspicuous, fragrant flowers in June and July. Withstands heavy pruning and shearing quite well and is often used for both formal and informal hedges. Transplants easily, tolerates city pollution, and grows quite rapidly.
5400	Ligustrum vulgare Common privet European privet	10' x 8'	Hardy Zone 5. Hardiness is variable, according to seed source. Often does quite well in Zone 4 in Iowa. Withstands heavy pruning and shearing. Flowers have a very unpleasant odor. Several cultivars are available.
5400a	Ligustrum vulgare 'Cheyenne' Cheyenne privet	10' x 8'	Hardy Zone 4 in Iowa. This commonly available cultivar is fairly reliably hardy in all of Iowa. May suffer from some tip dieback in severe winters. Other cultivars known. Golden foliated forms, which vary widely in size and hardiness, are sold. We are uncertain of their parentage. Some authorities call them hybrids of this species, others feel they are from L. obtusifolium or L. ovalifolium .
5410	Lonicera tatarica Tatarian honeysuckle	10' x 8'	Hardy Zone 3. A very popular species, widely planted for backgrounds, windbreaks, and hedges. Grows fairly rapidly into a strongly upright, multi-stemmed dense mass. The parent of many cultivars. The honeysuckle aphid is a new and menacing pest on many cultivars of honeysuckle over all of Iowa. The aphid feeds on shoots of susceptible varieties, with damage varying from unsightly witch's broom shoot development to death of the entire branch or even the entire plant. The relative susceptibility of many of the available varieties is not known, but we include what we know at this time. Varieties known to be badly damaged by the sap-feeding aphid should be avoided because they may present severe maintenance problems and expense.
5410a	Lonicera tatarica 'zabelii' Zabel's honeysuckle	10' x 8'	Hardy Zone 3. This very popular cultivar is of uncertain origin. Some authorities feel it is a cultivar of L. korolkowii ; others feel there are two distinct cultivars with a similar name. The one we know has fragrant, dark red flowers followed by shiny, red berries in late June, and is quite upright in growth. Badly damaged by the aphid.
5410b	Lonicera tatarica cv.	10' x 8'	Hardy Zone 3. There are many currently known, propagated, and sold cultivars of Tatarian honeysuckle. Among them are: alba, with pure white flowers; arnold red, with the darkest red flowers of any honeysuckle, and only lightly damaged by the aphid; grandiflora, which is sometimes called bride, and which is heavily damaged by the aphid; LeRoyanna, listed as a dwarf with poor flowers; lutea, with pink flowers and yellow fruit; morden orange, with pale pink flowers and very orange fruit that is not attacked by the aphid; parvifolia, with white flowers; rosea, with its flowers rosy pink outside and pale pink inside, but which is very heavily damaged by the aphid; sibirica, with deep rose flowers; and virginialis, with large, rose pink flowers. Consult your local Iowa certified nurseryman for the latest information on cultivars.

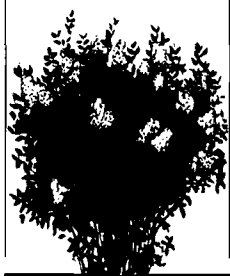


key name

height
and
spread

description

5420	Myrica pennsylvanica Bayberry Northern bayberry	9' x 6'	Hardy Zone 5. Often does quite well in sheltered sites in Zone 4 in Iowa. Native to the northeastern United States and cultivated since 1727. The waxy, grayish white, fragrant berries (born in great quantities and literally cover the plant) are used to make bayberry candles. Tolerates poor soils and salt pollution. Evergreen in its native range, is deciduous in Iowa. All parts of the plant and the leaves are very aromatic when crushed. Recommended. Should be very useful in difficult, dry sites.
5430	Philadelphus coronarius Sweet mockorange Sweet mock orange	10' x 6'	Hardy Zone 4. Cultivated since 1560, is native to southern Europe. This spreading shrub with its intensely fragrant, creamy white flowers in June was once very widely planted in shrub borders and in foundation plantings around older 2- and 3-story homes. Little used now except for its cultivars. Requires the same care as all other mockoranges—absolutely none. A vigorous, easy to grow plant.
5440	Philadelphus x virginalis cv. Minnesota snowflake mockorange	8' x 6'	Hardy Zone 3. This exceptionally hardy cultivar was introduced in Minneapolis in 1935. The rather leggy plants have very fragrant, double flowers and are reputed to withstand -30 degree F. winter temperatures.
5450	Physocarpus opulifolius Common ninebark Eastern ninebark	8' x 8'	Hardy Zone 3. Resembles a large, coarse spirea, with which it is closely related. The bark on old stems peels off in many thin strips, hence, "ninebark." Native. Easily transplanted and adaptable to almost any site, accepts both full sun and partial shade. Good for backgrounds, a bit large and coarse for the average home landscape.
5450a	Physocarpus opulifolius 'luteus' Golden ninebark	8' x 6'	Hardy Zone 3. This golden-leaved cultivar seems to be very popular. The slightly greenish, bright yellow leaves soon turn to a pale yellowish green. Still, it makes a rather dramatic color contrast with other shrubs. Use with caution; it attracts a lot of attention.
5470	Prunus triloba Plena (Multiplex) Flowering almond (Flowering plum)	10' x 8'	Hardy Zone 4. Flower buds are often killed during severe winters. Some authorities feel this cultivar should be named multiplex. It is rather bare legged and is best used when positioned at the back of a shrub border for the early, pink, double flowers.
5480	Rhus glabra Smooth sumac	10' x 5'	Hardy Zone 3. Native to the entire state. Well known and widely used for highway slopes and on banks. Suckers rapidly and profusely, spreads vigorously. Not at all particular about soils or sites. Brilliant red to dark blood red fall color, with open, staggy, winter appearance. One cut-leaved cultivar occasionally is available. Hardy and recommended where its suckers can be tolerated.
5490	Rhus copallina Flame sumac Shining sumac	10' x 8'	Hardy Zone 4. Native but rare. Hard to find in commerce. Foliage is rich, lustrous, dark green all summer, turning to rich, glossy red to crimson to scarlet in fall. One of the best sumacs, well suited for use as a featured specimen, for dry, rocky areas, large areas, and naturalizing. Dense and compact in its youth, becomes quite picturesque and irregular with age. Highly recommended.
5500	Sambucus canadensis American elder Elderberry	8' x 6'	Hardy Zone 3. A native, suckering shrub with many cultivars. Tends to die back severely in many winters. Subject to borers. Widely planted in wet sites, for naturalizing, and for its edible fruit. Grows very rapidly into a rather loose, ungainly, leggy, but rather lush appearing shrub with 6- to 10-inch wide, flat-topped cymes of fragrant, white flowers that are followed by large clusters of juicy, purple-black, edible fruit in August and September. Its fruit makes excellent wines, jellies, and pies, and can stain anything it touches. Several named cultivars vary in size, color, quantity of fruit, and leaf form.
key	name	height and spread	description



key	name	height and spread	description
5510	Spiraea x vanhouttii Vanhoutti spiraea Vanhoutte spirea (Bridal wreath)	8' x 8'	Hardy Zone 3. Reported to be the result of a cross between Spiraea cantonensis and Spiraea trilobata before 1866, this is perhaps the most widely planted and known of all spiraeas. Grows in almost any soil into a large, rounded, arching, fairly fine-textured shrub with prominent white flowers literally covering the plant in late April to early May. An excellent border shrub, also used for foundation plantings. The branches are rather bare at the base and the shrub benefits from having a shorter plant to hide its bare legs. A very desirable, sturdy, reliable, very useful shrub and highly recommended.
5520	Syringa x chinensis (rothomagensis) Chinese lilac	10' x 8'	Hardy Zone 3. A nonsuckering, large lilac often planted in shrub borders and in informal hedges. Has purple, fragrant flowers in large, loose panicles in mid-May. Developed around 1777, there are at least two cultivars: alba, with white flowers, and saugeana, with lilac-red flowers.
5530	Syringa x josiflexa Guinevere lilac	10' x 8'	Hardy Zone 3. A fairly large lilac hybrid, with slender, slightly nodding flowers in panicles in late May. Reported to be the result of crossing Syringa reflexa with Syringa josikae .
5540	Syringa x persica Persian lilac	10' x 7'	Hardy Zone 4. A nice, smaller lilac hybrid, growing into a graceful shrub with upright, arching branches. Several named cultivars may occasionally be found.
5550	Syringa x prestoniae Preston lilac	10' x 7'	Hardy Zone 3. This hybrid, the result of work by Isabella Preston of Ottawa, Canada in the early 1900s, is a fairly large lilac blooming in late May and early June. Several cultivars are available.
5550a	Syringa x prestoniae cv.	10' x 7'	Hardy Zone 3. Cultivars include coral, with single, light pink flowers; desdemona, with single, bluish flowers; Donald Wyman, with single, purple flowers; Isabella, with single, lilac flowers; James Macfarlane, with single, pink flowers; jessica, with single, violet flowers; olivia, with purple-lilac flowers; patience, with single, lilac flowers; and redwine, with single, magenta flowers. There are many more cultivars known than can be found to purchase.
5560	Syringa villosa Late lilac	10' x 7'	Hardy Zone 3. With rosy lilac to white flowers, this fairly large, dense lilac is the last to bloom. Native to China and cultivated since 1802, it was introduced into North America in 1882. A nice lilac, it was valued chiefly for its late bloom.
5600	Syringa vulgaris cv.	10' x 8'	The French hybrid lilacs are listed under the general key no. 5600 for the single French hybrid lilacs and 5605 for the double French hybrid lilacs. Mature height and growth rate varies somewhat between individual cultivars, as does the relative time of bloom. In general, all French hybrid lilacs bloom from late May into early June.

**single
French
hybrid lilacs**

5600a	Charles X	bluish red
5600b	Congo	wine red
5600c	de Miribel	dark blue
5600d	Edmond Bossier	red-purple
5600e	Firmament	clear blue
5600f	Ludwig Spaeth	red-purple
5600g	Macrostachya	pink-white
5600h	Marie Finon	white
5600i	Marie Legraye	creamy-white
5600j	Monge	deep red
5600k	President Lincoln	wedgewood blue
5600l	Vestale	white

Only the bloom colors are listed for the individual cultivars.
Many more cultivars of French hybrid lilacs are known. This listing is only a sample of what might be found. Normally only a few cultivars are available for sale at any one time. Consult your local Iowa certified nurseryman for information on currently available cultivars.

**double
French
hybrid lilacs**

5605a	Alphonse Lavellee	lilac
5605b	Belle de Nancy	satiny rose
5605c	Charles Joly	purple-red
5605d	Edith Cavell	pure white
5605e	General Pershing	purplish violet
5605f	Katherine Havemeyer	mauve-pink
5605g	Leon Gambetta	lilac
5605h	Madame Casimir Peirer	white
5605i	Madame Lemoine	white
5605j	Miss Ellen Wilmot	white
5605k	Olivier de Sernes	clear blue
5605l	Paul Thirion	clover rose
5605m	President Grevy	light blue
5605n	Victor Lemoine	bluish pink
5605o	Violetta	violet-red



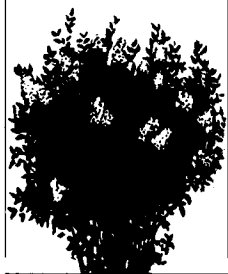
key name

bloom color

**height
and
description**

**large
deciduous
shrubs**

8 to 10 feet high at maturity (continued)



5620	Viburnum opulus European highbush cranberry European cranberry bush	10' x 8'	Hardy Zone 4. A European import by early settlers. Quite popular and rather widely planted in shrub borders and as a screen. Often attacked by aphids, which cause the leaves to curl and distort badly. White, flat-topped flowers in June are followed by green fruit that turns red in August and hangs on all winter, looking much like dried, red raisins. Fall color is a bit unreliable, but is a nice red when it happens. Several cultivars, including a dwarf form, are listed later.
5620a	Viburnum opulus cv. Roseum Snowball bush	10' x 8'	Hardy Zone 4. This is the old-fashioned snowball bush. Flowers are sterile and form 6- to 10-inch diameter round, white to pinkish balls. Aphids can be a serious problem with this cultivar.
5630	Viburnum rufidulum Rusty blackhaw viburnum	8' x 8'	Hardy Zone 5b in sheltered areas. May be hardy in protected, carefully selected sites in Zone 5a. Readily transplanted, adaptable to almost any soil type, does well in both full sun and in shade. Very handsome, lustrous green foliage, good fall color. A very desirable shrub, but only marginally hardy. Recommended where it can be grown.
5640	Viburnum trilobum American cranberry bush viburnum Highbush cranberry American highbush cranberry	10' x 8'	Hardy Zone 3. Native. Grows vigorously into a rather large, round-topped, fairly dense shrub with lustrous dark green leaves that reliably change to yellow through red-purple in the fall. Flowers are conspicuous, in fairly large, flat-topped, white racemes in late May to June, followed by green fruit that ripen to a bright, shiny red in early September. The fruit is edible and used for making jelly or for making a refreshing drink. They hang conspicuously on the plants until late winter or until devoured by birds. We find it hard to understand why this excellent native shrub is so often ignored in favor of a European import that is plagued by various pests. Several cultivars are available, including a dwarf, listed later. Highly recommended.
5650	Viburnum tomentosum (plicatum tomentosum) Doublefile viburnum	9' x 8'	Hardy Zone 5. A quite elegant shrub, with dark green, oddly furrowed leaves that droop like dog's ears. Strongly horizontal branching habit. White flowers with no fragrance are borne along the branches, creating a very delicate effect. Excellent fall color. The strong horizontal lines are an excellent contrast to the vertical lines of most other shrubs. Makes an excellent specimen, also used as a background shrub or massed against large buildings. Recommended.
5650a	Viburnum tomentosum cv. (plicatum tomentosum cv.) Mariesii doublefile viburnum	9' x 8'	Hardy Zone 5. Larger flowers and better fruit than the parent. Branching more flat and horizontal. Other cultivars available include: lanarth, more compact and larger flowered than the parent; pink beauty, with deep pink flowers; roseum, with white flowers that fade to pink; and rowallane, with conspicuous fruit.
5660	Zanthoxylum americanum Pricklyash Prickly ash Northern prickly ash	10' x 8'	Hardy Zone 3. Native, often found taking over woodlands that have been improperly harvested and then grazed by cattle. Suckers freely, becoming a dense, virtually impenetrable thicket. Foresters are not fond of it. However, very useful in shady areas where the prickly stems are acceptable. Needs pruning to keep it from spreading too freely. Recommended, with reservations.

key name

**height
and
spread**

description

medium deciduous shrubs
6 to 8 feet high at maturity

5680	Acanthopanax sieboldianus Five-leaved aralia	8' x 5'	Hardy Zone 3. A bright green leaved, upright, round-topped shrub that has prickly stems and is extremely adaptable. Withstands city conditions very well. An excellent medium shrub. Makes a good barrier plant. Has interesting 5- to 7-leaflet compound leaves. Recommended.
5690	Acer ginalla 'compactum' Dwarf amur maple	8' x 8'	Hardy Zone 3. A very nice dwarf form of the popular amur maple that can be grown as a large shrub or tiny specimen tree. Excellent red to wine red fall color. Recommended.
5700	Caragana frutex Russian peashrub	8' x 6'	Hardy Zone 3. A fine-textured, upright, suckering shrub. Very tough and hardy, will grow almost anywhere. Has small compound leaves with 4 leaflets. Yellow flowers in June. Good for bank stabilization and for borders. Suckers may make it a bit hard to confine.
5710	Caragana microphylla Littleleaf peashrub	8' x 5'	Hardy Zone 3. Another very tough peashrub, perhaps not very well known. Has long, spreading branches, 12 to 18 very small leaflets on each compound leaf, and yellow flowers in June. Useful towards the back of a shrub border for the fine textured appearance and the yellow flowers.

5720	Cornum amomum Silky dogwood Red willow	8' x 8'	Hardy Zone 5. Fairly fast growing, native to low woodlands and along streams. A bit coarse for the small home landscape. Yellowish white, nonfragrant flowers in June, followed by interesting porcelain blue fruit clusters in August. Younger branches are purplish red in winter. Best used in masses, in shrub borders, and for naturalizing in wet, shady areas.
5730	Cornus sericea (stolonifera) Red ozier dogwood Redozier dogwood American dogwood	6' x 6'	Hardy Zone 3. Native. Some sources list this as Cornus sericea . Others list it as a subspecies of Cornus alba , which is imported from Siberia. We have personally seen it growing wild in road ditches in Allamakee and Winneshiek counties in Iowa. A very reliable red-twigged dogwood. Useful for mass effects, for shrub borders, for foundation plantings, and for naturalizing. Recommended. Many cultivars available.
5730a	Cornus sericea (stolonifera) cv.	6' x 6'	Hardy Zone 3. Several cultivars are available. Among them are "baileyii," which some authorities list as a separate species, that is hardy only in Zone 4. Has dull winter twig color, and does best in sandy soils. Coloradensis or Cheyenne is a smaller growing cultivar with blood red stem color; isanti is a shorter form with bright red stem color; kelsey is a very dwarf cultivar reputed to have poorer stem color than the species and to be less hardy; and nitida, with green stems.
5730	Corylus americana American filbert Hazelnut	8' x 6'	Hardy Zone 3. Native. A medium to fast-growing, round-topped shrub with a quite leggy or open base. Transplant balled and burlapped into well-drained soils. Tends to sucker rather freely at the base. Leaves are dark green in summer; has little fall color. Best used in masses in partial shade and for naturalizing. Bears a sweet, edible nut (hazelnut) that is often gathered from wild thickets of this shrub.



key

name

height
and
spread

description

5740	Cotoneaster divaricata Spreading cotoneaster	6' x 5'	Hardy Zone 5. Grows into a spreading, rounded, multi-stemmed shrub, with long, slender outer branches that droop. The shrub has a rather delicate, fine appearance. The small leaves are dark green and lustrous above, and lighter green below. Outstanding rather fluorescent red/ yellow/purple fall color. Use as a border, hedge, foundation planting, or specimen. Highly recommended.
5750	Cotoneaster multiflora Many-flowered cotoneaster	8' x 8'	Hardy Zone 5. An upright, spreading, fountain-shaped cotoneaster. Shaped much like the well-known Vanhoutte spirea. Soft gray-green to blue-green leaves, which contrast with the leaves of other deciduous shrubs. Very spectacular in flower, as the white, unpleasantly fragrant flowers are held above and contrast with the foliage. Red fruit of 1/3-inch diameter is produced in great quantities, but is partially hidden by the foliage.
5750a	Cotoneaster multiflora 'calocarpa' Manyflowered cotoneaster	8' x 8'	Hardy Zone 5. This fairly popular cultivar has leaves that are longer and narrower than the species with larger and more numerous fruit.
5760	Forsythia suspensa Weeping forsythia	6' x 5'	Hardy Zone 5. Flowers are not reliably hardy north of Zone 5b. Grown for its fountain-like, gracefully arching or weeping branches. Has a very graceful, open effect when not in bloom. Does not bloom as heavily as other forsythias even when the flower buds survive the winter.
5320d	Forsythia x intermedia cv. Lynwood gold forsythia	6' x 6'	Hardy Zone 4. Flowers are hardy only into Zone 5. This upright forsythia has 2-inch diameter, deep yellow flowers spaced all along the stems. Blooms fairly reliably in Zone 5b; may bloom in Zone 5a depending upon the individual site and the severity of the winter.
5770	Hydrangea paniculata Panicle hydrangea	8' x 5'	Hardy Zone 4. Grown both as a large shrub and as a tiny, odd, specimen tree. Its large panicles of white flowers fade to bluish. Not planted as much as pee gee hydrangea.
5770a	Hydrangea paniculata 'grandiflora' Paniculata grandiflora hydrangea Pee gee hydrangea	8' x 5'	Hardy Zone 4. This well-known old variety is still available from many nurseries. Quite reliable, planted for its late summer flowers. Used towards the back of the shrub border, or pruned into an odd, tiny specimen tree.
5780	Ilex verticillata Winterberry Michigan holly Black alder Coralberry	6' x 8'	Hardy Zone 3 in acid soils. Native to Michigan and some surrounding states but requires acid soils. Where soils permit its use, grows slowly into an oval to rounded shrub with deep, rich, green leaves. Bright red fruit ripen in September and persist into January if not eaten earlier by birds. The only holly hardy enough for Iowa, but does not have the leaves commonly associated with the name "holly." Several cultivars available, more being developed. Consult your local Iowa certified nurseryman for further information.
5800	Lindera benzoin Spicebush	6' x 6'	Hardy Zone 5. Native. Hard to transplant and slow to reestablish. A somewhat loose and open, rounded shrub with light green leaves in summer and yellow fall color. Flowers are greenish yellow in early to mid-April, followed by bright scarlet fruit in September after the leaves fall. Useful in the shrub border or for naturalizing.
5810	Ligustrum obtusifolium Border privet	8' x 8'	Hardy Zone 4. A multi-stemmed, dense shrub, broadest at the top. Has unpleasantly fragrant, white flowers in June, followed by blue-black, bloomy, persistent fruit. Makes a good hedge or screen.



key name

height
and
spread

description

5810a	Ligustrum obtusifolium 'regelianum' Regel's border privet	6' x 6'	Hardy Zone 5. Distinctly less hardy than the parent species, this common cultivar has a very distinctly horizontal, spreading, branching habit. Usually has some dieback in most winters. Used for foundation and border plantings.
5810b	Ligustrum obtusifolium cv. Golden privet	6' x 6'	Hardy Zone 5. There seems to be more than one plant sold as golden privet, and we are not certain of the parentage. All have a rather vivid greenish gold foliage if grown in full sun, and a rather sickly yellow-green in shady areas. Reliably hardy in Zone 5b, sometimes has dieback problems in severe winters in Zone 5a. Use with caution because the yellow foliage is quite dramatic and attracts a lot of attention.
5820	Lonicera morrowi Morrow's honeysuckle	8' x 8'	Hardy Zone 3. A broad, rounded, evenly-growing honeysuckle often used for formal hedges and borders. Has white flowers in June, followed by red fruit. One cultivar, xanthocarpa, has yellow fruit. The stems grow into a rather tangled mass. The plant has dense foliage all the way to the ground. Reports of attack by the honeysuckle aphid are inconsistent. See key no. 5410 for more information.
4680	Malus 'sargentii' Sargent crabapple Sargent crab	8' x 18'	An extremely low, spreading crabapple. Quite well known and widely available, sargent crab is most often grown as a very wide-spreading shrub since its normal form is much wider than its very short height. Slightly pink buds open into a profusion of pure white, single flowers that completely cover the plant. Very dense growing. Could be pruned into a bonsai if desired. Its dark red, 1/4-inch fruit are quite showy against the bright, dark green leaves. An interesting specimen good for mass plantings on slopes in parks. Somewhat susceptible to fire blight.
4682	Malus 'sargentii tina' Dwarf sargent crabapple Dwarf sargent crab	4' x 12?'	An extremely dwarf cultivar of the sargent crabapple. Its bright yellow stamens protrude from bright red buds. This unusual effect is followed by white flowers and red fruit identical to the parent, sargent crabapple. Disease resistant. Use as a novelty, in a rock garden, in a planter on the patio, as a naturally dwarfed bonsai, as a nice low but very wide shrub, or as a specimen.
5830	Philadelphus x lemoinei Lemoine mockorange	6' x 4'	Hardy Zone 5. May be satisfactory in sheltered sites in Zone 4. This old hybrid with its upright, bushy habit and its fragrant white flowers is now little seen. However, it is the parent of many cultivars, a few of which follow.
5830a	Philadelphus x lemoinei cv. Avalanche mockorange	6' x 6'	Hardy Zone 5. One of the most fragrant, single flowered cultivars. Has upright, arching branches.
5830b	Philadelphus x lemoinei cv. Innocence mockorange	8' x 6'	Hardy Zone 5. Double flowered, one of the most fragrant mockoranges. Grows slightly larger than the parent.
5830c	Philadelphus x lemoinei cv.	6' x 6'	Hardy Zone 5. Several more cultivars occasionally are available. Among them are belle etoile, with 2 1/4-inch single flowers; boule d'argent, with 2-inch double flowers, and others. Mont blanc, growing only 4-feet high, is listed later under very small shrubs.
5440a	Philadelphus x virginialis cv. Virginal mockorange	8' x 4'	Hardy Zone 5. Has double, white, intensely fragrant flowers in June. Somewhat leggy. Needs a shorter shrub in front of it.
key	name	height and spread	description

5850	Prunus x cistena Purple leaved sand cherry Purpleleaf sandcherry	6' x 6'	Hardy Zone 3. Originating in a cross of Prunus pumila and Prunus cerasifera , has intensely reddish purple foliage that holds its color throughout the summer. The flowers are single and pink, and would be quite dramatic, but the bright-colored leaves are already out and hide the flowers.
5860	Prunus maritima Beach plum	6' x 6'	Hardy Zone 4. A rounded, dense shrub with white, fragrant, single or double flowers followed by 1/2- to 1-inch diameter, dull purple to red, edible fruit in August. Native to Cape Cod in Massachusetts and very salt tolerant.
5870	Prunus tomentosa Manchu cherry Nanking cherry	8' x 8'	Hardy Zone 3. A broad, spreading shrub, becoming open and picturesque with age. Has white, fragrant flowers very early in April, followed by lots of small, scarlet, edible fruit that make excellent jelly and juice—if you can get them before the birds do.
5880	Rhus aromatica Fragrant sumac	6' x 5'	Hardy Zone 4. Native, cultivated since 1759. A spreading shrub with coarse, upright, aromatic branches. The branchlets are hairy, as are the clusters of aromatic, red fruit in August and September. There are 3 leaflets to each compound leaf. Conspicuous yellow flowers occur in late April. Often used in mass plantings, in thickets, and for a bank cover. People who are exceptionally sensitive to poison ivy, a relative, may find that contact with fragrant sumac causes a mild rash. Recommended, with some caution as to placing it where sensitive people do not touch it.
5890	Ribes odoratum Clove currant Fragrant currant	6' x 5'	Hardy Zone 3. Native. Grows into an irregular mass of ascending, arching stems. Vigorous and hardy, but not the neatest shrub. Has fragrant, yellow flowers in May. Leaves are lost rather abruptly and before frost. Generally recommended.
5900	Rosa x harisoni Harison's yellow rose	6' x 4'	Hardy Zone 4. Originated around 1830, this very reliable shrub rose bears many 2-inch diameter yellow, somewhat unpleasant smelling flowers over a 2-week period in June.
5910	Rosa hugonis Father Hugo rose	6' x 6'	Hardy Zone 4. One of the better early yellow roses, Native to China, introduced into North America in 1899. Common to older gardens, the 2- to 2½-inch diameter single, yellow flowers in late May are very reliable and pretty.
5920	Rosa multiflora Multiflora rose	8' x 10'	Hardy Zone 5. This rose is now classified as a secondary noxious weed in Iowa and must not be planted. It is listed here because many catalogs still offer it. It once was widely planted for hedges, barriers, and wildlife plantings. Unfortunately, it is readily and rapidly spread by birds, and can quickly take over an area. Very difficult to eliminate once established.
5930	Rosa primula Primrose rose	6' x 8'	Hardy Zone 4. Has large, pale yellow, single flowers in May. Minnesota authorities say this very reliable old variety is the first rose to bloom every year.
5935	Rosa rubrifolia Redleaf rose	6' x 5'	Hardy Zone 3. Native to the mountains of central and southern Europe. The branches are slender and purplish and have only a few small rose thorns. The leaves are tinged with purplish red. Formerly grown for its foliage as either a hedge or as a specimen rose, now more often grown for the large hips (fruit) that contain large amounts of vitamin C.
5940	Rosa setigera Prairie rose	6' x 8'	Hardy Zone 4. Native. A very wide spreading rose with deep pink, fading to white, scentless, single flowers that are about 2 inches across. One of the latest flowering species, blooms in late June and July. Gets far too large for the small garden.



key	name	height and spread	description
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5950	Spiraea prunifolia Bridalwreath spirea True bridalwreath	6' x 6'	Hardy Zone 5. This is a very old variety, that was little planted. Grows into an open, arching shrub with foliage only on the upper 2/3 of the plant. Has small, single flowers along the stems in early June.
5950a	Spiraea prunifolia 'plena' Double bridalwreath spirea	6' x 6'	Hardy Zone 5. This double-flowered cultivar is more often offered and planted. The 1/4-inch flowers look like tiny, white roses, and are spaced along the stem, giving a delicate, airy effect in late April. A widely-arching shrub, with foliage only on the upper half of the plant. Needs a shorter shrub to cover its bare legs. Generally recommended.
5960	Syringa meyeri Meyer's lilac	6' x 10'	Hardy Zone 3. Authorities differ on the mature size of this lilac. It is listed as from 3- to 8-feet high at maturity. However, all agree that it starts to bloom when only a foot high. Best used in a shrub border in front of an evergreen background. Blooms very early, before the leaves have developed. Grows into a small, dense, neatly rounded, broad shrub.
5970	Syringa microphylla Littleleaf lilac	6' x 10'	Hardy Zone 5. A very low, spreading, compact shrub with typical, pale lilac flowers in early June. At least one cultivar, <i>superba</i> , has deep pink flowers.
5980	Syringa velutina Manchurian lilac	6' x 10'	Hardy Zone 5. A very handsome, broad-spreading, dense shrub with fragrant rose-lilac flowers in small, 1 1/2- to 2 1/2-inch long panicles in late May into early June. It is hard to be sure whether you are buying Manchurian, littleleaf, or Meyer's lilac. All are nice, small lilacs.
5990	Viburnum dentatum Arrowwood viburnum	6' x 6'	Hardy Zone 3. Native, and cultivated since 1736. Has fibrous roots and transplants well into almost any soil. Equally happy in sun or shade. Has dark, lustrous green leaves in summer. Fall color ranges from yellow through glossy red to bright reddish purple. A very desirable, hardy, adaptable, dense, rounded shrub. Under ideal conditions, sometimes grows to over twice the indicated size. However, most specimens will be under 6 feet in height, and the others can easily be pruned. Highly recommended.
5990a	Viburnum dentatum cv. Canby downy viburnum	8' x 5'	Hardy Zone 4. One source lists this desirable, dense, arching shrub as a cultivar of V. dentatum . We formerly listed it as Viburnum pubescens canbyii . Similar to Viburnum dentatum , perhaps grows a bit larger.
key	name	height and spread	description

**dwarf
French
hybrid lilacs**

5610	Syringa vulgaris cv.	lilac
5610a	Capitaine Baltet lilac	purple-lilac
5610b	De Croncels lilac	magenta
5610c	Lucie Baltet lilac	flesh pink
5610d	President Harding lilac	reddish
5610e	Rochambeau lilac	purple-lilac

The dwarf French hybrid lilacs are all about 6-feet high, and spread from 4- to 6-feet wide.



key name

bloom color

**height
and
description**

small deciduous shrubs
4 to 6 feet high at maturity

6100	Berberis koreana Korean barberry	5' x 4'	Hardy Zone 4. Grows into a quite dense, oval- to haystack-shaped, small shrub that suckers freely from the roots and forms large, dense colonies. Has showy, yellow flowers in 3- to 4-inch long racemes in mid-May, followed by bright red, 1/4-inch fruit in clusters that can be seen in fall and early winter. Excellent, bright red fall leaf color. Extremely prickly and very dense, it makes a virtually impenetrable barrier.
6110	Berberis x mentorensis Mentor barberry	5' x 5'	Hardy Zone 5. A very fast-growing barberry with quite uniform growth. Very adaptable and prunes well. Widely used as a hedge plant because of its reliability and uniform growth. Prickly and virtually impenetrable.
6120	Berberis thunbergii Japanese barberry	5' x 4'	Hardy Zone 4. Has yellow flowers in May that are hidden under the foliage. Fruit is a bright red, 1/4-inch long, narrow berry, quite showy in fall and early winter. Fall color is quite variable but beautiful, varying from a soft orange to bright scarlet on the same plant. Many cultivars available.
6120a	Berberis thunbergii 'atropurpurea' Red-leaved barberry	5' x 5'	Hardy Zone 4. A purple-leaved cultivar that keeps its color throughout the summer if grown in full sun. Quite popular, is very prominent in the landscape. Unfortunately, growth and hardiness are very uneven among mass plantings and hedges invariably die in random patches, spoiling the intended effect.
6120b	Berberis thunbergii 'aurea' Golden barberry	5' x 5'	Hardy Zone 4. Has bright yellow leaves, especially when grown in full sun. A little difficult to use in home landscapes because of its high contrast with other plants.
6120c	Berberis thunbergii cv.	5' x 5'	Hardy Zone 4. Other cultivars are occasionally available including crimson pygmy, a purple-leaved, very dwarf form that almost always has some winter dieback; erecta, listed later; globe, a green-leaved dwarf form; marshall's red, similar to atropurpurea; golden ring, with purplish leaves with golden margins; minor, with smaller leaves and growing quite small and dense; rosy glow, with greenish white leaves overcast with rosy red; sheridan's red, a larger-leaved, red-leaved barberry reported to be quite vigorously growing; silver beauty, which is a sprawly-growing cultivar with nonuniform, variegated leaves; thornless, with essentially thornless stems; and variegata, with variegated leaves and a growth habit identical to the species.
6130	Calycanthus floridus Common sweetshrub Sweetshrub Carolina allspice Strawberry shrub Pineapple shrub	5' x 5'	Hardy Zone 5. Trial in sheltered sites in Zone 4 in Iowa. Found native from Virginia to Florida, with at least one report from far southern Illinois. Thrives in deep, rich, well-drained soils in either shade or full sun. Grows slowly into a very dense, bushy, rounded shrub of very regular outline. Planted for its marvelously fragrant, dark reddish brown, 2-inch diameter flowers in mid-May. Continues flowering sporadically into June or July. All parts of the plant give off a strong camphor-like scent when dried. Very nice in shrub borders or next to outdoor living areas where the sweet strawberry scent can permeate the entire area.
6140	Caragana brevifolia Shortleaf peashrub	4' x 4'	Hardy Zone 3. Rather rare. Native to northwestern China and Kashmir. Grows into an attractive low hedge. Requires little pruning.
6150	Caragana frutex cv. Globe Russian peashrub	4' x 4'	Hardy Zone 3. A very hardy, dwarf, globe-shaped cultivar that reportedly does not sucker like the parent. Should make an excellent formal hedge.

height and spread **description**

key **name**



6160	Caragana pygmaea Pygmy peashrub	4' x 4'	Hardy Zone 3. A very hardy, dwarf species of peashrub that apparently is resistant to alkali chlorosis and has been widely planted in western Minnesota and the Dakotas. Useful for foundation plantings, shrub borders, and hedges.
6170	Chaenomeles speciosa Flowering quince Flowering quince Japanese flowering quince	6' x 6'	Hardy Zone 5. Trial in sheltered sites in Zone 4 in Iowa. Several hundred cultivars have been named. Native to central China, introduced into North America around 1874. Most cultivars have white, pink, or scarlet flowers. Quite lovely in flower, but rather ratty looking the rest of the year. Has a reputation for collecting wind blown trash in its tangled branches. May be susceptible to cedar-apple rust.
6180	Deutzia x lemoinei Lemoine deutzia	5' x 5'	Hardy Zone 4. Grown for its white flowers in early June. A fairly twiggy, dense, erect-branched, round-headed shrub. Reported to be the hardiest of the cultivated deutzias.
6180a	Deutzia x lemoinei cv. Avalanche lemoine deutzia	4' x 4'	Hardy Zone 4b. A very dense, compact cultivar with arching branches and many white flowers.
6190	Dirca palustris Leatherwood	5' x 5'	Hardy Zone 3. Quite dense and symmetrical in open areas, but rather open and sparse in shady areas. Native to wet, shady, wooded areas, cultivated since 1740. Flowers in March or very early April in 4-inch broad clusters of a pale yellow color. Unusual because of the very early bloom. The wood is unusually flexible and strong, and the bark can be used for fishing lines. Unusual, very hardy, and adaptable. Suitable for naturalizing into wet areas as a background with unusually early blooms.
6200	Euonymus alatus compacta Dwarf winged euonymus Dwarf burning bush Dwarf winged wahoo	6' x 4'	Hardy Zone 4. May grow larger than indicated. Prunes quite well. Reported to have smaller corky wings than the species, we have seen several unnamed cultivars with very prominent wings. Quite reliable fall color in both sun and shade. Very reliable and generally recommended.
6200a	Euonymus alatus compacta cv. Nordine dwarf winged euonymus Nordine burning bush	5' x 5'	Hardy Zone 4. Reported to be more hardy than compacta and grows quite a bit more dense and lower to the ground. More fruitful than the species. May be hard to find, but is worth looking for.
6210	Forsythia x ovata cv. Sunrise forsythia	5' x 5'	Hardy Zone 4. This new introduction from Iowa State University bloomed normally the spring of 1982 after a winter with temperatures 28 below zero and 40 mile per hour winds. In addition, there was an early warm spell followed by below zero temperatures in April. Any forsythia cultivar that can bloom profusely after that should be well worth a try over the entire state. The only forsythia we can recommend for reliable bloom.
6220	Hydrangea arborescens Hills-of-snow hydrangea Smooth hydrangea Wild hydrangea Sevenbark	4' x 4'	Hardy Zone 4. Native to the far southeast corner of Iowa and cultivated since about 1800. A rather sprawling, upright shrub that suckers freely. Flowers are in rather flat, rounded corymbs, about 4 to 6 inches in diameter and pass from green through dull white to brown from late June through September. Since it dies back a great deal in winter, becoming quite ratty looking, and blooms on the new wood, one can simply amputate the entire shrub to the ground line each fall and still have the nice green foliage and interesting blooms each summer. Tolerates a great deal of shade, but requires a lot of water. Useful as a background or naturalized in shady, wet areas.



key name

height
and
spread

description

6220a	Hydrangea arborescens 'grandiflora' Hills of snow hydrangea	5' x 5'	Hardy Zone 4. There are several known cultivars, all of which are planted more often than the species. This old variety has quite white flowers, with the clusters somewhat divided into 4 sections that look rather pushed together. Other cultivars available are annabelle, with flower clusters 2 weeks before the other cultivars and at least a foot across; and sterilis, often confused with grandiflora and with flatter-topped flower clusters. Culture and uses are identical with the species.
6230	Lonicera fragrantissima Winter honeysuckle	6' x 6'	Hardy Zone 5. Trial in sheltered sites in Zone 4. A wide, spreading, somewhat irregular-growing shrub with a tangled mass of slender, recurving branches that hold their foliage into November. The flowers are not showy but are lemon-scented and extremely fragrant for 3 to 4 weeks from late March through early April. The flowers can easily be forced in late winter to bring some cheer to those gray days. Makes a nice hedge and tolerates pruning quite well.
6250	Mahonia aquifolium Oregon grape Oregon grape holly	5' x 5'	Hardy Zone 5b. Does fairly well in protected sites well into Zone 5a, but tends to die back to the snow line in even average winters. Where it can be grown, makes a truly lovely small shrub with bright, glossy, green, holly-shaped leaves. Has conspicuous, slightly fragrant, yellow flowers in late April. Often holds most of its leaves throughout the winter, and is semi-evergreen in Iowa. The showy fruits are blue-black in clusters that resemble grapes (hence the name) appearing in August and often lasting into December. Grows best in acid soils. Highly recommended where it can be grown.
6260	Philadelphus x Galahad Galahad mockorange	5' x 5'	Hardy Zone 4. This cultivar, of presently undetermined parentage, grows into a compact, dwarf shrub with single, fragrant flowers.
6270	Philadelphus x lemoinei cv. Mont Blanc mockorange	4' x 4'	Hardy Zone 4. Growing only 4-feet high, this cultivar has single, intensely fragrant, white flowers 1¼ inches in diameter. It is reported to be somewhat hardier than the other lemoinei cultivars.
6280	Prunus glandulosa Dwarf flowering almond	4' x 4'	Hardy Zone 4. The species is spreading, multi-stemmed, and rather straggly. Only attractive in bloom, which is the way it is often shown in the illustrations on bargain basement plant sales. The cultivars are much better than the species, but it is quite hardy.
6280a	Prunus glandulosa alboplœna Dwarf flowering almond	4' x 4'	Hardy Zone 4. A double, white, flowered form that is much showier than the parent species. Quite nice in bloom, but distinctly unspectacular the rest of the year.
6280b	Prunus glandulosa sinensis Doublepink dwarf flowering almond	4' x 4'	Hardy Zone 4. This is perhaps the best of the dwarf flowering almonds. The flowers are fully double and a nice clear pink. Not as hardy as the parent species, and often shows some dieback in Zone 4 in Iowa.
6290	Rhododendron carolinianum x cv. P. J. M. rhododendron Rhododendron PJM	4' x 4'	Hardy Zone 4. Possibly the most reliable of the rhododendrons available in Iowa. PJM is a group of hybrids, originating in Massachusetts in 1943. Several cultivars have been named. All have bright, lavender-pink clusters of flowers in early April, usually coinciding very closely with the bloom of our native amelanchiers, giving the possibility of a very interesting contrast in bloom color and plant size. Evergreen, all rhododendrons do much better in acid soils if other site conditions are adequate. May winterburn if fully exposed to sun and wind.
key	name	height and spread	description

6300	Rhododendron molle Chinese azalea	5' x 5'	Hardy Zone 5b. May do reasonably well in Zone 5a if in acid soils and in the shade. Will not tolerate alkaline soils or winter sun and wind. Flowers are yellow, spotted with green, and 2 inches across. Quite nice where site conditions are perfect, but otherwise very marginally hardy.
6310	Rhododendron x northern lights Northern Lights hybrid rhododendrons	5' x 5'	Hardy Zone 4. When grown in suitable soils (deep, moist, well-drained, and neutral to acid), the original seedling plants have flowered every year for the past 25 years. Vigorous, deciduous shrubs with pink, fragrant flowers. Flower buds have bloomed normally after winter temperatures of 40 degrees below zero.
6320	Rhododendron yedoense Yodogawa azalea	5' x 5'	Hardy Zone 5. Requires acid soil and shade. Will survive the Iowa winter in Zone 4 if completely buried by snow and in ideal soils. Has fragrant, purple flowers in May. Both single- and double-flowered cultivars can be found occasionally. The double-flowered varieties are reputed to be more freely flowering.
6330	Rhodotyplus scandens Black jetbead	4' x 4'	Hardy Zone 5. May do fairly well in Zone 4 in Iowa in sheltered sites. Has fairly showy, white, 4-petaled (unusual for a member of the rose family) flowers in late May to early June, followed by shiny, black fruit that give it its name. The fruit often hangs on throughout the winter even into the following summer. Very tolerant of pollution, poor soils, sun, shade, and crowding. Not particularly showy, but can be used in very difficult situations and therefore recommended.
6340	Ribes alpinum Alpine currant	5' x 10?'	Hardy Zone 2. Extremely hardy, tolerates quite severe pruning and can be sheared into a very formal hedge of almost any desired width. Left alone, it grows vigorously into a dense, twiggy, rounded, spreading shrub about twice as broad as high. Very reliable and generally recommended.
6345	Ribes cynosbati Pasture gooseberry	5' x 3'	Hardy Zone 2. This is the very prickly, wild pasture gooseberry that is native over the entire state. When fully ripe, the edible fruit is quite tasty and often gathered for jams, jellies, and pies.
6345a	Ribes cynosbati inerme Smooth gooseberry	5' x 3'	Hardy Zone 2. Virtually identical with the species, but essentially thornless.
6350	Ribes hirtellum Gooseberry	4' x 4'	Hardy Zone 3. This is the cultivated gooseberry commonly planted for its edible fruit. Several cultivars are available, including pixwell and welcome. Just as ornamental as the other gooseberries, but produces much larger crops of better quality fruit.
6355	Ribes sativum Garden currant	4' x 4'	Hardy Zone 3. This native of Western Europe is the common garden currant, introduced into North America by early settlers. Grown primarily for its clusters of small, bright red fruit that are prized for making jelly and dried for fruit cakes. The cultivars cascade and red lake are quite popular, among others. Not often thought of when planning the shrub border or when planning foundation plantings, this edible fruited currant is ornamental and offers large crops of fruit.
6360	Rosa blanda Smooth wild rose Meadow rose	4' x 3'	Hardy Zone 2. Native to the entire state. Not often offered by nurseries, but a hardy, adaptable, wild rose very useful in naturalizing and in wildflower gardens.



key name

height
and
spread

description

6370	Rosa rugosa Rugosa rose	5' x 5'	Hardy Zone 3. Native to northern China, Korea, and Japan, reported to be quite free of disease and insect problems. A good, hardy shrub for the shrub border. Quite a few hybrids and cultivars, a few of which are listed below.
6370a	Rosa rugosa cv. Agnes rugosa rose	5' x 5'	Hardy Zone 3. Has double, fragrant, amber-yellow flowers about 3 inches across in June, with repeat blooming through August.
6370b	Rosa rugosa cv. Alba rugosa rose	5' x 5'	Hardy Zone 3. Has single, white flowers in June, with repeat blooms through August.
6370c	Rosa rugosa cv. Hansa rugosa rose	5' x 5'	Hardy Zone 3. Has semi-double, reddish violet flowers in June, with repeat blooms through August.
6370d	Rosa rugosa cv. Grootendorst rugosa rose	5' x 5'	Hardy Zone 3. Has profuse clusters of 1-inch diameter, deep pink flowers in June, with repeat blooms through August.
6380	Rosa virginiana Virginia rose	4' x 4'	Hardy Zone 4. Native to entire state. A very handsome rose, grows vigorously into a low shrub with a dense thicket of upright, thorny branches. Flowers are large, single, pink wild roses, 2½ inches across in June. Makes an excellent barrier or low hedge, very adaptable and will thrive in poor, sandy soils. Can be cut to the ground and will then grow vigorously into an even more dense thicket. Recommended.
6390	Sorbaria sorbifolia Ural falsespiraea False spiraea	5' x 5'	Hardy Zone 3. Quite hardy, adaptable, and very shade tolerant. Grows into a very upright shrub with compound leaves very similar to mountainash. Spreads rapidly by suckers. Outstanding in bloom with its 4- to 10-inch panicles of small white flowers in late June and into July. Extremely easy to grow. Because it spreads so vigorously, it is best used as a background or for mass effects. Makes an excellent bank cover, especially in deep shady areas.
6400	Spiraea x arguta Garland spiraea	5' x 4'	Hardy Zone 4. Originated before 1884, this hybrid flowers freely in May with the typical spiraea many flowered umbel. Grows quite upright, and is an excellent early-flowering spiraea. One dwarf cultivar is listed under Very Small Deciduous Shrubs.
6410	Spiraea x billiardii Billiard spiraea	5' x 3'	Hardy Zone 3. This very old, hybrid spiraea originated before 1854, and has rose-colored flowers from June through August in upright, narrow, dense 2- to 4-inch panicles. Old flowers turn brown and persist, as do the seed heads, which must be pruned off in early spring. Very susceptible to iron chlorosis, which means it should only be planted in neutral to acid soils. Grows into a very upright, sometimes suckering shrub with bare shins.
6420	Spiraea x multiflora Snow garland spiraea	5' x 4'	Hardy Zone 4. This hybrid originated before 1884 and is quite similar in appearance to Spiraea arguta , the garland spiraea, but flowers more heavily. A good shrub for foundation and border plantings. It has the typical spiraea bare stems at the base of the shrub and blooms in early May.
key	name	height and spread	description

6430	Spiraea nipponica Nippon spiraea	6' x 5'	Hardy Zone 3. In growth habit and flower, is remarkably similar to a small vanhouttei spiraea. Maintains a neater, denser outline than vanhouttei. A very vigorous species native to Japan and cultivated in North America since 1882. The cultivars (which follow) are more often found and planted.
6430a	Spiraea nipponica cv. Rotundifolia nippon spiraea	6' x 5'	Hardy Zone 4. This free-flowering cultivar has leaves and flowers larger than the parent. Blooms from late May into early June.
6430b	Spiraea nipponica cv. Snowmound nippon spiraea	6' x 5'	Hardy Zone 4. This cultivar can be considered as a superior replacement for the vanhouttei spiraea where a smaller, neater appearing shrub of similar outline is desired. Blooms from late May into early June.
6440	Spiraea trilobata Treelobe spiraea	5' x 4'	Hardy Zone 3. Native to northern China, Siberia, and Turkestan, it was introduced into North America in 1801. This spreading to arching spiraea has wiry twigs and white flowers in many flowered umbels in May. This spiraea is seldom planted but is as good or better than many spiraeas that are planted.
6450	Syringa vulgaris nana cv. Dwarf common lilac	5' x 4'	Hardy Zone 4. There are several named cultivars of the common lilac that are sold as dwarf common lilac. Consult your local Iowa certified nurseryman for information on currently available cultivars.
6460	Weigelia florida Old fashioned weigelia	6' x 5'	Hardy Zone 5. Often does well in Zone 4b with some winter protection. This is the hardiest of the weigelias, and was introduced into North America in 1845 from northern China and Korea. Not planted as often as the many cultivars and hybrids that follow. Flowers are rosy pink in early June and come from the previous year's wood.
6460a	Weigelia florida cv. Alba weigelia	6' x 5'	Hardy Zone 5. This cultivar has white flowers; otherwise is identical with the parent species.
6460b	Weigelia florida cv. Mandshurica weigelia	6' x 5'	Hardy Zone 4. This very hardy weigelia selection has a very straggly appearance and is most often used in breeding for hardiness. Has nice lavender flowers.
6460c	Weigelia florida cv. Variegated weigelia	4' x 4'	Hardy Zone 5. A rather handsome shrub, with leaves edged with pale yellow. Flowers are a deep rose color.
6470	Weigelia x cv.	6' x 5'	Hardy Zone 5. Often reasonably hardy in Zone 4b in sheltered sites. There are many weigelia cultivars available, varying in hardiness as well as growth habit and flower color. Some representative cultivars are listed here. Consult your local Iowa certified nurseryman.
6470a	Weigelia x cv. Bristol ruby	6' x 5'	A bright red-flowered cultivar.
6470b	Weigelia x cv. Bristol snowflake	6' x 5'	White flowers with some pink.
6470c	Weigelia x cv. Dropmore pink	6' x 5'	A pink-flowered cultivar developed for hardiness.
6470d	Weigelia x cv. Eva Rathke	6' x 5'	A crimson-flowered cultivar that flowers in late May to early June and then repeats the bloom in mid-August.
6470e	Weigelia x cv. Pink princess	6' x 5'	A hardy selection originating in Iowa. Has pink flowers.



key name

height
and
spread

description

key	name	height and spread	description
6470f	Weigelia x cv. Red prince	6' x 5'	A very new, hardy selection from Iowa State University with bright red flowers. Promises to be one of the very best reds.
6470g	Weigelia x cv. Vanicek	6' x 5'	One of the best reds. Quite hardy. Sometimes sold as Newport red or as cardinal.
6480	Yucca filamentosa Spanish bayonet Adam's needle	6' x 3'	Hardy Zone 5. Does well in Zone 4 in highly protected locations and if covered with snow. Erect, stiffly spreading. Individual leaves are quite long, stiff, narrow, and sharply pointed, all growing from a point at the base of the plant. Each leaf may be 2½-feet long. Very showy spikes of pendulous, yellowish white flowers from the center of the plant in July are followed by clusters of seed pods in September. Quite distinctive and unusual in shape, best used as an attention getting accent or in hot, dry areas such as under south overhangs near doors.

**very small
deciduous
shrubs**

under 4 feet high at
maturity

6500	Amorpha canescens Leadplant Lead plant	3' x 3'	Hardy Zone 3. Native to prairies throughout Iowa. Branches are angled, very hairy, and gray. Leaves also very hairy and gray, both above and below. Dense clusters of blue flowers in 1- to 5-inch long spikes are produced in June and July. Requires well-drained soils. Quite tolerant of dryness. Best used either naturalized or as an herbaceous perennial.
6510	Amorpha nana Fragrant false indigo	2' x 2'	Hardy Zone 3. Native to prairies throughout the state. A very low shrub with purple flowers in 1- to 2-inch long racemes in May and June. A very interesting shrub for naturalizing into a prairie or as a low border or foundation planting.
6520	Aralia hispida Bristly sarsaparilla	3' x 3'	Hardy Zone 3. Native. A very small shrub with white flowers in June and July followed by 1/3-inch purple fruit in August and September. Has very sharp, bristly spines at the base of the plant. Grows well in partial shade and thrives in sandy, dry, almost sterile soil.
6530	Arctostaphylos uva-ursi Bearberry	6" x 3'	Hardy Zone 3. Native, but requires well-drained, acid soil. Salt tolerant. One of the very best, low, glossy-leaved, broad-leaved evergreen shrubs and ground covers known, but is completely intolerant of most Iowa soils. However, could be grown in artificial soils if you are willing to go to that trouble. Small, pink flowers in nodding racemes in April to May, followed by bright red 1/4-inch fruit in July and August.
6540	Berberis thunbergii 'erecta' Truehedge Barberry Columnberry	4' x 3'	Hardy Zone 4. This popular cultivar grows vigorously into a very upright, dense, compact shrub with many small, sharp spines. Excellent bright red fall color. The rather inconspicuous, yellow flowers in late May are followed in August and September by bright red 1/4-inch fruits.
6540a	Berberis thunbergii cv.	3' x 3'	Hardy Zone 4. Other dwarfed cultivars are known and occasionally available, including crimson pygmy, 2-foot tall, with purple leaves and often suffering from some dieback in the winter; globe, much hardier and also only 2-foot tall, with green leaves; and minor, with smaller leaves than the species and only 3-foot tall.
6550	Buxus microphylla Littleleaf boxwood	3' x 3'	Hardy Zone 5. Often does quite well in Zone 4 in Iowa if protected from winter sun and wind. A broad-leaved evergreen to semi-evergreen shrub that tolerates pruning and shearing very well. Often used for topiary and formal and informal hedges. Often suffers from some winterburn and dieback. The cultivars are hardier and more reliable.
6550a	Buxus microphylla 'koreana' Korean boxwood	3' x 3'	An extremely hardy cultivar, the foliage turns brown in winter. This cultivar is the parent of others that follow.
6550b	Buxus microphylla cv. Tide Hill Korean boxwood	3' x 3'	Hardy Zone 5. A cultivar of the Korean boxwood that stays green all winter.
6550c	Buxus microphylla cv. Wintergreen Korean boxwood	3' x 3'	Hardy Zone 5. Another cultivar of the Korean boxwood that retains its green color all winter. Reported to do very well in the Chicago area, is worth a try in protected sites in Zone 5 in Iowa.
6560	Caragana frutex 'globe' 'Globe' Russian peashrub	3' x 3'	Hardy Zone 3. A very neat, compact, dense, globe-shaped cultivar that does not sucker. An excellent formal hedge that requires little or no pruning.

key name

height
and
spread

description



6570	Caryopteris x clandonensis Blue spiraea Bluebeard	3' x 3'	Hardy Zone 5. Trial in sheltered sites in Zone 4b. A relatively short-lived, small shrub that tends to die back each winter and often must be pruned back to the ground each spring. Reliable in Zone 5b. Grown as a small specimen or foundation shrub for its blue flowers in the fall.
6570a	Caryopteris x clandonensis cv. Blue mist spiraea	3' x 3'	Hardy Zone 5. This selection has nice, light blue flowers.
6570b	Caryopteris x clandonensis cv. Dark knight blue spiraea	3' x 3'	Hardy Zone 5. This cultivar is quite similar to blue mist, but has darker flowers.
6580	Ceanothus americanus New Jersey tea	3' x 3'	Hardy Zone 3. Native to this area in acid soils. Requires acid soils. Does very well in sandy soils, if acid. Produces white flowers from June to September. Good for foundation plantings in suitable soils. Early settlers used the leaves for tea, hence the name. Though most references stress the acid soil requirement, this plant has been found growing native on alkaline prairie soils in Kansas.
6590	Ceanothus ovatus Inland ceanothus	2' x 1.5'	Hardy Zone 3. A very small, hardy, upright, native shrub. Requires acid soils. Very useful where soils are suitable.
6600	Chaenomeles japonica Lesser flowering quince Japanese flowering quince	3' x 3'	Hardy Zone 5. May do fairly well in sheltered sites in Zone 4b. Often blooms only where covered with snow in Zone 5a. Fairly reliable in Zone 5b. Flowers may be from orange-red to scarlet to blood red, depending upon the cultivar. Fruits often are used for making quince jelly. Tends to catch everything that blows by in the tangled branches. There are many cultivars.
6610	Cornus stolonifera cv. (Cornus sericea cv.) Kelsey dwarf redtwig dogwood	3' x 3'	Hardy Zone 5. Dies back in Zone 4. Since the bright red twigs are one of the main reasons for growing this shrub, it is only recommended in Zone 5. A nice, small shrub with interesting, bright red stems in winter.
6620	Cotoneaster apiculata Cranberry cotoneaster	3' x 3'	Hardy Zone 5. Will winterkill to the snowline in Zone 4 in a severe winter. The hardiest spreading cotoneaster, it has pink flowers in early June followed by ¼-inch red fruits in August and September. A very nice, low, spreading shrub with tiny, almost shiny leaves.
6630	Deutzia gracilis Slender deutzia	3' x 3'	Hardy Zone 5. May do fairly well in protected sites in Zone 4. Grows into a graceful, low, broad mound. Literally covered with pure white ¾-inch flowers in mid to late May. Good for foundation plantings and shrub borders.
6630a	Deutzia gracilis x cv. Carminea slender deutzia	3' x 3'	Hardy Zone 5. This hybrid of D. gracilis parentage grows into a rather gracefully spreading plant with arching branches. Has rosy pink flowers in large panicles in May. An excellent flower display, but rather plain the rest of the year.
6640	Diervilla lonicera Bush honeysuckle	3' x 3'	Hardy Zone 3. Native, cultivated since 1720. Makes a good bank cover in either sun or partial shade. Has small, yellow flowers in June. Suckers rather freely.
6650	Diervilla sessifolia Southern bush-honeysuckle	3' x 3'	Hardy Zone 5. Reported to be completely hardy into Minnesota, we are not yet sure enough to recommend it north of Zone 5. Spreads readily and makes an excellent bank cover. Produces yellow flowers in June and July.
key	name	height and spread	description

6660	Euonymus fortunei Fortune's euonymus Wintercreeper	4' x 4'	Hardy Zone 5. This broad-leaved evergreen shrub does very well in moist, well-drained soils in sunny to very shady areas protected from winter winds. It is extremely variable in form, and is the parent of many cultivars that range from shrubs to vines to ground covers in growth habit. This parent is most typically a rather loose, irregular shrub with glossy evergreen leaves. However, it immediately changes form and becomes a high climbing vine if it encounters a suitable material to climb upon. May or may not have flowers (inconspicuous) or fruit (which closely resemble bittersweet berries) depending upon the age of the individual plant. Some cultivars are susceptible to attack by crown gall. All cultivars are susceptible to attack by the euonymus scale. Consult your local Iowa certified nurseryman for information on cultivars for your area and intended use.
6660a	Euonymus fortunei cv. Coloratus wintercreeper	1' x 4'	Hardy Zone 5. Hardy Zone 4 if covered by snow in winter. This is a group of cultivars that creep along the ground and have purple leaves in winter. They make excellent ground covers and vines where hardy.
6660b	Euonymus fortunei cv. Gracilis wintercreeper	1' x 4'	Hardy Zone 5b. Hardy Zone 5a and Zone 4b if covered with snow in winter. This is a rather variable group of broad, spreading shrubs, ground covers, and vines that have attractively variegated, green and cream colored leaves.
6660c	Euonymus fortunei cv. Minima euonymus Kewensis euonymus	1' x 3'	Hardy Zone 5. Hardy Zone 4b if covered with snow. This is a very dainty, small-leaved cultivar, sometimes grown indoors as a pot plant. Often sold as kewensis.
6660d	Euonymus fortunei cv. Radicans euonymus	4' x 4'	Hardy Zone 5. This is a grouping of nice shrub forms that grow about as broad as tall and may climb if they encounter anything to climb upon. Usually has nice, waxy, green leaves. Winterburns badly some years.
6660e	Euonymus fortunei cv. Sarcoxie euonymus	4' x 4'	Hardy Zone 5. This appears to be a distinct cultivar with whitish leaf veins. Supposedly a nonfruiting form, but we have seen fruit on what looked like sarcoxie euonymus. This cultivar is often infected with crown gall.
6660f	Euonymus fortunei cv. Vegetus euonymus	4' x 4'	Hardy Zone 5. This is the fully mature form of the parent species. Most often seen as a nice, rather neat, glossy leaved evergreen euonymus shrub with rounded, thick leaves and heavy crops of berries. Will climb vigorously if given the chance.
6670	Euonymus nana Dwarf euonymus	3' x 3'	Hardy Zone 3. A low, spreading shrub. Leaves are dark green and remain green until late fall and sometimes remain on the plant all winter. Rather sprawling, the branches frequently take root where they touch the ground. Useful for foundation plantings in front of a shrub border. Its bittersweet fruit are brownish purple. Fruiting branches are often used in flower arrangements.
6670a	Euonymus nana cv. Turkestanica dwarf euonymus	3' x 3'	Hardy Zone 3. This cultivar is more upright growing and more dense than the parent species and is more often available.
6680	Euonymus obovatus Running euonymus	1' x 3'	Hardy Zone 4. Lies flat upon the ground and roots freely wherever the stems touch. Deciduous, is much hardier than the evergreen euonymus cultivars listed previously. A rather coarse but fairly reliable ground cover.

height
and
spread

key name

description

6690	Hypericum prolificum Shrubby St. John's-wort Golden St. John's-wort	3' x 3'	Hardy Zone 4. Native, grows into a rather stiffly upright, small shrub that does very well in dry, rocky soils. Produces bright yellow, 3/4-inch diameter flowers continuously from June through August. A distinctly underused native shrub.
6700	Hypericum kalmianum Kalm St. John's-wort	1.5' x 3'	Hardy Zone 4. Native, quite hardy, and adaptable. Cultivated since 1760. A bit straggly in appearance, has bluish green foliage and bright yellow 1- to 2-inch diameter flowers in July.
6710	Kerria japonica Japanese kerria	3' x 3'	Hardy Zone 5. A small, uprightly arching, twiggy shrub. Has bright yellow, 1/4- to 1 3/4-inch diameter flowers in June, with sporadic flowers throughout the summer. Has interesting, bright green twigs in winter.
6710a	Kerria japonica 'pleniflora' Double Japanese kerria	3' x 4'	Hardy Zone 5. This double-flowered cultivar blooms in mid-May. Otherwise, almost identical to the species.
6720	Lonicera x xylosteum 'claveyi' Clavey's dwarf honeysuckle	3' x 5'	Hardy Zone 3. This well-known old cultivar grows into a very low, broadly spreading shrub. Has bluish green foliage and light yellow flowers. Needs very little pruning. Is not attacked by the honeysuckle aphid. Generally reliable and recommended.
6720a	Lonicera x xylosteum cv. Emerald mound honeysuckle	3' x 6'	Hardy Zone 3. A very fine, low-growing, mounded honeysuckle with rich, bluish green foliage. Has white to yellowish white flowers in June, followed by red berries in August. Is not attacked by the honeysuckle aphid. Recommended.
6730	Mahonia repens Creeping mahonia	1' x 2'	Hardy Zone 5. A very low-growing, spreading, evergreen shrub or ground cover. May die back above the snow line in severe winters. Native to North America, this low, glossy, holly-leaved shrub has clusters of bright yellow flowers in late May and grapelike clusters of shiny black fruit in August and September.
6740	Philadelphus coronarius 'nanus' Dwarf sweet mockorange	4' x 4'	Hardy Zone 3. A dwarfed cultivar with very fragrant, white, 1- to 1 2/3-inch diameter flowers borne in 5- to 7-flowered racemes covering the plant in late May to early June, but a bit plain the rest of the year. Planted for sweetly-scented flowers, best used as a low background or in the shrub border.
6750	Philadelphus x cv. Miniature snowflake mockorange	3' x 3'	Hardy Zone 3. A very compact, dwarf mockorange with very fragrant, double flowers.
6750a	Philadelphus x cv. Silver showers mockorange	3' x 3'	Hardy Zone 3. Another very compact, dwarf mockorange.
6760	Physocarpus monogynus Mountain ninebark	3' x 3'	Hardy Zone 4. Native to the Black Hills of South Dakota and Wyoming and areas south. Cultivated since 1879. A neat, compact, hardy shrub that resembles Alpine currant. Recommended for hedges and foundation plantings.
6770	Physocarpus opulifolius 'nana' Dwarf common ninebark	2' x 2'	Hardy Zone 3. This is a very compact, dwarf cultivar. The leaves are smaller and much less deeply lobed than those of the parent. A very useful, small shrub. We know of a 7-year-old hedge 100-feet-long that has required no pruning. Highly recommended.
key	name	height and spread	description

6780	Potentilla fruticosa Shrubby cinquefoil	3' x 3'	Hardy Zone 3. Native to wet areas and bogs, especially in alkaline soils. Very hardy, grows rather slowly into a low, compact shrub that flowers steadily from June until frost with 1-inch diameter yellow flowers that are spaced randomly about the plant. Highly recommended for foundation plantings, as a low hedge, or in the foreground of a shrub border. Far too many cultivars to list all. Some representative ones follow.
6780a	Potentilla fruticosa cv. Coronation triumph	3' x 3'	Hardy Zone 3. A mound-shaped, full, dense cultivar. Soft green foliage. Very abundant, yellow blooms.
6780b	Potentilla fruticosa cv. Farrieri Gold drop	2' x 3'	Hardy Zone 3. A readily available cultivar. Very small leaves with deep yellow flowers.
6780c	Potentilla fruticosa cv. Friedrichsii	4' x 4'	Hardy Zone 3. A slightly larger cultivar with light yellow flowers.
6780d	Potentilla fruticosa cv. Jackmannii	4' x 4'	Hardy Zone 3. A very vigorous, somewhat larger cultivar with good, medium green foliage. A profusion of very bright yellow flowers. Occasionally sold as gold drop, which is actually the cultivar named farrierii. At least one nursery sells this as buttercup shrub.
6780e	Potentilla fruticosa cv. Katherine Dykes	2' x 3'	Hardy Zone 3. A very low-growing potentilla with arching branches and light lemon yellow flowers.
6780f	Potentilla fruticosa cv. Manley's	3' x 3'	Hardy Zone 3. A low, mounded plant with pale yellow flowers 1 inch in diameter. Sometimes sold as moonlight.
6780g	Potentilla fruticosa cv. Mount Everest	4' x 4'	Hardy Zone 3. A vigorous, larger potentilla with white flowers.
6780h	Potentilla fruticosa cv. Primrose beauty	3' x 3'	Hardy Zone 3. A low, densely-growing, compact potentilla with very nice foliage. Pale yellow to creamy white flowers. Possibly the same plant as vilmoriniana.
6780i	Potentilla fruticosa cv. Snowflake	3' x 3'	Hardy Zone 3. This cultivar has 1-inch diameter semi-double white flowers.
6780j	Potentilla fruticosa cv. Tangerine	3' x 3'	Hardy Zone 3. This fairly new cultivar has tangerine orange flowers when grown in the shade and in cool weather. However, in hot weather or in full sun, the flowers are just a nice potentilla yellow.
6780k	Potentilla fruticosa cv. Vilmoriniana	3' x 3'	Hardy Zone 3. A compact-growing cultivar with silvery tomentose foliage and pale yellow to creamy white flowers that are 1 inch in diameter. May be the same plant as primrose beauty.
6790	Prunus x pumila? Prunus x tomentosa? Hansen's bush cherry	3' x 3'	Hardy Zone 3. This is a very widely-known and sold cultivar, but is of uncertain parentage. Very hardy and reliable, grows vigorously into a small shrub with typical cherry or plum flowers followed by large crops of fairly large, purple fruit that is prized for jellies and pies.
6800	Rosa nitida Shining rose	2' x 3'	Hardy Zone 4. A very nice, naturally dwarfed, native rose with very bristly, spiny stems and 1- to 2½-inch diameter single, pink, fragrant flowers.
6810	Rosa x floribunda Floribunda roses	3' x 2'	This group of cultivars is often used as "everblooming" rose hedges or as foundation plants. Consult your local Iowa certified nurseryman.

**height
and
spread**

description

key name

6820	Rosa x polyantha Polyantha roses	2' x 1.5'	This group of cultivars is very hardy and free blooming. Used as low hedges or as background plants.
6830	Rosa spinosissima Scotch rose	3' x 3'	Hardy Zone 3. Widely naturalized (found growing wild) but not native. Grows into a very dense, freely suckering, bristly, prickly, mound-like shrub. Readily forms impenetrable thickets. Various named and unnamed cultivars can often be found. Flowers in June are from 1 to 2 inches in diameter and very numerous, varying (according to cultivar) from pink to white or even yellow.
6840	Salix purpurea nana Dwarf arctic willow	4' x 4'	Hardy Zone 3. This dwarf form of the purple osier willow grows rapidly and vigorously, with slender stems and narrow leaves. Prunes and shears well and is very adaptable to different soils. Very tolerant of excess water. Makes a nice low hedge.
6850	Spiraea albiflora Japanese white spiraea	1.5' x 3'	Hardy Zone 3. A very low shrub with stiff, upright branches, growing into a rounded mound. The white flowers in late June and early July are quite prominent against the dark green foliage. Since the flowers appear from the new wood, this spiraea can be pruned back early in the spring without harming the year's flower display. An excellent, very small shrub.
6860	Spiraea x arguta 'compacta' Dwarf garland spiraea	3' x 3'	Hardy Zone 4. This dwarf cultivar gets quite chlorotic in alkaline soils. A neat, small, upright spiraea that blooms freely in May with pure white flowers.
6870	Spiraea x bumalda Bumalda spiraea	2.5' x 3'	Hardy Zone 3. This hybrid originated before 1890 and is the parent of several cultivars. Not often planted, because the cultivars are more popular. The hybrid and all of its cultivars should be pruned in early spring before growth starts.
6870a	Spiraea x bumalda cv. Anthony Waterer spiraea	2' x 4'	Hardy Zone 3. Grows stiffly upright and has clusters of deep pink flowers in late June with occasional additional flowers into August.
6870b	Spiraea x bumalda cv. Crispa spiraea	2' x 3'	Hardy Zone 3. An interesting cultivar with twisted leaves. Flowers are rose-pink in June and July. The interesting leaves suggest use as an accent plant or low hedge next to a patio.
6870c	Spiraea x bumalda cv. Froebeli Froebel spiraea	3' x 4'	Hardy Zone 3. This rather popular cultivar is more vigorous than Anthony Waterer and has more brilliant deep pink flowers. Grows into a more arching shrub than Anthony Waterer.
6870d	Spiraea x bumalda cv. Gold flame spiraea	2' x 3'	Hardy Zone 3. The new foliage is strongly mottled with red, copper, and golden orange. These colors are again repeated when the leaves turn in the fall. Flowers are pink.
6870e	Spiraea x bumalda cv. Norman spiraea	1' x 1.5'	Hardy Zone 3. An extremely compact cultivar with pink flowers.
6880	Spiraea japonica Japanese spiraea	4' x 3'	Hardy Zone 4. An upright, rather stiff shrub. The flowers vary from pink to white in the species. Several cultivars are more often available than the species.
6880a	Spiraea japonica cv. Alpina	1' x 2'	Hardy Zone 4. A very dainty, low, spreading, fine-textured shrub with pink flowers in June or July. Makes an excellent ground cover or edging plant.
6880b	Spiraea japonica cv. Atrosanguinea	4' x 4'	Hardy Zone 4. This spiraea is reported to have the deepest red flowers of any spiraea.
key	name	height and spread	description

6880c	Spiraea japonica cv. Coccinea	3' x 3'	Hardy Zone 4. This cultivar was listed in previous editions, but we can not be certain if it is a different plant than <i>Atrosanguinea</i> .
6880d	Spiraea japonica cv. Ovalifolia Ovalleaf Japanese spiraea	2' x 2'	Hardy Zone 4. A very nice, small spiraea, growing into a neat mound and blooming in late June and early July with 4- to 5-inch diameter flat clusters of white flowers.
6890	Spiraea x superba Striped spiraea	3' x 3'	Hardy Zone 4. An upright-growing spiraea hybrid with pink flowers.
6900	Spiraea thunbergi Thunberg spiraea	4' x 3'	Hardy Zone 4 in Iowa. Often suffers from tip dieback, requiring tedious pruning each spring and suggesting marginal hardiness. Grows into a bushy, very twiggy, tiny-leaved, loosely-spreading, arching shrub with yellowish green summer foliage and yellow fall color. Has white flowers in early April before the leaves emerge.
6910	Symphoricarpos albus Common snowberry	3' x 3'	Hardy Zone 3. Native on limestone and clay soils, transplants easily into almost any soil. A bushy, bluish green folliaged, small shrub with many ascending shoots. Suckers freely and spreads profusely. Inconspicuous, pinkish flowers in June on the new growth (prune in early spring before growth begins), followed by little clusters of pure white, waxy, white, 5/8-inch round fruit in September through November. Rather plain, but the white fruit are interesting. Grows quite well in shade, useful there and as a bank cover.
6920	Symphoricarpos x chenaultii Chenault coralberry	2' x 4+'	Hardy Zone 5. Often dies back to the snowline in Zone 4 and in severe winters in Zone 5a. A low, spreading, arching shrub with pinkish flowers in July followed by little clusters of small, round, white fruit. The sides of the fruit facing the sun turn a nice blush pink.
6920a	Symphoricarpos x chenaultii? cv. Hancock coralberry	2' x 3'	Hardy Zone 4. The parentage of this well-known cultivar is in doubt. Quite compact, rounded, and spreading in growth habit. Fruit is nice coral-red. One of the better <i>symphoricarpos</i> .
6930	Symphoricarpos orbiculatus Indiancarriant Coralberry Buckbrush	3' x 3'	Hardy Zone 3. This very hardy, adaptable, native shrub will grow almost anywhere. A very nice, spreading, arching shrub with small, dull green leaves that hang on late in the fall. Produces yellowish white flowers flushed with rose in June or July, followed by many little clusters of small, purplish red fruit that mature in October and hang on all winter. A nice shrub for foundation plantings and low hedges, but is rather hard to accept as a landscape plant if you have just spent 20 years trying to kill it in your pastures. Understandably not too popular in some areas, but recommended where it is acceptable.
6940	Viburnum x carlcephalum Fragrant viburnum Carl's koreanspice viburnum	4' x 4'	Hardy Zone 5. Reasonably hardy in protected sites in Zone 4b. May grow larger, depending upon the site. Grown for its intensely fragrant clusters of flowers in late April and early May. Leaves are dark green in summer, purplish red in fall. Excellent in the shrub border.
6950	Viburnum carlesii Koreanspice viburnum	4' x 5'	Hardy Zone 5. Reasonably hardy in protected sites in Zone 4b. This species is one of the parents of all listed fragrant viburnums. A rather slow-growing, rounded, dense shrub with stiff, upright, spreading branches. Grown for its intensely fragrant, pinkish white clusters of flowers in late April to early May. The flowers may be killed by late frosts where the plant is already marginally hardy, spoiling the spring effect. Recommended where hardy.
6950a	Viburnum carlesii cv. Dwarf pink snowball	2.5' x 3'	Hardy Zone 5. This is a dwarf cultivar, more dense than the species. Has the same intensely fragrant flowers as the parent, but can be used where the species is a bit too big.



key

name

height
and
spread

description

key	name	height and spread	description
6960	Viburnum x juddii Judd viburnum	4' x 4'	Hardy Zone 5. Another hybrid of <i>V. carlesii</i> , apparently more cold-tolerant, with the same intensely fragrant, pinkish white flowers in early spring.
6970	Viburnum opulus nanum	2' x 2'	Hardy Zone 3. This is a very dwarf form of the European highbush cranberry that rarely flowers or fruits. Excellent for very low hedges, a foundation planting, or as a bank cover.
6980	Yucca glauca Soapweed	3' x 3'	Hardy Zone 3. Native. Individual leaves are 15 to 20 inches long, narrow, and very sharply pointed. They originate in a rosette from a single point near the ground. The flower stalk rises from the center of the leaves in July and is topped with greenish white, pendulous, bell-shaped flowers. Cultivated since 1656, this is the hardiest of the yuccas. Unusual in form, it attracts a lot of attention.

woody vines

7000	Akebia quinata Fiveleaf akebia	15'	Hardy Zone 5. A vigorous, graceful, twining vine with interesting 5-leaflet, compound leaves. Has dark red to rosy purple flowers in late May and early June followed by odd, sausage-shaped, purple pods if the flowers are carefully hand pollinated. Grows relatively slowly, is good on trellises as a screen on good soils in full sun.
7010	Ampelopsis brevipedunculata Porcelain ampelopsis	12'	A vigorous vine that climbs by tendrils. Flowers are rather inconspicuous, small, and greenish in July and August, followed by attractive fruit that are 1/3-inch across in September and October and change from pale lilac to bright blue. Good on fences and trellises.
7020	Aristolochia durior Dutchman's pipe	30'	Hardy Zone 4. Cultivated since 1783, a vigorous, twining vine that requires a strong support. Leaves are rather handsome and 2 to 6 inches long. The flowers look like little meerschaum pipes. Grows well in both sun and shade.
7030	Campsis radicans Trumpet creeper Trumpetvine	25 +'	Hardy Zone 5. Tends to die back to the ground in Zone 4 if grown in the open, but will often survive and flower normally if grown against a south facing wall. A vigorous, clinging, native vine that climbs by aerial roots that cling to the wall. Has bright orange, trumpet-shaped flowers. It spreads easily. The very heavy vines require strong supports.
7040	Campsis x tagliabunda cv. Mme. Galen hybrid trumpet creeper	25 +'	Hardy Zone 5. A larger-flowered, rather better behaved, hybrid trumpet creeper or trumpetvine.
7050	Celastrus orbiculatus Oriental bittersweet	25 +'	Hardy Zone 5. A vigorous, twining, vine, native to Japan and China; introduced into North America in 1860. Grown mainly for its clusters of orange bittersweet fruit in the fall. Recommended in Zone 5b, with a cautious recommendation for fairly sheltered sites in Zone 5a. The sexes are separate, and you must plant both male and female plants to be sure of getting fruit.
7060	Celastrus rosthornianus Chinese bittersweet (loeseneri)	15'	Hardy Zone 4. A vigorous twining bittersweet that often produces an abundant crop of fruit. Fruit often shatter and fall off after the branches are cut. Sometimes listed as Celastrus loeseneri in catalogs.
7070	Celastrus scandens Bittersweet American bittersweet	20'	Hardy Zone 3. This is our own native bittersweet. Very hardy and adaptable, thrives on most well-drained soils. A vigorous vine that climbs by twining. Grow on a sturdy trellis or on a fence. We feel this is the most attractive of the bittersweets, especially when it has a good crop of fruit. Very vigorous, it can strangle a small tree if given the chance.
7080	Clematis x jackmannii Jackman clematis	15'	Hardy Zone 4, often appreciates some winter protection. Originated around 1860, this vigorous, rather slow-growing hybrid climbs with tendrils. Mature height may vary from 5 to 15 feet, depending upon the soil and the amount of winter protection. Produces lovely, velvety, dark purple flowers from late June through October, bloom peaks in July. Grow on a sturdy trellis in full sun.



key name

normal height

description

7090	Clematis x cv. Many-flowered clematis	10'	Hardy Zone 4. There are at least 20 fairly commonly available named cultivars. They include: appleblossom, with pale pink flowers from 4 to 5 inches across; ascotiensis, with dark purple, 4- to 5-inch flowers; Duchess of Albany, with pink, bell-shaped flowers a bit more than 1 inch across; Ernest Markham, with red-violet flowers 2½ to 4 inches across; etoil violette, a prolific bloomer with dark purple 2½- to 4½-inch flowers; hagley hybrid, with lavender-pink flowers from 4 to 5 inches across; henryi, having 4- to 5-inch white flowers with dark centers; huldine, with 3½- to 4-inch pearly white flowers with a touch of pink on the back side of the petals; jackmannii alba, with 5-inch white flowers that have a bluish edge on each petal; lady northcliff, with dark purple, 5- to 6-inch flowers; Lady Veda Stewart, with 4- to 5-inch maroon flowers; Mme. Baron Veillard, with lilac-rose flowers from 5 to 6 inches across; Mme. Cholmondeley, which has only a few light blue flowers at least 6 inches across; Mme. Edouard Andre, with velvety, red flowers 5 to 6 inches in diameter; Nelly Mosher with bicolored flowers that are pale pink with a deep pink bar down the middle of each petal; president, with dark purple 6-inch flowers; ramona, with 4- to 6-inch light purple flowers that have white centers; red jackmann, with 5½-inch reddish maroon flowers; victoria, with 5½-inch purple flowers; and Ville de Lyon, with 4-inch carmine red blooms. As a general rule, all clematis do best in light, deep, well-drained loamy soils, with some partial shade. The east side of a building is often a good choice.
7100	Clematis x lawsoniana cv. Henry clematis	10'	Hardy Zone 4. This is a nice hybrid, with huge, creamy white flowers.
7110	Clematis paniculata Sweet autumn clematis	25'	Hardy Zone 4. A vigorous, fast-growing vine that climbs with tendrils. The flowers are about an inch across, quite abundant, very fragrant, and are profusely produced from late August into October. The fruit in October are white, extremely plummy and completely cover the plant, making it look like a fresh snowdrift.
7120	Clematis texensis Scarlet clematis	6+'	Hardy Zone 5b. Hardiness in Zone 5a and Zone 4b seems to depend upon the site and the amount of winter exposure. A very desirable, vigorous vine that climbs with tendrils. The leaves are compound, but the end leaflet becomes the tendril the vine climbs with. The flowers are scarlet, oddly um-shaped, about an inch long, and appear from July to September.
7130	Clematis verticillaris Rock clematis Mountain clematis	6+'	Hardy Zone 4. Native, the flowers are about 5 inches across and a nice rosy violet color. Some authorities list this native vine as Clematis occidentalis var. occidentalis . This desirable vine or ground cover may be difficult to find.
7140	Clematis virginiana Virgin's bower	15'	Hardy Zone 3. A very vigorous climbing native vine with 1-inch white flowers in June and July, followed by plummy fruit clusters in August and September.
6660	Euonymus fortunei Fortune's euonymus Wintercreeper	20?'	Hardy Zone 5. This broad-leaved evergreen shrub does very well in moist, well-drained soils in sunny to very shady areas protected from winter winds. It is extremely variable in form, and is the parent of a great many cultivars, which range in growth habit from shrubs to vines to ground covers. This parent is typically a loose, irregular shrub with glossy evergreen leaves. However, it immediately changes form and becomes a high climbing vine if it encounters suitable material to climb upon. May or may not have flowers (inconspicuous) or fruit (which closely resemble bittersweet berries), depending upon the age of the individual plant. Susceptible to attack by the euonymus scale. Consult your local Iowa certified nurseryman regarding individual cultivars.

key name

normal height

description



key	name	normal height	description
6660a	Euonymus fortunei cv. Coloratus wintercreeper	10?'	Hardy Zone 5. Hardy Zone 4 if covered by snow in winter. This is a group of cultivars that creep along the ground and have purple leaves in winter. They make excellent ground covers and vines where hardy.
6660b	Euonymus fortunei cv. Gracilis wintercreeper	10?'	Hardy Zone 5b. Hardy Zone 5a and Zone 4b if covered with snow in winter. This is a rather variable group of broad, spreading shrubs, ground covers, and vines that have attractively variegated, green and cream-colored leaves.
6660c	Euonymus fortunei cv. Minima euonymus Kewensis euonymus	5+ '	Hardy Zone 5. Hardy Zone 4 if covered with snow. This is a very dainty, small-leaved cultivar, sometimes grown as a pot plant indoors. Often sold as kewensis.
6660d	Euonymus fortunei cv. Radicans euonymus	20'	Hardy Zone 5. This is a grouping of nice shrub forms that grow about as broad as tall and may climb if they encounter anything to climb upon. Usually has nice, waxy, green leaves. Winterburns badly some years.
6660e	Euonymus fortunei cv. Sarcoxie euonymus	15+ '	Hardy Zone 5. This appears to be a distinct cultivar with whitish leaf veins. Supposedly a nonfruiting form, but we have seen fruit on what certainly looked like sarcoxie euonymus.
6660f	Euonymus fortunei cv. Vegetus euonymus	20+ '	Hardy Zone 5. This is the fully matured form of the parent species. Most often seen as a nice, rather neat, glossy-leaved evergreen euonymus shrub with rounded, thick leaves and heavy crops of berries. Will climb vigorously if given a chance.
7160	Hedera helix English ivy	20'	Hardy Zone 5b. Often reasonably hardy in Zone 5a if in a protected site. If used as a ground cover, will usually survive the winter in Zone 4 if completely covered with snow or a heavy straw mulch. A very attractive climbing or creeping evergreen vine with glossy, green leaves with prominent white veins. Often grown as a house plant. The following cultivars seem hardier than many others and could be tried: Baltica is a hardy cultivar with small leaves. Bulgaria is a hardy cultivar from the Missouri Botanic Garden. Ogallala is a hardy cultivar from the North Platte Experiment Station in Nebraska and should be tried in Iowa.
7170	Lonicera dioica Limber honeysuckle	15'	Hardy Zone 2. A very hardy, quite showy, native vine that climbs by twining. Has showy flowers in whorls in June. The end pair of leaves on each branchlet is joined into a disk at the base. This very desirable vine has been overlooked by many nurseries that propagate and sell plants.
7180	Lonicera x heckrottii Gold flame honeysuckle Goldflame honeysuckle	15'	Hardy Zone 5. Will die back to the snowline in Zone 4. May die back to the snowline in Zone 5 if the winter is quite severe. A hybrid, twining vine with fragrant, bright gold, trumpet-shaped flowers. Quite handsome, but marginally hardy and a bit short lived.
7190	Lonicera japonica halliana Hall's Japanese honeysuckle	15'	Hardy Zone 5. A semi-evergreen, twining vine with bluish green foliage and fragrant, white turning to yellow flowers. Often used as a ground cover. Very vigorous and a bit invasive.
7200	Lonicera sempervirens Trumpet honeysuckle	15'	Hardy Zone 5. A semi-evergreen twining vine with orange-yellow to scarlet spikes of 2-inch long, slender trumpet-shaped flowers from May to August. Native to the United States, but rather marginally hardy in Iowa.
7200a	Lonicera sempervirens cv. Dropmore scarlet trumpet honeysuckle	20'	Hardy Zone 5. Often hardy into Zone 4 in fairly sheltered sites. This cultivar is hardier than the parent, and has more spectacular, bright scarlet flowers.

7210	Lycium chinense Chinese matrimony vine Chinese wolfberry	12'	Hardy Zone 4. This rambling shrub weaves its way up trellises and produces small, purple flowers from June to September. Fruit is scarlet to orange-red, about an inch long, and quite showy from August to September. Very sturdy and adaptable. Very useful for bank covers and for planting at the tops of walls to trail gracefully down the wall. Quite vigorous—some feel this is almost a weed.
7220	Menispermum canadense Common moonseed	15'	Hardy Zone 3. Native, has been cultivated since 1646. Climbs by twining, has quite slender branches and needs support. Does very well in moist, shady areas and grows quite fast. The leaves are very dark green in summer and are unusually large, 4- to 10-inches long. An excellent native vine for screens and as a ground cover.
7230	Parthenocissus quinquefolia Virginia creeper Woodbine	35 +	Hardy Zone 3. This is our native Virginia creeper. It is a vigorously-growing vine that clings to almost any surface with little adhesive disks on the tips of the many-branched tendrils. Climbs high, covering walls, windows, trees, poles, and windmill towers. The fruit look like clusters of small purplish grapes, but are not particularly noticeable until after the leaves have fallen. Bright red fall color. Will grow vigorously in almost any soil and tolerates pollution.
7230a	Parthenocissus quinquefolia cv. Engelmannii	30 +'	Hardy Zone 3. This cultivar of native Virginia creeper is quite similar to the parent but has smaller leaves.
7230b	Parthenocissus quinquefolia cv. Saint Paulii	30 +'	Hardy Zone 3. This less well-known cultivar has smaller leaves than the cultivar and the leaves are hairy beneath. Clings even tighter than the parent species.
7240	Parthenocissus tricuspidata Boston ivy Japanese creeper	25'	Hardy Zone 5. Often does well in sheltered sites in Zone 4. Grows vigorously, clinging closely to walls with adhesive disk tipped tendrils. Foliage is very lustrous, with 3-lobed leaves. Branches make interesting patterns against a wall in winter. Clings so closely to a wall that birds cannot build nests in it. Excellent bright red fall color.
7250	Parthenocissus vitacea (?inserta?)	30 +'	Hardy Zone 3. Native. Very similar in appearance to Parthenocissus quinquefolia , with slightly smaller, glossy leaves. However, the tendrils have no adhesive pads at the tips, and the plant climbs by wrapping the tendrils around a support or by inserting them into cracks.
7260	Polygonum auberti Silvervine fleecflower Silver lace vine	25?'	Hardy Zone 5. Does fairly well in protected sites in Zone 4. An extremely fast-growing, twining vine. Even if killed to the ground by a hard winter, usually grows at least 15 feet the first summer. Has white, fragrant flowers in long, very showy racemes in late summer, giving a very fleecy effect; hence the name.
key	name	normal height	description



key	name	normal height	description
7270	Rhus radicans Poison ivy	35+'	Hardy Zone 3. This is poison ivy, and not recommended for planting. This is a very adaptable, hardy native vine that climbs vigorously by means of many rootlets. The leaves are compound, with three leaflets. The leaves can vary greatly in outline, from toothed to smooth to somewhat lobed, and are usually rather glossy. The plant has excellent, bright red fall color. The clusters of yellowish green, waxy berries cling to the plant until late winter or until eaten by birds. The bare stems and trunks resemble a fuzzy rope against the surface they are climbing upon due to the many clinging rootlets. Can also appear as a small shrub about 3- to 4-feet tall or as a low, creeping shrub. All parts of the plant contain urushiol, an oil that causes allergic reactions in many people, varying from mild to quite severe. This oil is most often spread onto the skin of the victim by direct contact, but may be spread by a pet that runs through the plant and gets the substance on its fur. The oil is not volatile in sunlight and cannot be spread by the wind. However, it will vaporize if the plant or any part of the plant is burned. If the smoke is inhaled by a person who is sensitive, death could result! Be very careful if you burn poison ivy! If this plant did not cause the blisters and itching, it would be one of our most highly recommended vines. We suggest you either leave it completely alone or enjoy the fall color display from a safe distance.
7280	Smilax Bona-nox Catbriar	40+'	Hardy Zone 3. Native in deciduous woods. This is an attractive native vine; but, like most members of its genus, is armed with thousands of razor sharp thorns. Could be naturalized where people are not expected nor wanted, or used as a barrier.
7290	Smilax glauca Sawbriar Wild sarsaparilla	40+'	Hardy Zone 3. Another native briar vine. Normally found in upland woods and in thickets. Heavily armed with sharp thorns. Attractive, bluish black berries in clusters are very showy after the leaves have fallen. The stems are quite glaucous, and the leaves are glaucous beneath.
7300	Smilax hispida Bristly greenbriar Hagbriar Hellfetter	40+'	Hardy Zone 3. A very spiny, native vine, with long branches that are armed with razor sharp slender thorns. Small, greenish flowers in June are followed in September and October by clusters of small black berries. Cultivated since 1688. In spite of its thorns, this is a very attractive vine. Either use as a barrier, or plant where people will not accidentally contact the sharp thorns.
7310	Smilax rotundifolia Common greenbriar	40+'	Hardy Zone 3. A distinctly round-leaved, native briar vine with attractive glaucous black berries in late summer.
7320	Vitis labrusca Fox grape	15+'	Hardy Zone 5. Selected cultivars are hardy in Zone 4. Native to the far southeast corner of Iowa and cultivated since 1656. Most of our cultivated grapes such as concord and fredonia are cultivars of this native. Most often used as a cultivated fruit, can also be planted on arbors, pergolas, and fences for the dual purpose of fruit and privacy.
7330	Vitis riparia Riverbank grape	30+'	Hardy Zone 3. Native and cultivated since 1656, this vigorous, hardy grape is often found growing in trees. The hardiest grape species, is often planted as a screen on a sturdy trellis. The fruit are small, but make excellent juice and jellies. At least one cultivar, beta, is sold. Beta is extremely hardy and has larger fruit than the species that makes excellent juice and jelly.

7340	<p>Vitis vinifera Wine grape Dessert grape European grape</p>	30'	<p>Hardy Zone 5b. Hardy Zone 5a with winter protection. Some cultivars are hardy in Zone 4 with sufficient winter protection. This grape is most widely known throughout the world and in its various cultivars as the source of most of the world's wine, raisin, and eating grapes. Various cultivars have grapes from white through red to deep purple, and are both seed containing and seedless. Listed here because it is as ornamental as any other grape where it is hardy. Extremely susceptible to damage by phenoxy herbicides (2,4-D, etc.).</p>
7350	<p>Wisteria floribunda Japanese wisteria</p>	20'	<p>Hardy Zone 5. May do quite well in sheltered sites in Zone 4. Native to Japan and cultivated in North America since 1830, this is the hardiest of the cultivated wisterias. A twining vine, grown for its spectacular violet to violet-blue, 8- to 20-inch long, drooping clusters of fragrant flowers in June. Requires full sun and well-drained soil. There are many named cultivars available. Consult your local Iowa certified nurseryman for advice on available cultivars and their hardiness.</p>
7360	<p>Wisteria machrostachys Kentucky wisteria</p>	20 +'	<p>Hardy Zone 5b. This wisteria is native to areas south of Iowa. It probably will not do well much north of Zone 5b. Flowers quite late with 1-foot long drooping racemes of light blue to lilac-purple flowers.</p>
7370	<p>Wisteria sinensis Chinese wisteria</p>	20'	<p>Hardy Zone 5. Has blue, nonfragrant flowers in May before the leaves appear. A slow-growing, sturdy, twining vine. One cultivar, alba, has pure white, intensely fragrant flowers.</p>
key	name	normal height	description

**annual
vines**

7400	Cardiospermum haliacabum Balloonvine heartseed	10'	A quick-growing, annual vine that climbs with tendrils. Grow in full sun on a trellis or fence.
7410	Cobea scandens Purplevine cobeia	15 +'	A quick-growing, annual vine that climbs with tendrils. Has violet flowers in summer. Grow in full sun on a trellis or porch.
7420	Cucurbita x cv. Ornamental gourd	15'	There are many varieties of ornamental gourds that are grown for their vigorous, annual vines and for the ornamental fruit. The range of colors, sizes, and shapes of the fruit is far more than can be described here. Many gourds seem to attract and suffer the depredations of more insects than anyone but an entomologist could imagine. Gourds will grow in both wet and quite dry soils.
7430	Dolichos lablab Hyacinth bean	10'	A very fast-growing, twining, annual vine with violet flowers in summer. Grows on a trellis or on wires or cords.
7440	Humulus japonicus Japanese hop	10'	A quick-growing, rather coarse-textured, annual vine that climbs by twining. Flowers are quite small and inconspicuous, but the fruit is an interesting small hop capsule. A variegated-leaved variety is sometimes found. Grow almost anywhere on a sturdy string or small rope.
7450	Ipomoea x cv. Morning glory	15 +'	These are the cultivated annual morning glory vines. Grown from seeds, they bloom heavily each morning throughout the summer. Flower colors vary from blues to reds to white. Climbs by twining.
7460	Lagenaria siceraria Calabash gourd	15'	This quick-growing, coarse, annual vine climbs with tendrils. Grown for its quick screen and its huge, orange gourd fruit.
7470	Mormordica balsamina Balsamapple	15 +'	A quick-growing, medium-textured, annual vine that climbs trellises or porches in full sun by means of tendrils. Odd, warty, orange fruit.
7480	Phaseolus coccineus Scarlet runner bean	8'	A quick-growing, annual vine that climbs by twining. Grow in either sun or light shade on a trellis or wire support. Has bright scarlet flowers all summer, followed by edible, snap-type beans. An interesting dual purpose vine.
7490	Quamoclit sloteri Cardinal starglory	12 +'	A fine-textured, quick-growing, annual vine that can be grown in sun or shade. Climbs by twining on a trellis or wire support. Produces scarlet flowers all summer.



key name

normal
height description

ground covers

21	Ajuga reptans Carpet bugle Bugle	4"	Hardy Zone 5b. Does well in selected protected sites in Zone 5a. A very attractive, low ground cover with deep purple flowers in erect spikes in May and June. Recommended where it can be grown.
6530	Arctostaphylos uva-ursi Bearberry	6"	Hardy Zone 3. Native, but absolutely requires well-drained, acid soil. Salt tolerant. One of the very best low, glossy-leaved, broad-leaved evergreen shrubs and ground covers known, but is completely intolerant of most low soils. However, could be grown in artificial soil if you are willing to go to the trouble. Small, pink flowers in nodding racemes in April to May, followed by bright red, ¼-inch fruit in July and August.
7500	Aegopodium podogaria Bishop's goutweed Goatweed	1-1.5'	A very reliable, quick-growing, hardy ground cover that dies to the ground each fall and regrows herbaceously each spring. Has white flowers in flat-topped umbels in June. Spreads easily, should be confined in an area such as between a sidewalk and a house. Grows well in either sun or shade but does not tolerate dry areas.
7500a	Aegopodium podogaria cv. Silveredge bishop's goutweed Goatweed	1-1.5'	A dainty, silver-edged cultivar. Slightly more sensitive to dry soils than the parent. Has white flowers in umbels in June. Sometimes called goatweed, an apparent misspelling.
7000	Akebia quinata Fiveleaf akebia	1'	Hardy Zone 5. A vigorous, graceful, twining vine with interesting 5-leaflet, compound leaves. Its dark red to rosy purple flowers in late May and early June are followed by odd, sausage-shaped, purple pods if the flowers are carefully hand pollinated. Grows fairly slowly, but makes an excellent ground cover on good soils in either full sun or medium shade.
6620	Cotoneaster apiculata Cranberry cotoneaster	3'	Hardy Zone 5. Will winterkill to the snowline in Zone 4 in a severe winter. The hardiest spreading cotoneaster, it has pink flowers in early June followed by ¼-inch red fruit in August and September. A very nice, low, spreading shrub with tiny, almost shiny leaves. Makes an excellent ground cover if pruned flat and covered with snow or a thick straw mulch. Can be used as a ground cover through all of Zone 4.
8	Convallaria majalis Lily-of-the-valley	1'	The common lily-of-the-valley is hardy throughout central United States. Rather coarse textured, grows into a nice, rather glossy, green-leaved, vertical-leaved mat with lovely sprays of tiny, bell-shaped, very sweetly fragrant, white flowers in May. Dies to the ground each fall and comes up from the roots each spring. A very good ground cover for shady, moist areas with rich soil.
121	Coronilla varia Crownvetch	2+'	This is the crownvetch planted along Iowa highways. As a ground cover, it often grows only 1- to 2-feet tall but under good soil, sun, and moisture conditions can get 4-feet tall. Somewhat difficult to start from seed, is usually started by planting crowns obtained from nurseries. Spreads vigorously once started, but does not control erosion since it does not form sod.



key

name

normal
height

description

6660	Euonymus fortunei Fortune's euonymus Wintecreeper	2+'	Hardy Zone 5. This broad-leaved evergreen shrub does very well in moist, well-drained soils in sunny to very shady areas protected from winter winds. It is extremely variable in form, and is the parent of many cultivars, which range from shrubs to vines to ground covers in growth habit. This parent is typically a loose, irregular shrub with glossy evergreen leaves. However, it immediately changes form and becomes a high climbing vine if it encounters a suitable material to climb upon. May or may not have flowers (inconspicuous) or fruit (which closely resemble bittersweet berries), depending upon the age of the individual plant. Susceptible to attack by the euonymus scale. Consult your local Iowa certified nurseryman for latest information on cultivars.
6660a	Euonymus fortunei cv. Coloratus wintercreeper	1'	Hardy Zone 5. Hardy Zone 4 if covered by snow in winter. This group of cultivars creeps along the ground and has purple leaves in winter. They make excellent ground covers and vines where hardy.
6660b	Euonymus fortunei cv. Gracilis wintercreeper	1'	Hardy Zone 5b. Hardy Zone 5a and Zone 4 if covered with snow in winter. This is a rather variable group of broad, spreading shrubs, ground covers, and vines that have attractively variegated, green and cream-colored leaves.
6660c	Euonymus fortunei cv. Minima euonymus Kewensis euonymus	1'	Hardy Zone 5. Hardy Zone 4 if covered with snow. This is a very dainty, small-leaved cultivar, sometimes grown as a pot plant indoors. Often sold as kewensis.
6660d	Euonymus fortunei cv. Radicans euonymus	2+'	Hardy Zone 5. This is a grouping of nice shrub forms that grow about as broad as tall and may climb if they encounter anything to climb upon. Usually has nice, waxy green leaves. Winterburns badly some years. Does quite well as ground cover, especially if covered by snow in winter.
6660e	Euonymus fortunei cv. Sarcoxie euonymus	2+'	Hardy Zone 5. This appears to be a distinct cultivar with whitish leaf veins. Supposedly a nonfruiting form, but we have seen fruit on what certainly looked like sarcoxie euonymus. Also does well as a ground cover, especially if covered by snow in winter.
6660f	Euonymus fortunei cv. Vegetus euonymus	2+'	Hardy Zone 5. This is the fully mature form of the parent species. Most often seen as a nice, rather neat, glossy-leaved evergreen euonymus shrub with rounded, thick leaves and heavy crops of berries. Will climb vigorously if given a chance. Also an excellent ground cover.
6680	Euonymus obovatus Running euonymus	1'	Hardy Zone 4. Lies flat upon the ground and roots freely wherever the stems touch. Deciduous, is much hardier than the evergreen euonymus cultivars listed previously. A rather coarse but fairly reliable ground cover.
7510	Euphorbia cyparissias Cypress euphorbia Cypress spurge	1'	Hardy Zone 5. An interesting, slow-growing ground cover. Grows in full sun. Forms dense carpets. This ground cover spreads vigorously but slowly and is capable of becoming a weed unless confined.
7520	Forsythia x intermedia cv. Arnold's dwarf forsythia	2'	Hardy Zone 5. This is a medium-textured, woody, deciduous ground cover quite useful for sunny slopes and fairly large areas. Summer leaves are light green, often remaining on the plant all winter and turning tan. The flowers in late May are golden yellow, but the plant produces very few flowers, even if completely covered by snow in winter.
85	Hosta x cv. Hosta Plantainlily	2'	There are many cultivars of hosta varying in size from 1- to 2-feet high and with leaf colors varying from rich purple to clear greens to variegated green and cream. All have spikes of purple flowers in July and August, and all make good ground covers in either sun or fairly dense shade.



key name

normal
height

description

**juniper
ground
covers**

A large group of junipers that also make excellent ground covers are listed here in a group.

2610	Juniperus chinensis 'sargentii' Sargent juniper	medium	2' x 6'	Hardy Zone 4. A reliable, old cultivar with a very formal, very low, spreading, mounded form. Silver-blue to green foliage. Several named cultivars of this cultivar are available including sargentii compacta, sargentii glauca, and sargentii viridis. All are somewhat more compact than sargentii, with foliage of differing shades of blue-green and green. Susceptible to cedar-apple rust.
2620a	Juniperus chinensis cv. Blaauws juniper	medium	4' x 4'	Hardy Zone 4. Very dense and compact with rich, blue-green foliage. Grows into an irregular vase shape.
2620f	Juniperus chinensis cv. San Jose juniper	medium	1' x 8'	Hardy Zone 4. An extremely low, creeping form with grayish green foliage and an irregular, spreading form.
2620g	Juniperus chinensis cv. Sea spray juniper	medium	1' x ?	Hardy Zone 4. Very new, reputed to be a better ground cover than better known cultivars such as blue rug, Bar Harbor, or tamariscifolia. Reported to be very slow growing. We have no experience with it. Listed for information only.

2630	Juniperus communis cv. Depressa juniper Oldfield juniper Old field juniper	slow!	3' x 9'	Hardy Zone 4. Native to practically all of North America, much of Europe, and Asia. The species is so variable that one could propagate hundreds of cultivars. Most naturally occurring forms are quite sprawly and prostrate. This cultivar grows very slowly into a dwarf, dense, spreading shrub. The oil from the fleshy cones is used for medicinal flavorings and for making gin. Many cultivars are available. Ask your local Iowa certified nurseryman about locally available cultivars. Resistant to the cedar-apple rust.
2640	Juniperus horizontalis admirabilis Prostrate juniper	fast +	6" x 9'	Hardy Zone 3. An old cultivar introduced by Plumfield Nurseries of Fremont, Nebraska. A dense, dwarf, very low, spreading shrub with bluish green, creeping branches. Reported to be quite resistant to winterburn in Minnesota. Resistant to cedar-apple rust.
2650a	Juniperus horizontalis plumosa Andorra creeping juniper Andorra juniper	fast +	1' x 9'	Hardy Zone 3. This very old cultivar is well known for its gray-green summer foliage and purplish winter foliage. It is also well known for developing a ratty, completely bare-branched center as it matures. Popular and easily obtained, fast-growing and reliable—but short-lived and no longer recommended unless you just want a quick, immediate effect. Susceptible to cedar-apple rust.
2650b	Juniperus horizontalis cv. Bar Harbor juniper	medium	1' x 9'	Hardy Zone 4. A very low-growing, bluish green foliage, spreading form, turning purplish in winter.
2650c	Juniperus horizontalis cv. Blue chip juniper	medium	1' x 8'	Hardy Zone 4. Selected by Hill Nursery near Chicago for its low, compact growth and clear blue color throughout the year.
2650d	Juniperus horizontalis cv. Waukegan juniper Douglasii juniper	fast	1' x 9'	Hardy Zone 4. Discovered near Douglas Nurseries in Waukegan, Illinois, grows rapidly in a trailing form. Steel blue foliage turning purplish in winter.
2650e	Juniperus horizontalis cv. Blue rug juniper Wilton's carpet juniper Wiltonii juniper	medium	6" x 6'	Hardy Zone 4. Beautiful silver-blue foliage, turning purplish in winter. Creeping, spreading habit that "clings" tightly to the ground, even changing direction of growth at the edge of a vertical wall to "cling" tightly to the vertical surface. Resistant to cedar-apple rust. Dependable and generally recommended.



key	name	growth rate	height and spread	description
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2650f	Juniperus horizontalis cv. Emerald spreader juniper	medium	6" x 6'	Hardy Zone 4. An exceedingly low, ground-hugging, spreading juniper with feathery-appearing, deep emerald green branchlets.
2650g	Juniperus horizontalis cv. Turquoise spreader juniper	fast	1' x 8'	Hardy Zone 4. A wide-spreading, vigorous-growing form with soft, feathery branchlets of turquoise green.
2650h	Juniperus horizontalis cv. Webber juniper	medium	6" x 6'	Hardy Zone 4. An extremely low, matlike, spreading juniper with fine-textured, bluish green foliage.
2650i	Juniperus horizontalis cv. Hughes juniper	medium	6" x 8'	Hardy Zone 4. A silvery blue, very low-growing selection with distinct, radially upright, spreading branches.
2650j	Juniperus horizontalis cv.	medium	1' x 9'	Hardy Zone 4. Many more cultivars of Juniperus horizontalis are available, and more are constantly being developed. Among them are: alpina, which is susceptible to cedar-apple rust; blue mat; dunvegan blue; emerson; jade spreader; plumosa compacta; sun spot; and others. Consult your local Iowa certified nurseryman for information on available cultivars.
2670	Juniperus procumbens Japgarden juniper	slow	1' x 6'	Hardy Zone 4. Introduced into North America in 1843 from its native Japan. Has a reputation for being somewhat hard to transplant, but since virtually all stock for sale is container grown, transplanting in suitable sites should not be a problem. Reported to be tremendously susceptible to the Phomopsis disease in overly wet soils. Very distinctive, spiky, bluish to gray-green foliage, with a neat, dwarf growth habit. Thrives on limey, dry soils, which are easy to find in Iowa. Most resistant to cedar-apple rust. Generally recommended.
2670a	Juniperus procumbens 'nana' Dwarf jagpgarden juniper	slow	1' x 5'	Hardy Zone 4. Similar to the parent species but quite a bit smaller and slower growing. Very neat in habit, with overlapping branchlets. Excellent in rock gardens. Generally reliable and recommended. At least one other cultivar (variegata) is known.
2680a	Juniperus sabina cv. Arcadia juniper	slow	1' x 8'	Hardy Zone 3. A very low, spreading cultivar with horizontal branches and dark, grass green foliage.
2680b	Juniperus sabina cv. Blue Danube juniper	slow	3' x 9'	Hardy Zone 4. Introduced from Austria in 1956. A spreading shrub with upcurved branches and bluish green foliage. More horizontal than the species and has better foliage.
2680c	Juniperus sabina cv. Broadmoor juniper	slow	1' x 4'	Hardy Zone 4. A very dense, dwarf cultivar with soft, grayish green foliage. Distinct, strong, horizontal branches with branchlets curving vigorously upward to give an unusual effect—rather reminiscent of feathers held on edge. This cultivar was developed from seeds imported from near Petersburg, Russia in 1933. Resistant to cedar-apple rust.
2680d	Juniperus sabina cv. Scandia juniper Skandia juniper	slow	1' x 5'	Hardy Zone 4. Like the preceding, it was developed in 1933 from seeds imported from Russia. A low, spreading plant with somewhat spikey, dark green to grayish green foliage. Quite handsome. Resistant to cedar-apple rust.



key	name	growth rate	height and spread	description
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7170	Lonicera dioica Limber honeysuckle	2'	Hardy Zone 2. A very hardy, quite showy, native vine that climbs by twining. Quite showy flowers in whorls in June. The end pair of leaves on each branchlet is joined into a disk at the base. This is a very desirable vine that has been overlooked by many nurseries that propagate and sell plants. Should make an excellent ground cover.
7190	Lonicera japonica 'halliana' Halls Japanese honeysuckle	2'	Hardy Zone 5. A semi-evergreen, twining vine with bluish green foliage and fragrant, white turning to yellow flowers. Often used as a ground cover.
7210	Lycium chinense Chinese matrimoney vine Chinese wolfberry	3+'	Hardy Zone 4. This rambling shrub that weaves its way up trellises has small, purple flowers from June to September. Fruit are scarlet to orange-red, about an inch long, and quite showy from August to September. Very sturdy and adaptable. Very useful for bank covers. When planted at the tops of walls it trails gracefully down the wall. A good ground cover for large areas.
7530	Lysimachia nummularia Moneywort Creeping charlie Creeping jennie	4"	This is not the common weed known as creeping charlie. An excellent ground cover for full sun to half shade. Has small, bright green leaves on slender, ground hugging stems. Blooms almost continuously through June with 3/4-inch diameter, bright yellow, single flowers. This is a highly recommended ground cover that has suffered from the reputation of another low creeping plant with a similar name.
7220	Menispermum canadense Common moonseed	15'	Hardy Zone 3. Native, has been cultivated since 1646. Climbs by twining, has quite slender branches, and needs support. Does very well in moist, shady areas and grows quite fast. Leaves are very dark green in the summer and are unusually large—4- to 10-inches long. An excellent native vine for screens and as a ground cover.
59	Nepeta mussini Mussin's catnip Catmint	1'	A very hardy, fast-growing, reliable, herbaceous ground cover with gray-green foliage that dies to the ground each fall. Has small, blue flowers in June and July.
22	Pachysandra terminalis Japanese spurge Japanese pachysandra	1'	Hardy Zone 5. An excellent, semi-evergreen, herbaceous ground cover for shady areas that produces white flowers in May. Does best in Zone 5a if covered all winter by snow.
7230	Parthenocissus quinquefolia Virginia creeper Woodbine	1+'	Hardy Zone 3. This is native Virginia creeper. It is a vigorously-growing vine that clings to almost any surface with little adhesive disks on the tips of the many-branched tendrils. Climbs high, covering walls, windows, trees, poles, and windmill towers. The fruit look like clusters of small, purplish grapes, but are not particularly noticeable until after the leaves have fallen. Bright red fall color. Will grow vigorously in almost any soil and tolerates pollution.
7230a	Parthenocissus quinquefolia cv. Engelmannii	1+'	Hardy Zone 3. This cultivar of native Virginia creeper is quite similar to the parent but has smaller leaves.
7230b	Parthenocissus quinquefolia cv. Saint Paulii	1+'	Hardy Zone 3. This less well-known cultivar has smaller leaves than the cultivar and the leaves are hairy beneath. Clings even tighter than the parent species.
7250	Parthenocissus vitacea (?inserta?)	1+'	Hardy Zone 3. Native. Very similar in appearance to Parthenocissus quinquefolia , with slightly smaller, glossy leaves. However, the tendrils have no adhesive pads at the tips, and the plant climbs by wrapping the tendrils around a support or by inserting them into cracks.



key

name

normal
height

description

23	Paxistima canbyi Cliff-green Mountain-lover Canby paxistima	1'	Hardy Zone 5. An interesting ground cover, found native in the mountains of West Virginia. Has fine-textured, green leaves in summer, with bronze fall and winter color. The name is often misspelled as either pachistima, or pachystima. Requires acid soil.
18	Phlox subulata Moss phlox	4"	An excellent, very slow-growing, fine-leaved, spreading, herbaceous ground cover for sunny areas. The natural flower color is a somewhat bilious fluorescent pink, but several cultivars are available with flower colors ranging from white through clear pink to red.
7540	Polygonum x 'renoutria' Renoutria fleecflower	2'	Hardy Zone 5. There appears to be no plant botanically recognized as renoutria fleecflower. Various authorities give widely differing descriptions, with heights from 2 inches to 3 feet. However, all of the plants we have seen either sold or identified as renoutria fleecflower have been vigorously spreading, herbaceous ground covers covered with pink spikes of tiny flowers in late summer and about 2 feet tall. They die to the ground each fall but grow vigorously each spring.
7550	Potentilla tridentata Wineleaf potentilla	1'	Hardy Zone 3. Native, cultivated since 1789 but not often found now. A very low-growing, suckering perennial with woody stems and semi-evergreen leaves that turn a rich wine red in fall. An excellent ground cover for gravelly, well-drained soils. Very hardy and adaptable.
7560	Sedum acre Goldmoss Golden-carpet	2"	A very low-growing (2 to 3 inches), slow-growing perennial carpeting ground cover with brilliant, yellow flowers covering the entire plant in June. Especially useful in dry, very sunny sites.
7570	Sedum lydium Lydium stonecrop	6"	A very low-growing, slow-growing, half-evergreen, herbaceous perennial ground cover. Leaves have red edges in summer. Flowers are pink in flat topped clusters in August and September.
6850	Spiraea albiflora Japanese white spiraea	1.5'	Hardy Zone 3. A very low shrub with stiff, upright branches, growing into a rounded mound. The white flowers in late June and early July are quite prominent against the dark green foliage. Since the flowers appear from the new wood, this spiraea can be pruned back early in the spring without harming the year's flower display. An excellent very small shrub.
6870e	Spiraea x bumalda cv. Norman spiraea	1'	Hardy Zone 3. An extremely compact cultivar with pink flowers.
6880a	Spiraea japonica cv. Alpina	1'	Hardy Zone 4. A very dainty, low-spreading, fine-textured shrub with pink flowers in June or July. Makes an excellent ground cover or edging plant.
6920a	Symphoricarpos x chenaulti? cv. Hancock coralberry	2'	Hardy Zone 4. The parentage of this well-known cultivar is in doubt. It is quite compact, rounded, and spreading in growth habit. Fruit is coral-red. One of the better symphoricarpos. Makes a good ground cover for large areas.
20	Vinca minor Creeping periwinkle	6"	A very reliable, creeping, broad-leaved, evergreen ground cover with dainty, glossy, green leaves that are about ½ inch wide and 2 inches long. Grows very well in shady areas and has ½-inch blue flowers in May.
7580	Viola sp. Violets	6"	This is the common violet, growing wild all over Iowa. There are many different species, with varying flower colors, from white through pale blue to deep blue or even dark purple-violet. There are even yellow flowered violets. All make excellent native ground covers in almost any soil and in either full sun or shade.



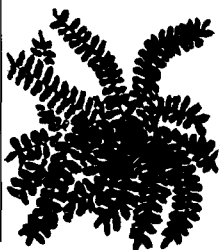
key name

normal
height

description

ferns

650	Adiantum pendatum Maidenhair fern	8" x 14"	Adapted to shady areas, very interesting texture, often difficult to grow.
651	Athyrium filixemina Ladyfern	3' x 3'	Very reliable and dependable, this medium-textured fern grows in either sun or shade and has a refined appearance.
652	Osmunda cinnamomea Cinnamon fern	5' x 5'	A very coarse-textured fern that grows best in moist, shady places.
653	Osmunda claytoniana Interrupted fern	3' x 3'	A coarse fern with arching fronds that grows in open, shady areas.
654	Pteretis nodulosa Ostrich fern	2' x 2'	A coarse-textured fern with quite large fronds that grows well in sun and shade.



key

name

height
and
spread

description

**perennial
flowers**

spring flowering

1	Alyssum saxatile Goldentuft alyssum	1' x 1'	Very reliable with fine-textured, gray-green foliage and bright yellow flowers in May. Excellent for rock gardens and edgings in full sun. A fair cut flower.
2	Anchusa myosotidiflora Bugloss	1' x 1.5'	Coarse, green foliage with blue flowers in May. A good border for both sun and shade. A good cut flower.
3	Anemone pulsatilla Pasque flower	9" x 1'	Medium, gray-green foliage with white flowers in April and May. Grows best in acid soil in full sun. A good cut flower. Grows wild in Iowa.
4	Aquilegia coerulea Colorado columbine	2.5' x 1'	Medium-textured, light green foliage with blue columbine flowers in May. Grows well in shade. A good cut flower.
5	Aquilegia x varieties Long-spurred hybrid columbine	2.5' x 1'	Medium-textured, light green foliage. Many different colors of flowers are available. Blooms in May and June. A good border flower for shady areas. A good cut flower.
6	Arabis alpina Alpine rockcress	6" x 1'	Fine, gray-green foliage with white flowers in April and May. Very good for rock gardens and edgings in full sun or half shade. A good cut flower.
7	Cerastium tomentosum Snow-in-summer	6" x 1'	Fine-textured, silvery foliage with white flowers in May and June. Very good for rock gardens and edgings in full sun. A fair cut flower.
8	Convallaria majalis Lily-of-the-valley	1' x 9"	Coarse, semi-glossy, broad blade-like, dark green foliage with spikes of fragrant, white flowers in May. Excellent in shady, moist to fairly dry areas, either as a mass planting or as an edging or border. An excellent cut flower.
9	Dicentra spectabilis Common bleedingheart	2' x 3'	Medium green, gracefully arching foliage. Has pink flowers in May and June. Foliage dies to the ground shortly after blooming, reappearing the next spring. Used in shady borders and as a specimen flower. A good cut flower.
10	Iris germanica (in varieties) Common iris German iris	3' x 1'	Coarse, sword-shaped, green foliage. Fringed, fragrant flowers in April and May. Many colors of flowers are available. A good cut flower. Often used in borders and as a bold accent. Plant in full sun.
11	Iris Pumila Dwarf iris	8" x 1'	Coarse, sword-shaped, green foliage. Blooms in April and May with blue, yellow, or white flowers. Used as an edging in sunny areas. Only a fair cut flower.
12	Mertensia virginica Virginia bluebells	2' x 1'	A native Iowa wildflower with medium-textured, green foliage that dies back in early summer. Very dependable, bell-shaped, blue flowers in clusters in March and April. An excellent border perennial in sun or in half shade. Only a fair cut flower.
13	Myosotis palustris Myosotis scorpioides True forget-me-not	8" x 1'	Fine-textured, green foliage. Blooms from May through July with many small, blue to pink flowers. A good edging plant for sun to half shade areas. Only a fair cut flower. Grows best in the northeast third of Iowa.
14	Paeonia albiflora (in varieties) Peony Chinese peony	3' x 3'	Glossy, coarse, dark green foliage. Large, single and double flowers in May and June. Many colors available, but most are shades of red, pink, and white. Many varieties are very fragrant. The bloom season varies from variety to variety. A very popular and well-liked perennial, often used extensively on Memorial Day for cemetery decorations. Very dependable and recommended. An excellent cut flower.



key name

height
and
spread

description

15	Papaver nudicaule Iceland poppy	1' x 1'	Medium-textured, light green foliage. Blooms in April and May with red, orange, and yellow flowers. Foliage dies to the ground after blooming. A good border flower for sunny areas. Only a fair cut flower.
16	Papaver orientale (in varieties) Oriental poppy	2' x 3'	Coarse, light green foliage that dies to the ground after blooming. Blooms from May to June with flowers in shades of white, red, and yellow. A good border flower for sunny areas. Dependable and generally recommended.
17	Phlox divaricata Sweetwilliam phlox Wild sweet william Sweet william	10" x 1'	Medium-textured, dark green foliage. Very fragrant, lavender flowers in May and June. A native Iowa wildflower found all over the state. Two wild flower colors are known, white with pink centers and the more common lavender-blue with dark blue center. Very reliable and recommended. A good cut flower.
18	Phlox subulata Moss phlox	6" x 1'	Very fine-textured, green foliage. Covered with tiny flowers in April and May. The most common flower color is a billious, fluorescent, pinkish lavender, but varieties with clear blue, pink, white, and red flowers are available. An excellent rock garden or edging plant for sunny places. Very reliable and recommended. Not a good cut flower.
19	Polemonium x (in varieties) Polemonium Jacob's ladder	1-3' x 1.5'	Fine-textured, green foliage. Blue and white flowers in May and June. Spreads rampantly and needs physical control (such as a brick edging) to restrict it. A good border flower for half shade. Not a good cut flower.
20	Vinca minor Common periwinkle Creeping periwinkle Vinca	3" x 1'	Fine-textured, very shiny, green leaves. Blue flowers in April. One of the best edgings or ground covers for sunny to half shaded areas. Not a good cut flower. Highly recommended. Normally evergreen (holds its leaves throughout the winter).
key	name	height and spread	description

**perennial
flowers**

early summer
flowering

30	Althea rosea Hollyhock	5' x 2'	Very coarse, light green foliage. 3- to 4-inch single or double flowers in June and July in all colors but blue. Tall and spikey in appearance. A reliable, old favorite biennial (blooms the second year and then dies) recommended for a border flower in sunny areas. A fair cut flower.
31	Anchusa azurea Italian bugloss	3' x 1.5'	Coarse, green foliage. Blue flowers in June. Used as a border flower in sunny areas. A good cut flower.
32	Artemisia alba Silverking sagebrush	3' x 1.5'	Fine-textured, silver-colored foliage. Silvery flowers in June. A good border flower for sunny areas. A good cut flower.
33	Baptisia australis Blue wilandigo	4' x 3'	Medium-textured, sea green foliage. Blue flowers in June. A good border flower for sunny areas. A fair cut flower.
34	Campanula garganica Gargano harebell	6" x 1'	Medium-textured, green foliage. Pale blue flowers in May. Not reliably hardy in Zone 4. An excellent rock garden or edging flower for sunny areas. Not a good cut flower.
35	Campanula medium Canterbury bells	3' x 1.5'	Medium-textured, green foliage. A popular old favorite biennial with blue, pink, and white blooms in June. Good in sunny borders. Only a fair cut flower. Grows best in northeast Iowa.
36	Chrysanthemum coccineum Florist's pyrethrum	3' x 1.5'	Fine-textured, green foliage. White and pink flowers in June and July. A good border flower for sunny areas. Very reliable and recommended. An excellent cut flower.
37	Chrysanthemum maximum Shasta daisy Pyrenees daisy	2' x 1.5'	Medium-textured, green foliage. Large, single, white flowers from May through August. Many varieties available. A good border flower for sunny areas. An excellent cut flower.
38	Clematis recta Ground clematis	3' x 2'	Medium-textured, green foliage. White flowers in June and July. A good border flower for sunny areas. A good cut flower.
39	Delphinium x (in varieties) Larkspur Delphinium	6' x 2'	Coarse, green foliage. Tall spikes of blue or white flowers in June and July. A good tall border flower for sunny or half shady areas. A fair cut flower.
40	Delphinium grandiflorum chinense Slender Siberian larkspur	3' x 2'	Fine-textured, green foliage. Spikes of blue or white flowers in June. An excellent, reliable border flower for sunny areas. An excellent cut flower.
41	Dianthus barbatus Sweet william	15" x 1'	Medium-textured, green foliage. Very fragrant blooms in white, pinks, and reds in June. A popular biennial for sunny borders. Only a fair cut flower.
42	Dianthus deltoides Maiden pink	8" x 1'	Fine-textured, gray-green foliage. Flowers are fringed and fragrant, and are white and shades of pink in June and July. A good edging flower for sunny areas. A good cut flower.
43	Dicentra eximia Fringed bleedingheart Wild bleedingheart	10" x 1'	Fine-textured, fringed, green foliage. Nodding, pink flowers bloom almost continuously from June through September. A good edging flower for shady areas. A fair cut flower.
44	Dictamnus albus Gasplant dittany Gasplant	2.5' x 3'	Medium-textured, dark green, glossy foliage. Fragrant white and pink flowers in June. A good border flower for either sunny or half shady areas. The strong smelling foliage emits a volatile, flammable oil that can be ignited with a "puff" of flame by holding a lighted match close to the plant on hot, humid evenings. An interesting oddity.
45	Digitalis x (in varieties) Foxglove	3' x 1'	Coarse, light green foliage. Many varieties with many colors of flowers, all blooming in June and July. A popular biennial for flower borders in sun and half shade. A good cut flower. Does best in northeast Iowa.



key name

height
and
spread

description

46	Echinops ritro Small globe thistle	3' x 1.5'	Medium-textured, silvery blue, spikey foliage. Silvery blue flowers in July. A good border flower for sunny areas. A good cut flower.
47	Filipendula hexapetala Dropwort	1'-2' x 1'	Fine-textured, glossy, green foliage. White flowers in June. A good edging flower for sunny areas. A good cut flower.
48	Gaillardia aristata Gaillardia	2' x 1.5'	Medium-textured, light green foliage. Very reliable. Large single flowers in yellows, reds, and oranges from June through October. A good border flower for sunny areas. An excellent cut flower.
49	Geranium grandiflorum Lilac geranium	1.5' x 1'	Coarse, green foliage. Deep lilac, single flowers with dark blue veins in June. A good native border flower for shady areas. Only a fair cut flower.
50	Geum quellyon (in varieties) Avens	2' x 1'	Medium-textured, green foliage. Orange-red flowers in June. A good edging flower for sunny areas. Does best in northeast Iowa.
51	Hemerocallis x (in varieties) Daylily	4' x 1.5'	Sword-shaped, medium-textured, light green foliage. Many colors of flowers are available, mostly in yellows, reds, and oranges. Blooms in June and July. Individual flowers last only 1 day, closing and fading at night. A good border flower for sunny areas. Very reliable. A good cut flower.
52	Hesperis matronalis Dame's rocket Sweet rocket	3' x 1'	Medium-textured, green foliage. Fragrant purple or white flowers in June and July. A good border flower for sun or half shade. Spreads vigorously and needs to be confined. A good cut flower.
53	Heuchera sanguinea (in varieties) Coralbells	2' x 1'	Medium-textured, glossy green foliage. Small, drooping, white, red, and pink flowers in spikes from June through August. An excellent edging for sun or half shade. A good cut flower.
54	Iris kaempferi Japanese iris	3' x 1'	Sword-shaped, medium-textured, green foliage. Many colors of bearded iris flowers are available. Blooms in July. An excellent border flower for moist, sunny areas. Often planted in bogs and next to goldfish ponds.
55	Iris siberica Siberian iris	3' x 1'	Narrow, sword-shaped, fine-textured, green foliage. Lilac-blue to white flowers in May and June. Very reliable and recommended for a border flower in sunny areas. A good cut flower.
56	Linum perenne Perennial flax	1.5' x 1'	Very fine-textured, blue-green foliage. Clear blue, single flowers covering the plant in June and July. An excellent border flower for sun or half shade. Not a good cut flower.
57	Lupinus polphyllus Washington lupine	3' x 3'	Medium-textured, green foliage. Blue, pink, or white flowers in spikes in June. A good border flower for sunny areas. Only a fair cut flower.
58	Lythrum salicaria roseum Rose loosestrife	3' x 1'	Fine-textured, green foliage. Rose-colored flowers in July and August. A good border flower for moist, sunny areas. A good cut flower.
59	Nepeta mussini Mussin's catnip Persian catmint	1' x 1'	Medium-textured, gray-green, rather glossy foliage. Covered with many very small blue flowers from June through October. An excellent edging flower for sunny areas. Also very good for use in retaining walls and for rock gardens. Not a good cut flower.
60	Platycodon grandiflorum Balloonflower	3' x 1.5'	Medium-textured, green foliage. Blue or white flowers from June through August. Very reliable and recommended for flower borders in sun and half shade. Only a fair cut flower.
key	name	height and spread	description



61	Scabiosa caucasica Scabiosa Pincushion flower	1.5' x 1'	Medium-textured, green foliage. White and blue flowers from June through September. A good border flower for sunny areas. A good cut flower.
62	Sedum x (in varieties) Sedum varieties	6" x 1'	Foliage generally light green. Textures vary from very fine to quite coarse, depending upon the variety. Flowers of many different colors from May through August. The various varieties are good for ground covers, for edgings, for border flowers, and for use in retaining wall plantings in sunny areas. None are good cut flowers. Height and spread varies greatly according to variety.
63	Tradescantia x (in varieties) Spiderwort	1'-3' x 1.5'	Medium-textured, green foliage. The various varieties of spiderwort have white, pink, or blue 3-petaled flowers that individually last only 1 day. Plants are in continuous bloom from May through August. Good border flowers for sunny to half shady areas. Not good cut flowers.
64	Valeriana officinalis Heliotrope Valerian Garden heliotrope	2' x 1.5'	Medium-textured, green foliage. Varieties vary greatly in height. Some are only 2-feet tall, others reach 5 feet in height. Flowers are always very fragrant. Blooms in June with flower colors varying from white through pinks to a deep purplish blue. A good border flower for sunny areas. Often grown only for the fragrant flowers. A good cut flower.
65	Viola comuta (in varieties) Horned violet	6" x 8"	Medium-textured, green, heart-shaped foliage. Blooms continuously from May through October with fragrant flowers. Flower colors vary according to variety, most often white, blue, violet, purple, or yellow. A good edging flower for sun or half shade. A good cut flower.
66	Yucca filamentosa Yucca Adam's needle	6' x 3'	Sword-shaped, coarse-textured, evergreen foliage. The distinctive, spikey plants are from 2- to 3-feet tall, but the spikes of fragrant, creamy white flowers in June and July are up to 6-feet tall. Sharp, stout thorns on the end of the leaves. An excellent accent or entrance plant for sunny areas. Tolerates dryness. Not a good cut flower.

key

name

height
and
spread

description

**perennial
flowers**

late summer
flowering

70	Achillea ptarmica Yarrow Sneezewort	2' x 1'-2'	Fine-textured, ferny, green foliage. Blooms from June through August with unusually white flowers in flat corymbs. Several yarrows are commonly grown. It is difficult to tell them apart. Some have bright yellow flowers. All make good border flowers for sunny areas. Good cut flowers. The dried flower heads and dried seed heads keep for years.
71	Anthemis tinctoria Golden camomile	1.5' x 1.5'	Fine-textured, green foliage. Bright yellow flowers from July through September. A good border flower for sunny areas. An excellent cut flower.
72	Asclepias tuberosa Butterfly weed Butterfly milkweed	2' x 1.5'	Medium-textured, green foliage. This native milkweed has bright orange flowers in July and August. Does not spread like the common European milkweed, which is a pest. Very attractive to butterflies. A good border flower for sunny areas. Only a fair cut flower.
73	Belamcanda chinensis Blackberry lily	3' x 1'	Iris-like, green foliage. Bright orange lily-like flowers with red dots in July and August. The shiny seed clusters resemble blackberries. Thrives in sandy soils in full sun. Not a good cut flower.
74	Buddleia x (in varieties) Butterfly bush	6' x 4'	Coarse-textured, green foliage. Flowers vary in color, but are mostly purple. A woody shrub good for backgrounds. Blooms in August and September. Not a good cut flower. Not reliably hardy in Zone 4.
75	Campanula carpatica Carpathian bellflower	6' x 1'	Medium-textured, green foliage. White and blue flowers in July and August. A good edging flower for sunny areas. Not a good cut flower. Not reliably hardy in Zone 4.
76	Campanula persicifolia Willow bellflower Peach bells	3' x 1'	Fine-textured, green foliage. White and blue bell-shaped blooms in July and August. Foliage resembles willow or peach leaves. Very reliable and recommended for a border flower in sunny areas. Many cultivars with both single and double, bell-shaped flowers.
77	Centaurea montana Mountain bluet	2' x 1.5'	Medium-textured, cobwebby, green foliage. Large white or blue, single flowers from July through September. A good border flower for sunny areas. A good cut flower.
78	Cimicifuga racemosa Bugbane Black cohosh Black snakeroot	3'-8' x 3'	Coarse-textured, semi-glossy, green foliage. This native wildflower is quite large and should be used as a background in either sunny or shady areas. Tall spikes of white flowers in July and August. Not a good cut flower.
79	Coreopsis lanceolata Coreopsis Tickseed	2' x 1.5'	Medium-textured, green foliage. Large-flowered cultivars often called grandiflora. Large, single, yellow flowers from June through August. Good border flower for sunny areas. An excellent cut flower. Reliable and recommended, but not reliably hardy in Zone 4.
80	Echinacea purpurea Purple coneflower	3' x 1.5'	Coarse, green foliage. The native plants have rose-purple, cone-shaped flowers from July through September. Several larger-flowered cultivars are available, with deeper purple and white flowers. A fair cut flower.
81	Eryngium planum Seaholly	2' x 1.5'	Glossy, coarse, green foliage. Steel blue flowers in July and August. Does well in sandy soils. Good for borders and rock gardens in sunny areas. A good cut flower.
82	Eupatorium x (in varieties) Boneset Joe-pye weed	3' x 1.5'	Medium-textured, green foliage. Blue or white flowers from August through September. Good border flowers for sunny areas. Good cut flowers. Many cultivars available. Some are native, others are originally tropical, but are hardy here.

height
and
spread

description

key

name



83	Gypsophila paniculata Baby's breath	2.5' x 3'	Very fine-textured, green foliage. Several cultivars are available. Most have single or double, white flowers covering the plant. Good for flower borders in sunny areas. An excellent cut flower. Often used for flower arrangements.
84	Heliopsis helianthoides 'pitcheriana' Pitcher heliopsis	3' x 3'	Medium-textured, green foliage. Deep yellow flowers in July and August. A good border flower for sunny areas. A good cut flower.
85	Hosta x (in varieties) (Funkia) Plantain lily	2' x 2'	Glossy, broadly sword-shaped, coarse-textured foliage. Often grown only for the foliage. Foliage varies in color from light green to variegated to purples. White to blue flowers in spikes in July and August. An excellent border flower for shady, moist areas. Some varieties tolerate full sun, others half shade to deep shade. Only a fair cut flower.
86	Lathyrus latifolius Perennial pea	2' x 3'	Medium-textured, gray-green, legume foliage. White or pink fragrant flowers in July and August. A good border flower for either sunny or shady areas. Although the flowers are fragrant, this is not the sweet pea. A fair cut flower.
87	Liatris pycnostachya Kansas gayfeather	4' x 1'	Fine-textured, sword-shaped, green foliage. Spikes of red to purple flowers in August and September. Flowers appear almost fluorescent in their brilliance. An excellent, hardy native border flower for sun or half shade. A good cut flower.
88	Limonium latifolium Sea lavender Statice	2' x 1.5'	Glossy, coarse-textured, green foliage. Pale purple flowers in July and August. A good border flower for sunny areas. A good cut flower.
89	Lychnis x (in varieties) Catchfly Campion	1'-3' x 1'	Medium-textured, green foliage. Flowers may be white, red, orange, or pink, depending upon the variety. Blooms in July and August. A good border flower for sunny areas and rock gardens. A good cut flower.
90	Macleaya cordata Plumepoppy	6' x 3'	Coarse-textured, gray-green foliage. Tall plumes of tiny pink flowers in July and August. A good background flower for sunny areas. Not a good cut flower. Will spread unless confined.
91	Matricaria x (in varieties) Feverfew	2' x 1'	Fine-textured, gray-green foliage. White or yellow flowers from June through October. A good border flower for sunny areas. A good cut flower.
92	Monarda didyma Bee balm Oswego tea	3' x 1'	Medium-textured, green foliage. Flowers are various shades of reds from June through August. A good border flower for sun or shade. A good cut flower.
93	Oenothera missouriensis Evening primrose Ozark sundrops	10" x 1'	Medium-textured, green foliage. Brilliant yellow flowers from June through August that close up at night. An excellent edging, rock garden, or stone wall flower for half shady areas. Not a good cut flower.
94	Penstemon barbatus 'torreyi' Penstemon Beard-tongue Torrey penstemon	6" x 1'	Medium-textured, gray-green foliage in a rosette. Bright red to pink, bearded flowers in 2-foot high spikes in July. A good edging or rock garden flower for sunny areas but does not tolerate dryness. A good cut flower.
95	Phlox paniculata (in varieties) Summer phlox	3' x 1.5'	Medium-textured, green foliage. Large clusters of flowers in all colors but yellow and orange in July, then intermittently until frost. Quite hardy and dependable, but bothered by many diseases and insects. A good border flower for either sun or half shade. A fair cut flower.



key name

height
and
spread

description

96	Phytotegia virginiana Obedience False dragon's head	3' x 1.5'	Medium-textured, green foliage. Pink flowers in August and September. Often grown for its odd habit of "obediently" remaining in any contorted position it might be bent into. A good border flower for sunny areas. Spreads and may need confinement. A good cut flower.
97	Sanguisorba obtusa Burnet Japanese burnet	3' x 2'	Medium-textured, glossy, green foliage. Rose-purple to crimson flowers in spikes in July. A good border flower for sunny areas. A good cut flower.
98	Sidalcea (in varieties) Checkermallow	2' x 1'	Medium-textured, green foliage. White, pink, or lavender flowers from June through September. A good border flower for sunny areas. Only a fair cut flower.
99	Thalictrum (in varieties) Meadowrue	3' x 1.5'	Fine-textured, blue-green foliage. White or blue flowers from June through September. A good border flower for half shade. A good cut flower.
100	Verbascum olympicum Olympic mullein	6' x 3'	Coarse, densely woolly, gray-green leaves in a rosette. The tall flower spikes in July and August are bright yellow. This mullein is from Greece and has larger, brighter flowers than Verbascum thapsis , our native mullein. A good border flower for sunny areas. Not a good cut flower.
101	Veronica (in varieties) Speedwell	3' x 1'	Medium-textured, blue-green foliage. Flowers may be white, rose, purple, or blue from June through August. A good border flower for sunny areas. Quite reliable and hardy. An excellent cut flower.
key	name	height and spread	description

**perennial
flowers**
autumn flowering

110	Anemone japonica (in varieties) Windflower Japanese anemone	2' x 1.5'	Medium-textured, very glossy, gray-green foliage. White or pink flowers from September through November or until the hard freeze-up. An excellent border flower for cool, half shady areas. Does best in northeast Iowa. An excellent cut flower.
111	Aster (in varieties) Fall aster	3'-6' x 2'	Glossy, medium-textured, green foliage. Many varieties, with many different colors of flowers in September and October. Heights vary widely according to variety. Good background flowers for sunny areas. Excellent cut flowers.
112	Boltonia (in varieties) Boltonia	4'-6' x 2'	Medium-textured, green foliage. White or pink flowers in August and September. Boltonias are related to the common asters and closely resemble them. A good background flower for sunny areas. A good cut flower.
113	Chrysanthemum (in varieties) Garden chrysanthemum	2+ ' x 1.5'	Medium-textured, strongly-lobed, somewhat glossy, green foliage. Single and double flowers in almost every color. Very reliable and recommended for border flowers for sunny areas. Excellent cut flowers.
114	Chrysanthemum serotinum Giant daisy	5' x 2'	Medium-textured, somewhat glossy, light green foliage. Large, single, white flowers in August and September. A good background flower for sunny areas. A good cut flower.
115	Helenium autumnale (in varieties) Sneezeweed	5' x 2'	Medium-textured, somewhat glossy, green foliage. Large, single, yellow or red flowers in August and September. A good background flower for sunny areas. An excellent cut flower.
116	Helianthus decapetalus Double thinleaf sunflower	4' x 2'	Medium-textured, green foliage. Large, double, yellow flowers in August and September. A good border flower for sunny areas. A single, yellow-flowered variety also is available. A good cut flower.
117	Physalis alkekengi Ground cherry Strawberry tomato	2' x 3'	Medium-textured, green foliage. Grown for the interesting bright orange fruit that are contained in large dry capsules. A good border plant for sunny areas. This popular oddity has many common names. Will spread vigorously and needs to be confined. The odd, colorful fruit make excellent cut flowers.
118	Physostegia virginiana 'vivid' Obedience	1' x 1'	Medium-textured, green foliage. Bright salmon-pink, bearded flowers in September. This variety of the common obedience plant is a good edging flower for sunny areas. "Obeyes" when placed in odd positions just like the parent species. A good cut flower.
119	Salvia azurea 'grandiflora' Pitcher sage	5' x 2'	Medium-textured, fairly glossy, gray-green foliage. Deep sky blue flowers in August and September. A good, tall, border flower for sunny areas. A good cut flower. Not reliably hardy in Zone 4.
120	Sedum spectabile Showy stonecrop	1.5' x 2'	Fairly glossy, coarse-textured, gray-green foliage. The most common flower color is pink, but varieties are available with flower colors varying from white through deep red. A very reliable and dependable border flower for sunny areas. A good cut flower.



key name

height
and
spread

description

bulb plants
spring flowering
(plant in fall)

125	Crocus (in varieties) Crocus	6" x 4"	Fine-textured, narrow sword-shaped, shiny, dark green foliage that disappears soon after the flowers fall. Virtually every color of single, cup-shaped flowers in April. Good for lawn, border, or mass plantings in sunny and half shady areas. Only a fair cut flower.
126	Fritillaria meleagris Checked fritillary	1' x 4"	Fine-textured, green foliage. White to purplish flowers with a distinctive checkered appearance from April through June. A good border flower for shady areas. Only a fair cut flower.
127	Galanthus nivalis Snowdrop	6" x 4"	Fine-textured, green foliage that disappears soon after the flowers fall. Only 2 narrow leaves per plant. Nodding white flowers in April. A good lawn, border, or mass planting flower for sunny or half shady areas. Only a fair cut flower.
128	Hyacinthus (in varieties) Hyacinth	1' x 6"	Coarse-textured, rich dark green, glossy foliage that disappears soon after the flowers fall. Large clusters of very fragrant flowers in almost all colors in April and May. A good border flower for sunny areas. A good cut flower.
129	Muscari (in varieties) Grape hyacinth	6" x 4"	Fine-textured, narrow sword-shaped, green foliage in rosettes. The fragrant flowers in April and May resemble tiny clusters of bright blue grapes. Several species are available, with variations in flower color and shape. A good border flower for sunny or half shady areas. A good cut flower.
130	Narcissus (in varieties) Daffodil	1' x 6"	Coarse, glossy green, sword-shaped foliage that dies soon after the flowers fade. This genus has a very large group of species and hybrids, varying from the King Alfred daffodil to the tiny, white-flowered narcissus. Most have very fragrant flowers and may bloom any time from early April to late May. Good for borders or for naturalizing in sunny to half shady areas. Excellent cut flowers. Reliable and recommended.
131	Ornithoglaum umbellatum Star-of-Bethlehem	6" x 6"	Fine-textured, sword-shaped, glossy green foliage with a broad, white mid-rib. Nodding green and white flowers in May and June. A good flower for borders or for naturalizing in sunny areas.
132	Scilla hispanica Spanish squill Spanish bluebell	6" x 4"	This is a common but incorrect name for Endumion hispanicus , a related species. Fine-textured, glossy green foliage that dies soon after the flowers fade. The flowers in May can be white, pink, or blue, depending upon the variety. A good border flower for sunny or half shady areas. A good cut flower.
133	Scilla siberica Siberian squill Blue squill	6" x 4"	Fine-textured, sword-shaped, glossy green foliage that dies soon after the flowers fade. The nodding flowers in April are a vivid, deep blue. A good flower for borders or for naturalizing under shrubs. Thrives in sun or half shade. Reliable and recommended. A good cut flower.
134	Tulipa (in varieties) Tulip	1' x 4"	Broadly sword-shaped, coarse-textured, green foliage that dies soon after the flowers fade. An almost infinite variety of sizes and colors of cup-shaped flowers in April and May. A good border flower for sunny areas. A good cut flower.



key

name

height
and
spread

description

bulb plants

summer and fall
flowering (not winter
hardy; plant in
spring)

summer and fall
flowering (winter
hardy; plant in
spring or fall)



140	Begonia (tuberous hybrids) Tuberous begonias	1' x 1.5'	Coarse, glossy green foliage. Blooms profusely and continuously with all colors but blues until frost. Good for decorative pots and for border flowers in moist, shady areas. Fair cut flowers.
141	Canna x (in varieties) Canna	3+ ' x 1.5'	Very coarse-textured, broadly sword-shaped, green to bronze-green foliage. Tall spikes of red to yellow flowers until frost. A good background or dramatic feature flower for sunny areas. A fair cut flower.
142	Colchicum autumnale Autumn crocus	4" x 4"	Coarse-textured, strap-shaped, green foliage in spring that soon dies. The purple flowers appear from the bare ground in August or September. All parts of this plant are extremely poisonous if eaten! An interesting novelty for sun or half shade. Only a fair cut flower.
143	Dahlia x (in varieties) Dahlia	2'-6' x 2'	Coarse-textured, rather glossy, deep green foliage. Dahlias are available in plant heights from a few inches to 6-feet high and with single or double flowers ranging from an inch in diameter to almost a foot in diameter and in every conceivable color. Good border flowers for sunny areas. Good cut flowers.
144	Gladiolus x (in varieties) Gladiolus	2'-4' x 1'	Coarse, green, sword-shaped foliage. Plants and flowers vary greatly in size according to variety. Flowers in tall spikes from July through October, the time of bloom depending upon variety. Flowers of all colors. Good border flowers for sunny areas. Excellent cut flowers.
145	Lilium auratum (in varieties) Goldband lily	4'-8' x 1'	Medium-textured, fairly glossy deep green foliage. Fragrant lily flowers in various colors according to variety. Heights also vary greatly according to variety. Good border flowers for half shady areas. All lilies grow and bloom best when left undisturbed for many years. Reliable and recommended. Excellent cut flowers.
146	Lilium candidum (in varieties) Madonna lily	3'-6' x 1'	Medium-textured, green foliage. Waxy white, fragrant lily flowers in June and July. Heights of plants and number of flowers (from 5 to 20 or more) vary according to variety. Good border flowers for sunny areas. Excellent cut flowers.
147	Lilium henryi Henry lily	8' x 1'	Medium-textured, green foliage. Soft orange lily flowers in August and September. A very tall lily that is a good background flower for half shady areas. An excellent cut flower.
148	Lilium leucanthum Chinese white lily	4' x 2'	Fine-textured, glossy, green foliage. Fragrant, white flowers in July. A good border flower for half shady areas. An excellent cut flower.
148A	Lilium leucanthum 'chloraster' Greenstripe lily	3' x 2'	Fine-textured, glossy green foliage. Fragrant, white flowers in July with a bright green stripe down each rib. A good border flower for half shady areas. An excellent cut flower.
149	Lilium x maculatum (in varieties) Thunberg lilies	1'-2' x 1'	Incorrectly called Lilium elegans , this is a large group of hybrid lilies with fairly glossy, coarse-textured, green foliage. Heights vary according to variety. Fragrant flowers in June and July vary in color according to variety but are often deep reds to oranges to lemon yellows. Good border flowers for sunny areas. Highly recommended. Excellent cut flowers.

key name

height
and
spread

description

150	Lilium pumilum Coral lily	1.5' x 1'	Fine-textured, green foliage. Fragrant, waxy, coral-red flowers in June and July. Sometimes named Lilium tenuifolium , which is incorrect. A golden yellow, flowered variety is occasionally available. A good border flower for sunny areas. Reliable and recommended. A good cut flower.
151	Lilium regale Regal lily	6' x 1'	Fairly glossy, medium-textured, green foliage. The fragrant lily flowers in June are lilac or purple outside with white insides and a yellow base. A pure white flowered form is often available. A good border flower for sunny areas. Reliable and recommended. A good cut flower.
152	Lilium speciosum (in varieties) Speciosum lilies	2'-4' x 1'	Medium-textured, green foliage. Heights vary according to variety. Fragrant flowers in many colors, blooming in August and September according to the variety. A good border flower for half shady areas. Reliable and recommended. A good cut flower.
153	Lilium tigrinum Tiger lily	2'-5' x 1'	Sometimes named Lilium lancifolium . Medium-textured, green foliage. Many varieties and hybrids are available; the height depends upon the variety. Most varieties have bright orange to red, black dotted, flat lily flowers from July to September. Time of bloom depends upon individual variety. Yellow-flowered and double-flowered forms are available. A good border flower for sunny or half shady areas. A good cut flower.
154	Lilium x hybrids (in varieties) Mid-century hybrid lilies	2'-4' x 1'	Medium-textured, green foliage. This is a group of lily hybrids with mostly yellow, red, and orange flowers in June and July. They are very reliable border flowers for sunny or half shady areas. Good cut flowers.
155	Lycoris squamigera Resurrection lily Autumn lycoris	1' x 1.5'	The coarse-textured, green, strap-like foliage dies back to the ground in early summer. In August a 1 foot high spike of fragrant, rosy pink lily flowers appears from the bare ground. Most often planted as a novelty in sunny and half shady areas. A fair cut flower.
key	name	height and spread	description

**annual
flowers**

160	Ageratum houstonianum Ageratum Mexican ageratum	1' x 1'	Several varieties occasionally available. The most commonly found form has medium blue, fuzzy flowers in flat clusters until frost and is a good bedding or edging flower. Some varieties have white, lilac, or purple flowers. Reliable and recommended. A good cut flower.
161	Antirrhinum majus (in varieties) Snapdragon	1'-3' x 1'	Many colors of snapdragon flowers in spikes. Height and color of flower spikes varies according to variety. Very reliable and recommended for beds and borders in either sunny or half shady areas. An excellent cut flower.
162	Callistephus chinensis China aster	2' x 1'	Various colors of single, daisy-like flowers until frost. A good border flower for sunny or half shady areas. A good cut flower.
163	Centaurea cyanus Bachelor's button Cornflower	2' x 1'	Very fine-textured, green to grayish green foliage. Flowers are most commonly a clear, sky blue, but colors from white to dark blue to pink and lilac are also available. Very reliable. A good border flower for sun or semi-shade. A good cut flower.
164	Cleome Hasslerana Spider plant Cleome	3'-6' x 1'	An interesting group of tall annual flowers with white to pink flowers all along the upper third of the tall stems. A good border flower for sun or shade. A good cut flower.
165	Coreopsis (in varieties) Annual coreopsis	2' x 1'	Fine-textured, green foliage. Sometimes called calliopsis. Single, daisy-like, yellow, red, or brown flowers until frost. A good border flower for sunny areas. A good cut flower.
166	Cosmos (in varieties) Cosmos	3' x 1'	Extremely fine-textured, open, lacy, green foliage. Large, single, daisy-like flowers in rose, pink, purple, blue, and sometimes yellow. A good border flower for sunny areas. A good cut flower.
167	Delphinium (in varieties) Annual larkspur	3' x 1'	Fine-textured, green foliage. White, pink, or blue flowers in spikes in June. A good border flower for sunny areas. Reliable and recommended. A good cut flower.
168	Dianthus chinensis China pink	1' x 1'	Fine-textured, rather grayish green foliage. Fragrant, single flowers in June in shades of red. A good edging flower for sunny areas. A good cut flower.
169	Eschscholtzia californica California poppy	6" x 8"	Very fine-textured, gray-green foliage. Bright yellow poppy flowers until frost. A good edging flower for sunny areas. A good cut flower.
170	Gaillardia (in varieties) Blanket flower Annual gaillardia	1.5' x 1'	Daisy-like red to yellow flowers until frost. Flowers often have a "ringed" appearance, with the center and outer edge one color and the rest of the flower another color. Very reliable and recommended. A good border flower or mass planting in sunny areas. An excellent cut flower.
171	Gypsophila elegans Baby's-breath Annual baby's breath	1.5' x 1'	Very fine-textured, green foliage. White, daisy-like, single, white flowers with blue veins. Blooms into September. A good border flower for sunny areas. An excellent cut flower.
172	Helichrysum bracteatum Strawflower Everlasting	2' x 1'	Semi-double and double daisy-like flowers in mostly red, yellow, and orange colors in August and September. An excellent cut flower. If the flowers are cut and then hung upside down in the shade, they dry without losing either their shapes or colors and last practically forever. Also a good border flower for sunny areas.
173	Heliotropium (in varieties) Heliotrope	1.5' x 1'	Very coarse, dusty green foliage. Purple to blue to sometimes white flowers until frost. Most often grown because the flowers are intensely fragrant and perfume the entire garden. A good border flower for sunny areas. Only a fair cut flower.



key name

height
and
spread

description

174	Iberis affinis Candytuft	1.5' x 1'	White to reds and sometimes purple flowers until September. Some varieties have fragrant flowers. A good edging flower for sunny areas. Only a fair cut flower.
175	Lantana Lantana Shrub verbena	1' x 1.5'	A group of horticultural varieties of a species. Most often used for windowbox flowers, the flowers are oranges, whites, yellows, and purples and bloom from July until frost. Flowers often change color from the day they open until they finally fade and die. A good windowbox or edging flower for sunny areas. Only a fair cut flower.
176	Lochnera rosea Rose periwinkle Madagascar periwinkle	2' x 1.5'	Medium-textured, shiny, green foliage. Flowers from whites through magentas until frost. This plant is properly named Cantharansus roseus . A good border flower for sunny areas. A fair cut flower.
177	Lobelia erinus (in varieties) Edging lobelia	6" x 6"	Flowers in whites through purples and blues until frost. A good edging plant for sunny or shady areas. Not a cut flower.
178	Lobularia maritima Sweet alyssum	6" x 1'	Flowers are fragrant and vary in color from white through lavenders and bloom until frost. A good edging flower for sunny areas. Reliable and recommended. Only a fair cut flower.
179	Nicotiana (in varieties) Flowering tobacco	3'-5' x 2'	Coarse-textured, broad, tobacco-leaved, green foliage. Height varies according to variety. The flowers are shades of white to reds, and are intensely and sweetly fragrant. The fragrance is particularly intense at night. Very reliable and recommended. A good border flower for sunny or shady areas. Only a fair cut flower.
180	Papaver rhoeas (in varieties) Shirley poppy	1.5' x 1'	Single poppy flowers in whites to reds in July and August. A good border flower for sunny areas. A good cut flower.
181	Petunia hybrida (in varieties) Petunia	1' x 1'	Petunias come in virtually any imaginable color, with either single or double flowers. Flowers are very fragrant, and the plants bloom profusely until frost. Very reliable and highly recommended. A good cut flower.
182	Phlox Drummondii Annual phlox	6"-18" x 9"	Flowers in dense clusters until frost. Flower colors vary from whites through reds, purples, and blues. A good border flower in sunny areas. A good cut flower.
183	Portulaca grandiflora (in varieties) Portulaca Moss rose	6" x 1'	Rose-like flowers in almost any color until frost. Flowers open in full sun and close up tight at night and when the weather is cloudy. A very good edging flower for sunny, dry areas. Reliable and highly recommended. No good at all as a cut flower.
184	Salvia farinacea Mealy cup Mealy cup salvia	3' x 1.5'	Medium-textured, gray-green foliage. Blue flowers in July and August. A good border flower for sunny areas. A good cut flower.
185	Salvia splendens Scarlet sage	2' x 2'	Medium-textured, very dark green foliage. The most common flower color is bright scarlet. However, some varieties have flowers of white, purple, or blue. A good border flower for sunny areas. Blooms from July through September. A good cut flower.
186	Scabiosa atropurpurea Sweet scabious Pincushion flower	2' x 1'	Flowers from white through rose to dark purple, blooming until September. A good border flower for sunny areas. An excellent cut flower.

key name

height
and
spread

description

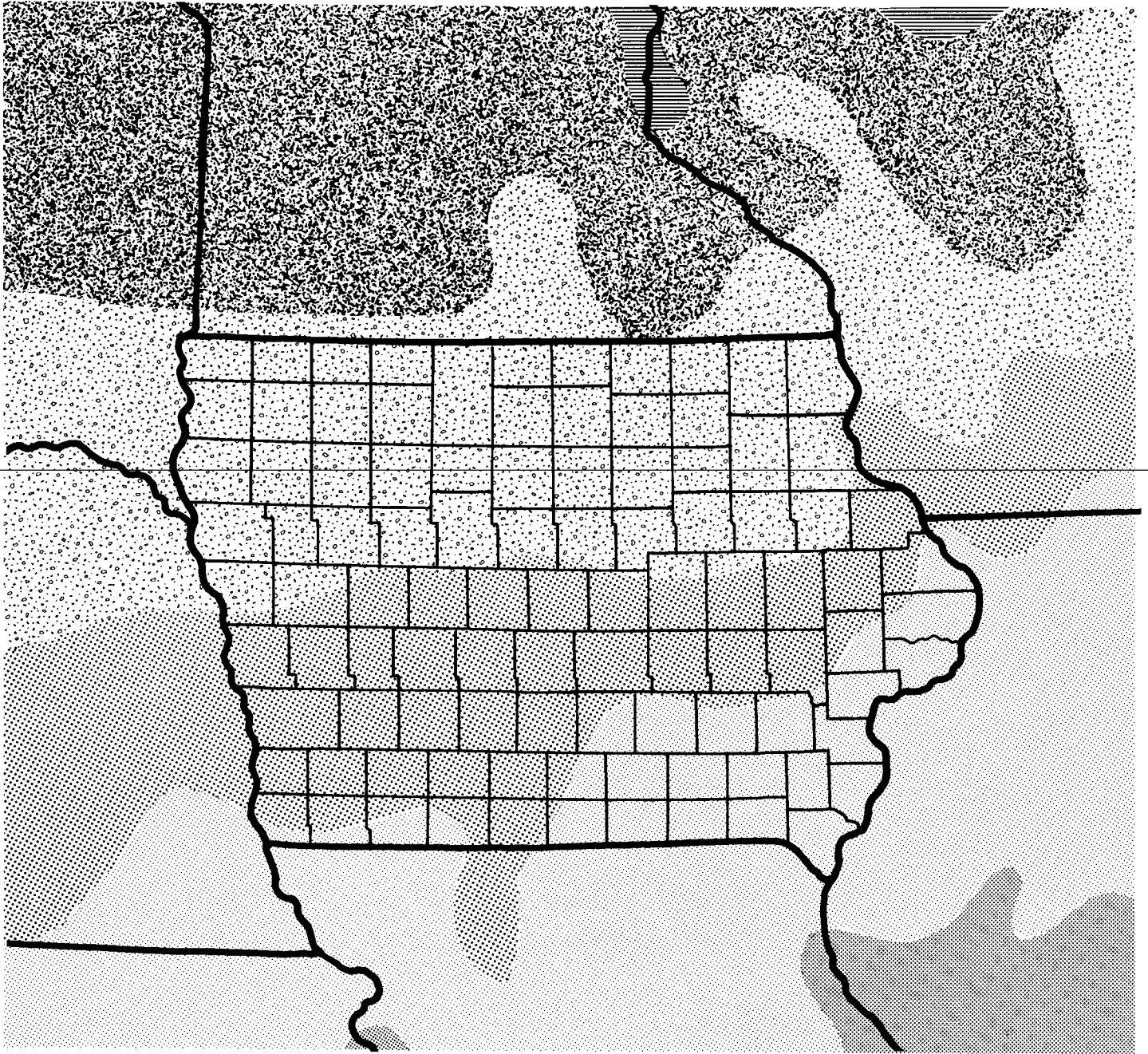


187	Tagetes erecta (in varieties) African marigold Aztec marigold	4' x 1'	Very large, solitary, yellow and orange flowers until frost. A good border flower for sunny areas. Very reliable and recommended. An excellent cut flower.
188	Tagetes patula (in varieties) French marigold	1' x 1'	Solitary flowers from yellow through maroon and sometimes parti-colored and blooming until frost. A good edging flower for sunny areas. Very reliable and recommended. An excellent cut flower.
189	Tropaeolum majus (in varieties) Nasturtium	1' x 1'	Glossy, coarse-textured foliage. The leaves are gently ruffled and round and are peppery flavored and edible. The flowers are fragrant, in reds and yellows and bloom until frost. An excellent edging or bedding flower for sunny areas. Nasturtiums grow and bloom especially well in very poor, dry soils. Very reliable and recommended. An excellent cut flower.
190	Verbena x hybrida Garden verbena	1' x 1'	Flowers may be pink, white, red, yellow, blue, purple, or even variegated, depending upon variety. Bloom until frost. A good edging flower for sunny areas. A good cut flower.
191	Viola tricolor Johnny jump-up	6" x 6"	Miniature, blue and white pansy flowers until September. Self sows and will come up every year. A good edging flower for shady or sunny moist areas. Very reliable and recommended. An excellent cut flower.
191A	Viola x wittrockiana Garden pansy	1' x 1'	Large, fragrant, pansy flowers in many colors until frost or until weather turns hot and dry. Flowers must be picked regularly or plants soon stop blooming. An excellent edging flower for cool, shady, moist areas. Very reliable and recommended. An excellent cut flower.
192	Zinnia (in varieties) Zinnia	6"-3' x 1'	Coarse-textured, green foliage. Zinnias vary widely in height and flower size according to variety. Flowers are single or double, and come in almost all colors. Highly reliable and recommended. Excellent cut flowers.

key name

height
and
spread

description



temperature

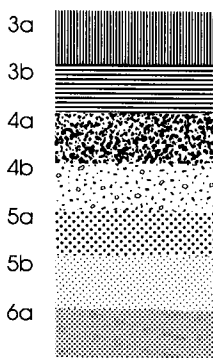
-40° to -30°

-30° to -20°

-20° to -10°

-10° to 0°

zone



Average annual minimum temperatures

Barcode Inside