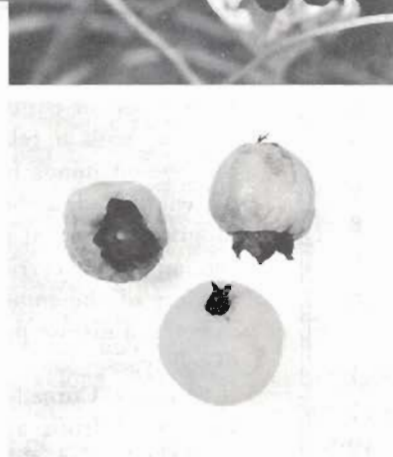
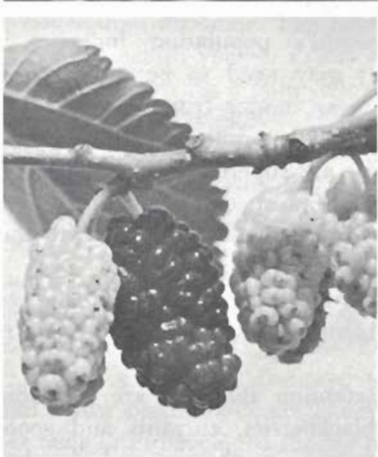
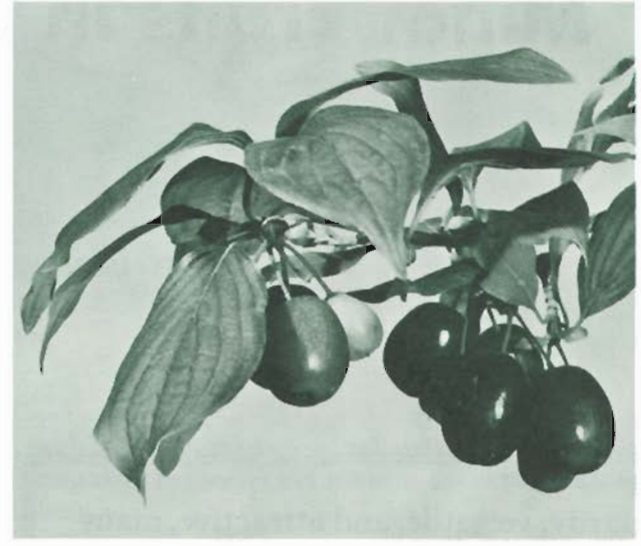


Minor Fruits in New York State

Donald K. Ourecky

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BY DONALD K. OURECKY

Hardy, versatile, and attractive, many minor fruits offer a new dimension in gardening and may assume increasing importance as a relatively untapped source of food.

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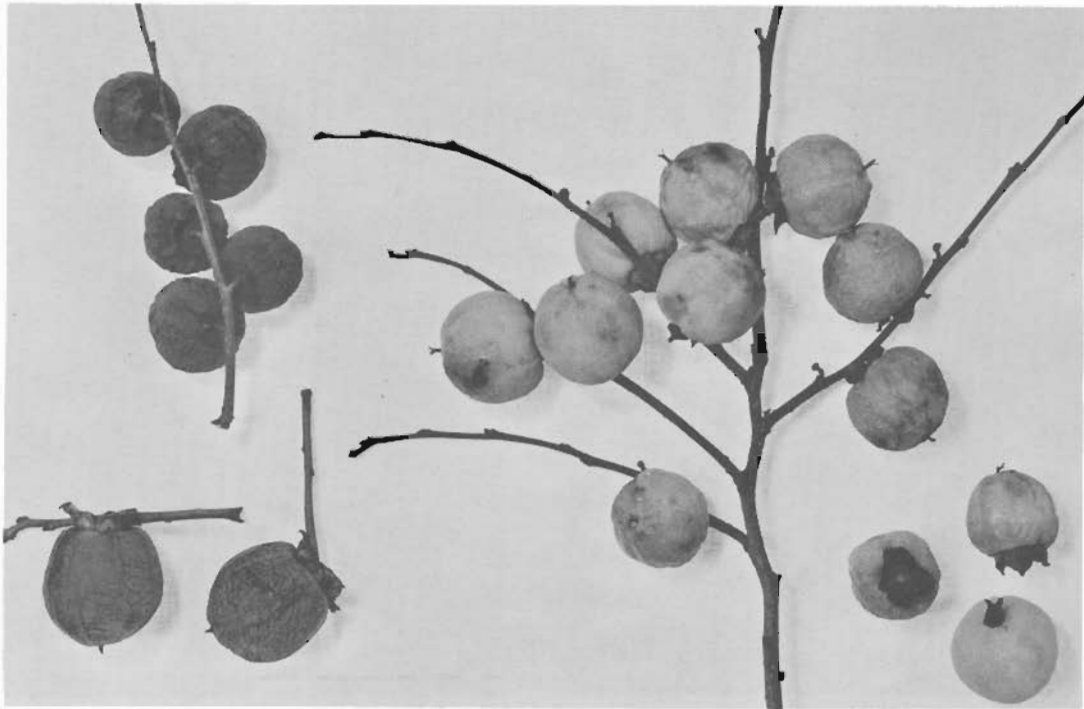
Minor fruits are plants which produce edible fruits of no real commercial value. They may be eaten fresh, preserved, made into jams and jellies or used for culinary purposes.

Many of the minor fruits are indigenous to specific areas such as the Beach plum (*Prunus maritima*) which may be found growing along the sandy beaches of the Northeast, the Buffalo berry (*Shepherdia argentea*) of the Great Plains and the Papaw (*Asimina triloba*) of Eastern U.S. Most of the fruits discussed in this bulletin have been grown successfully at the New York State Agricultural Experiment Station in Geneva, New York. Many of these fruits have been neglected as a source of food and ornament. As the world's population increases, new sources of food plants may need to be explored. With an increase in leisure time, minor fruits can provide the amateur with a relaxing but profitable hobby. Many of the present minor fruits are superior clones selected from the wild. To date there are no specific minor fruit breeding programs aimed at producing better varieties with the exception of elderberries.

Most of the minor fruits are relatively free of serious insect and disease problems and will grow on a wide range of soil types.

Separate Cornell Extension Bulletins are available on such small fruits as blackberries, currants and gooseberries, blueberries, elderberries, raspberries and strawberries.

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Persimmon

PERSIMMON

(*Diospyros virginiana*)

There are over 150 species in the genus *Diospyros*. Most of the species are tropical with a few which extend into the temperate zone and are fairly hardy. Persimmons are attractive trees which may grow to a height of 20-30 feet making a narrow, round top tree with pendulous branches. Most trees are either male or female, consequently several trees may be needed to insure pollination. In a seedling population one-half of the seedlings will be male and consequently will not produce fruit. Only rarely are trees dioecious or are the flowers perfect, the female flowers being larger than the male. The flowers are inconspicuous, urn-shaped, greenish yellow. Fruits vary in size from $\frac{3}{4}$ -2 inches in diameter with a pale yellow to deep orange color and may often have a reddish cheek. Persimmon fruits are extremely astringent when unripe. When fully ripe they are soft, nearly free of astringency, and have a mild characteristic flavor. Frost is not necessary for fruit ripening and will ruin immature fruits. Some clones never lose their astringency. In Northern areas the season is not long enough to ripen many of the late varieties, so only the earliest varieties should be grown. Fruits are highly ornamental as they hang on the tree for a long time after leaf-fall. Most persimmons are eaten fresh, however many recipes have been developed for the use of persimmon pulp in puddings, custards, cakes and sherberts. The seeds are large and vary in number with a few clones appearing

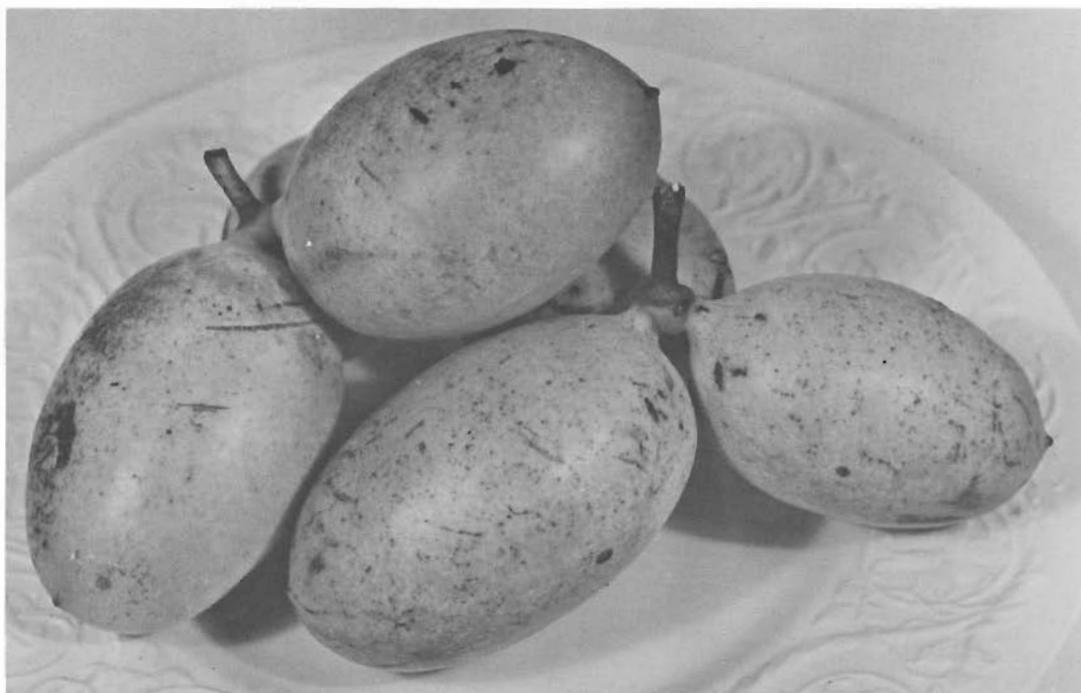
seedless, due to the lack of pollination. Some varieties develop dark bruises on the fruits or the entire fruits appear bluish.

The persimmon is native to southeastern New York, Connecticut and Long Island, extending south to Florida and westward to Kansas and Texas.

The Japanese persimmon *D. kaki*, has been cultivated for years in the Orient. This species is also grown in southern Europe and the U.S. Most clones are not winter hardy north of the 40th parallel nor is the season long enough to mature fruit. It bears larger fruit of excellent quality. Its hard, close grained wood is used for carving and furniture in the Orient.

Persimmons may be propagated by seed but all seedlings will vary, or by cuttings, layers, budding or topworking. Persimmons are difficult to transplant. After a scaffold is formed several varieties may be grafted on one tree. The trees are self-pruning, requiring little maintenance. Various mulches may be used in combination with a light nitrogen application. Persimmons are relatively free of insects and diseases.

The characteristics of a good variety or clone include productivity, winter hardiness, early ripening with a firm flesh, tough skin, few seeds, and high flavor and low astringency. Some varieties overbear thus delaying maturity and reducing quality. Garretson is one of the best varieties for Northern areas. It ripens in early October and is light orange in color with a reddish blush and heavy bloom. The fruits are $1\frac{1}{2}$ inches in diameter with a tender



Popaw

skin and soft flesh. John Rick produces a larger more attractive fruit. In some areas Urbana and Killen are good varieties. Early Golden is good but not as productive as others. Hicks and Juhl are good but not superior to Garretson. Other varieties offered by the trade include Lena, Maurice Burton, Golden Supreme, Creegs, Florence, and Mood Indigo.

PAPAW

(*Asimina triloba*)

The papaw is a native American fruit found growing throughout the eastern half of the U.S. with northern limits extending westward from New Jersey into western New York, Ontario and Michigan, southward through the southern states and westward to Kansas and northern Texas.

Papaws are small, ornamental trees frequently grown because of their large showy leaves. Trees may grow to a height of 20-30 feet or suckers can form, producing a thicket. The flowers are inconspicuous, maroon in color, about 1½ inches across and appear in late May before the leaves expand. The fruits are borne in clusters of 1-6 depending upon pollination. Fruits ripen in Geneva from mid-September up until frost. Some seedlings may fail to ripen before frost. The fruits are 4-6 inches long, glaucous with a thin green skin which turns yellowish black when ripe, resembling an over-ripe banana. The flesh is rich and sweet with a custard consistency, very distinct flavor and numerous dark brown seeds about the size of a lima bean. The fruits are high in food value with over 430 calories per pound.

Papaws do well on fertile, well drained soil. They are difficult to transplant and should be kept free from weed and grass competition, especially the first year. Trees are propagated by seeds sown in the fall or stratified and sown in the spring, and by layers and root cuttings. The seeds germinate very late in the season. Suckers are difficult to move and establish because of their poor root systems. If the suckers are not removed a thicket will develop.

The only superior variety distributed commercially is Davis. Seedlings can be interesting to grow because of the variable fruit size, quality and season of ripening. The fruit is perishable and consequently too soft for commercial handling. It is a lesser fruit with no culinary value.

Papaws are relatively free of insect and disease problems.

ELDERBERRY

(*Sambucus canadensis*)

The genus *Sambucus* belongs to the Caprifoliaceae or honeysuckle family and is widely distributed throughout the temperate and subtropical regions of the world. This family contains many species which are valued as ornamental shrubs but only a few produce edible fruits. There are over 20 species of which 13 are indigenous to North America. *S. canadensis* is found throughout the Eastern portion of the U.S., where it may obtain a height of 8 feet producing a coarse shrub with pithy branches. The individual flowers are very small, off-white in color and borne in large compound cymes. When the fruit ripens the entire cyme is harvested from which the berries are stripped. The



Elderberry

fruit is used for various culinary purposes: wine, sauces, alone in pies or combined with apples in pies. The fruit is difficult to ship because it shells badly from the cyme. Elderberries are easily propagated from seed, cuttings or by division.

The plants are easy to grow and have few diseases or insect problems. Weed control is the major problem to date.

Through breeding and selection great improvements have been made in the species *S. canadensis*.

A number of good varieties with large clusters and berries are available, namely York, Adams No. 1, Johns, Ezyoff, Kent, Nova and Scotia.

The West coast elder or *S. glauca* is a large tree-like shrub native to the west coast. It produces large clusters of dark blue berries which are covered with a very heavy bloom giving the fruit a blueberry appearance. Few breeding improvements have been made in this species.

MULBERRY

(*Morus alba*)

The mulberry is an ornamental as well as fruit bearing tree. Over 100 species have been described but only 5-10 are well known. The flowers are small, inconspicuous and may be dioecious or monoecious. The fruits resemble a slender blackberry in appearance; they are often soft and



Mulberry

rather insipid being used for jelly, dessert or bird food. The fruits drop when ripe and consequently may be harvested by covering the ground with a sheet or canvas and shaking the tree. Not all the fruits ripen at once.

Mulberries do well on a good soil but can be grown on thin gravelly soil or rocky slopes. Plants are propagated by seed, grafting or budding. Little effort has been made to develop superior clones. Seedlings are extremely variable in performance. Several ornamental types such as Tea's Weeping Mulberry are sold by nurseries. Mulberry leaves vary in size and shape within the same plant and are consequently characteristic of the genus and not due to a mutation.

Morus alba or the white mulberry is native to Japan and China but has been domesticated in Europe, Asia and America. In Kashmir, Afghanistan and Kabul, mulberries are grown as a source of food for the poor. In Japan and China the trees are used for paper pulp and the leaves for feeding silk worms. A number of varieties which are hardy include Downing, New American, Wellington and Hicks Everbearing. It is difficult to purchase varieties true to name because of little interest on the part of nurseries. The Russian mulberry is unusually hardy but has poor quality fruit. Other varieties of *alba* include Illinois Everbearing, Lavender, White, Dolly Madison and Hybrid.

Morus nigra, the black mulberry, is native to Northern Iran and was brought to Greece in biblical times. The black mulberry varieties Black Persian and Noir of Spain

are about as hardy as the peach. The fruits are larger and juicier than the others, but not as sweet and insipid.

Morus rubra, the red mulberry, is hardier and more widely distributed throughout the Northeastern U.S. and Canada southward to Florida and southern Texas. This species is more erect and not as spreading as the others. It prefers deep rich soils so consequently is found on bottom lands and along streams. Young trees are not as winter hardy as the more mature ones. This species is more useful as an ornamental than for its fruit. Such varieties include Hicks, Johnson, Stubbs, Townsend and Travis.

JUNEBERRY

(*Amelanchier alnifolia*)

Juneberry, shad-bush, service berry, sugar pear, Saskatoon, etc. are a few common names applied to over 25 species of *Amelanchier* indigenous to North America. Such species as *A. humilis*, *A. stolonifera*, and *A. sanguinea* produce edible fruit but ripen later than *A. alnifolia*, the species from which most domesticated clones have been obtained.

Juneberries are extremely winter hardy and are found growing wild in the Great Plains area northward into Saskatchewan, Canada where temperatures and rainfall are low. They thrive on a wide range of soil types. They are propagated by seed and suckers. *A. alnifolia* is a small shrubby tree which may attain a height of 25 feet. If suckers are not removed a bush type of growth habit will develop. The trees are highly ornamental because of the numerous small white flowers which appear in late April. In autumn, the foliage is highly colored. Fruits vary in size from that of a pea to $\frac{3}{4}$ of an inch in diameter. They are mostly purplish blue to black with a heavy bloom resembling a blueberry. They are juicy, rather insipid, mild flavored and ripen in late June. Attempts have been made to plant Juneberries near cherry orchards to lure the birds out of the orchard, but have met with varied results. Birds are very fond of Juneberries. Shannon and Indian are new superior varieties which are very productive with larger fruit. Success and Dwarf Mountain are very old varieties.

Indians and early settlers gathered the berries and dried and stored them for winter use. In areas where few fruits survive they are used for pies and preserves. The flavor in cuisine is enhanced by the addition of lemon juice.

HIGHBUSH CRANBERRY

(*Viburnum trilobum*)

The highbush cranberry, *V. trilobum*, is a woody shrub which belongs to the same family as the elderberry. Fruit size and color are its only similarities to the true cran-



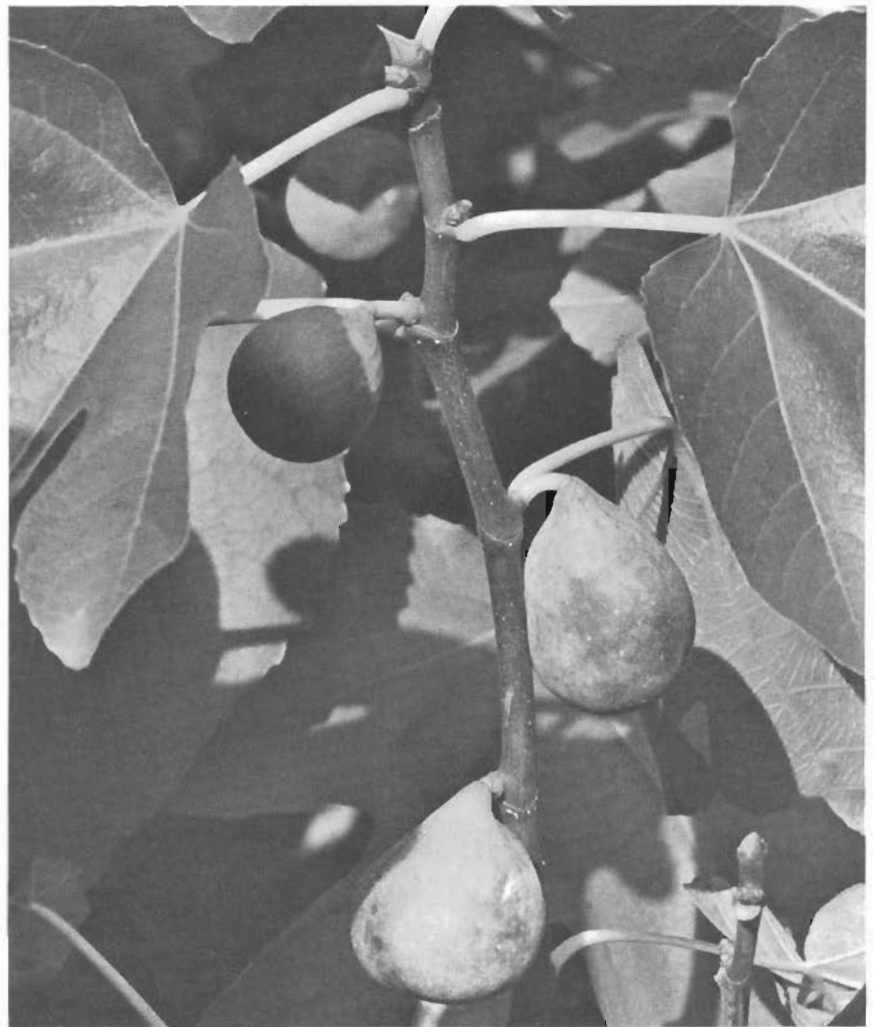
Highbush cranberry

berry. The plants are similar to currants but may reach a height of 12 feet with a tendency to be more open in growth habit. The flowers are very small, white and borne in large terminal clusters or cymes similar to the elderberry. There are over 120 species in this genus, however most plants are strictly ornamental with showy flowers, attractive foliage and plant shapes, and colorful fruit. The fruits will remain on the bushes through the winter, however freezing and thawing softens the fruits. The berries are seldom eaten by birds.

V. opulus, or European cranberry, fruits are highly acidic, large seeded, extremely astringent and only useful as an ornamental. Both species are hardy and grown throughout the Northeastern region extending into southern Canada.

V. trilobum fruits can be used in jelly, preserves or combinations and served along with meats.

Plants are propagated by seed which should be stratified, hardwood cuttings or layers. There are no special cultural requirements. Weed control is similar to that for



Fig

currants. A light pruning may be required if the bushes become too thick.

Most viburnums are sold today only as a species. The varieties Wentworth, Andrews and Hahs are superior clones which were selected for their fruit characteristics. Wentworth is early ripening, Hahs is midseason and Andrews is late.

FIG

(*Ficus carica*)

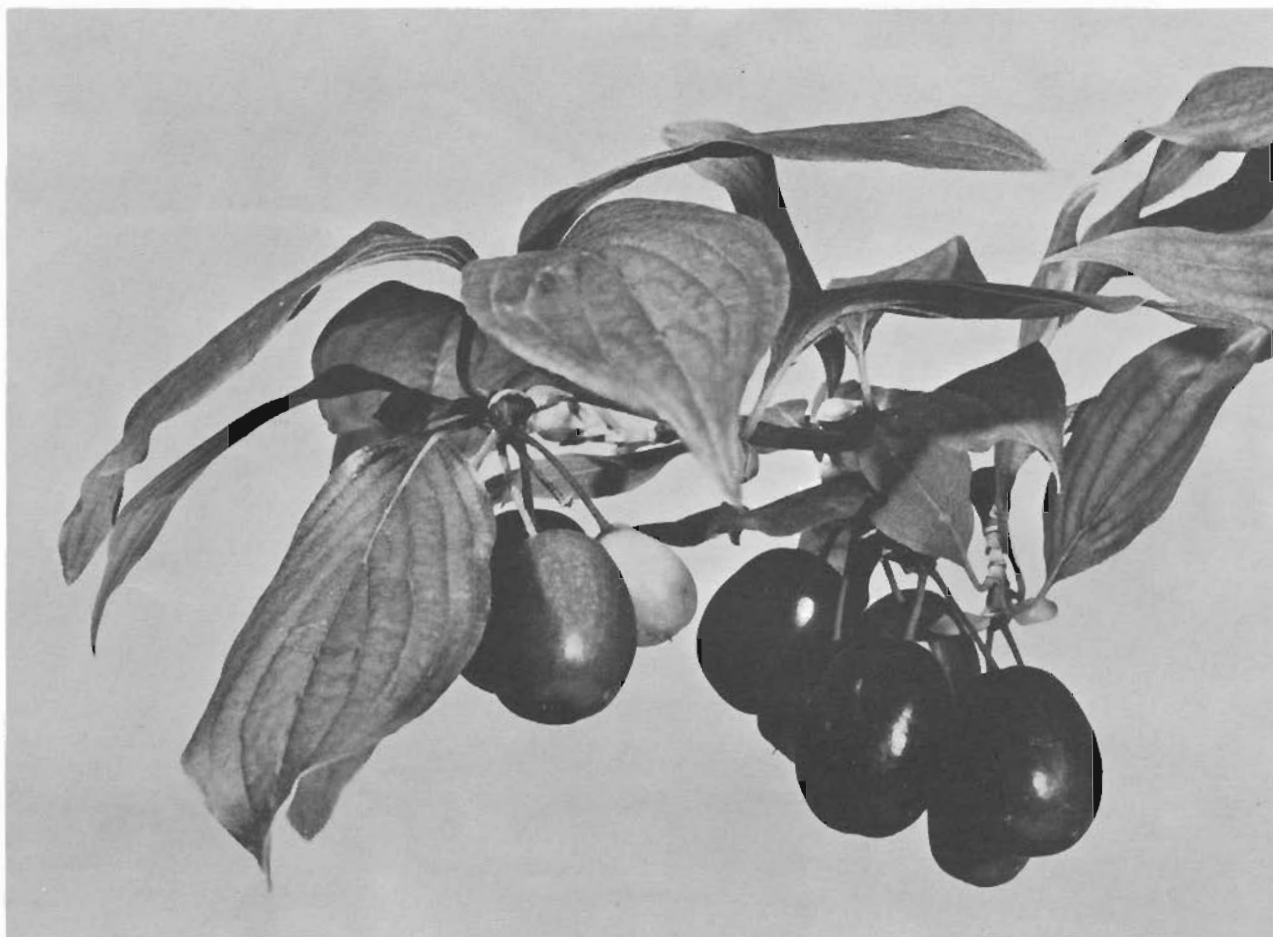
The fig is indigenous to Syria, Persia, Greece and the Mediterranean region where it has been grown and cultivated for centuries. The Fig was brought to the U.S. around 1790. Plants develop into a small tree or spreading shrub. Most figs are damaged by temperature below 15°F. However, a few in isolated or protected areas are known to withstand much lower temperatures. In colder areas figs are grown in tubs or grown outdoors during the summer, dug in the fall with a large ball of soil, stored in a moist cool cellar and then set out after the danger of frost has

passed. Small trees may be bent over and covered with soil or a heavy mulch to protect them from low temperatures. After the chance of frost has passed they are uncovered and staked in an erect position.

Figs may be grown from seed but seedlings are so variable that varieties are recommended. They are easily grown from dormant cuttings taken in the winter or early spring. For best results cuttings should be 4-5 inches in length, with a cut made through the node and buried leaving only the tip even with the soil surface. After rooting the cuttings may be placed into a nursery for a year before setting into a permanent location. A heavy, loam soil well supplied with moisture is best. Heavy mulches are frequently used.

The fruits are actually a swollen hollow receptacle with a small opening. The inside is completely lined with tiny flowers which develop into the true fruits or seeds of the fig.

Most plants sold in the Northern portion of the U.S. are clones developed for pot culture. For southern areas varieties are available from southern nurseries. In most



Cornelian cherry

years, fruits of the Brown Turkey variety ripen in Geneva. The growing season is seldom long enough to ripen Conadria and Celeste.

CORNELIAN CHERRY

(*Cornus mas*)

The dogwoods are hardy ornamental shrubs with handsome foliage which may develop brilliant fall colors. There are over 40 species of which *Cornus mas* is the only one which produces edible fruits. The plants may form a shrub-like hedge or develop into a small spreading tree. Cornelian cherries are used almost exclusively as ornamentals because they grow nearly as well in shady places under large trees as in sunny exposed locations and thrive in almost any soil type. The Cornelian cherry is one of the first fruits to flower in the spring. The flowers are small, yellow and numerous, appearing before the leaves. Cross pollination may be required for best fruit set. The fruits ripen in late summer and are about the size and shape of a medium-sized olive. Large fruited clones have been reported from the U.S.S.R. but are not available in the U.S. Fruits are sold in some European markets where they

are used for making jellies, tarts, and sweetmeats. In Turkey, they serve as a flavoring for sherberts. In Norway, the flowers are used to flavor distilled spirits.

Plants are propagated by seed and grafting. Seeds usually do not germinate until the second year. Seedlings vary greatly in vigor, productivity, and fruit size and shape. Some species grow readily from cuttings while others are layered.

BEACH OR SHORE PLUM

(*Prunus maritima*)

The beach plum is a decumbant straggling shrub reaching a height of 4–10 feet. Under cultivation it may be grown as a small tree. Native plantings may be found along the coastal areas of the Northeast from New Brunswick to the Carolinas where they grow extensively on sand dunes. They will grow on heavier soils with good drainage. The shrubs are tolerant to salt sprays, consequently they are popular as ornamentals in seaside plantings.

A profusion of small white flowers appears early in the spring before the leaves. The fruits ripen in late summer and



Beach or shore plum

are generally reddish to deep purple in color with a heavy waxy bloom. A few yellow fruited forms have been grown. The fruits are quite acid, up to $\frac{1}{2}$ inch or more in diameter with a crisp, tart juicy flesh and a cherry-like pit. The fruits are used for making jams and jellies which are sold in many local tourist resort areas. Fruits are easily harvested by shaking onto a canvas.

Contests have been conducted to stimulate interest in locating superior clones. Raritan as well as several pollinators have been named by the New Jersey Experiment Station. In Massachusetts, some selections have been named and a few introduced into the nursery trade. Autumn is a variety which produces a low growing, spreading type of bush producing a large annual crop with good size and quality. Other varieties which have been released include Stearns, Northneck and Squibnocket. Stearns is a good ornamental with fruit which processes well. Northneck and Squibnocket are recommended as ornamentals and soil binders.

Beach plums are easily propagated by seed, but seedling populations offer a wide range of variability in production, and fruit size and quality. Root cuttings may be made in the fall and planted in a nursery. After rooting sufficiently

they may be transplanted to a permanent location. Soft wood cuttings root fairly well when treated with a rooting hormone.

Bulletin No. 315, *The Beach Plum* which gives information on culture, diseases and insect control may be obtained from the Extension Service of the University of Massachusetts.

JUJUBE

(*Zizyphus jujuba*)

The Jujube is a deciduous shrub or small tree with slender prickly branches and light green leaves. Trees have been grown successfully as far north as Geneva, N.Y. but are generally restricted to arid and tropical or subtropical regions. It is cultivated in China where a great many varieties are grown. The flowers are very inconspicuous and greenish yellow in color. The mature fruits are generally reddish brown about the size of an olive. It is frequently called the Chinese date because of its texture and high sugar content. Fruits seldom mature in the north because they require a long growing season. Large fruited varieties such as So, Yu, Li and Tanku Vu are available in California.



Jujube

Trees are propagated by grafting and root cuttings. Seed can be obtained from Tennessee or California however, a grafted, named variety is best as seeds seldom fill and mature.

BUFFALO BERRY

(*Shepherdia argentea*)

The Buffalo Berry, commonly called the Rabbit Berry or Nebraska Currant, is a thorny shrub or small tree which is extremely hardy and able to withstand drought. It is native to the Great Plains from Saskatchewan southward through the Rockies to New Mexico. The young growth is tomentose with silvery leaves and consequently is useful as an ornamental in cold climates. Most of the fruits are harvested from native plantings and only occasionally grown where gooseberries and currants cannot survive.

The flowers are very small, yellow, nearly sessile and borne on small branches. Male and female flowers are borne on separate plants consequently if they are grown in a nursery until they flower, then sex can be determined after which they may be planted in a permanent location in a ratio of one male to ten females; both sexes being required for fruit production. The fruits vary in size from that of a currant to a small gooseberry, are red or yellow in color, highly acid and borne in clusters in the axiles of the small branches. Fruit ripens in July but may remain on the bush until frost. Because of the thorniness of the

plants, harvesting is difficult. They are used for sauces, jellies, and conserves. The Buffalo Berry derived its name from early settlers who served the berries as a sauce with buffalo meat. The berries may also be dried and stored for a long time.

No attempt has been made to select superior clones. Plants may be propagated from seed, upon stratification, and by cuttings and suckers. Cuttings can be made and handled like those of currants.

MEDLAR

(*Mespilus germanica*)

The Medlar is an attractive small tree often shrub-like and highly branched. It is related to the apple, pear and quince. Some plants are thorny, however cultivated types are thornless. The Medlar is widely grown in Europe, indigenous to south central Europe but little known in the U.S. Trees have been hardy at Geneva, N.Y.

Showy large white blossoms appear in late May or June after full leaf. The fruit is similar to that of a quince, and is borne singly on new growth. It is usually small, up to 2½ inches in diameter, hard, acidic and russet brown in color. The fruits are harvested after a light frost and stored where they are allowed to mellow or blet, at which time the flesh softens and becomes edible. The fruits may be eaten fresh or made into a preserve to season meats.

Trees are easily grown from seed, providing it is well filled, or they may be grafted on pear or quince stock. Medlars are more commonly found in Southern Atlantic or Gulf States.

In Europe, the old varieties Hollandish and Nottingham may be found. Other old varieties include Dutch Royal. A seedless and two variegated forms are known.

DWARF CHERRY

There are a number of *Prunus* species indigenous to the Great Plains area which are winter hardy, drought resistant and produce edible fruits. They are also useful as ornamentals. Only four dwarf cherry species will be considered here: *Prunus besseyi*, *P. pumila*, *P. tomentosa* and *P. japonica*.

Prunus besseyi or the Western Sand Cherry is a small spreading shrub up to four feet in height, with glossy, silvery green foliage. The flowers are white, less than 1/2 inch in diameter, appearing with the leaves in sessile clusters. This species is very hardy and found on the Great Plains from Kansas to Manitoba and westward to Wyoming and Colorado. The fruits are purplish black, however red and yellow fleshed types are known. They are quite astringent but sweet and vary in size from 1/4 to 3/4 of an inch in diameter. The Sand cherry has a more prostrate habit of growth than *P. pumila*. Fruits are used in pies combined with apples, jams or jellies. Recipes have been published by the South Dakota Experiment Station.

Superior clones of the Western Sand Cherry were selected from the wild and used in a breeding program. As a result the varieties Sioux, Brooks and Black Beauty were released. They are self-sterile and therefore several varieties should be planted together for cross pollination. Hansen's Bush Cherry has been widely distributed by many Great Plains nurseries. Other named Sand cherry hybrids include, Oka, Tom Thumb, Compass, Zumbra, Sapa, Opata, Nicollet and St. Anthony.

Prunus besseyi has been used as a rootstock for cherries, apricots, peaches and plums even though it is highly unsatisfactory. As a stock, its main assets are hardiness and dwarfing. In the East it has been susceptible to brown rot which attacks the twigs as well as the fruit.

Sand cherries are easily grown from seed; and fruit when very young but are quite variable in their fruiting characteristics. Superior clones and varieties are propagated by budding, grafting or root cuttings. Trees are adapted to poor sandy soils or do well on dry gravelly embankments.

Prunus pumila or the Dwarf cherry, has a decumbent growth habit but the young growth is more erect often reaching a height of 5-8 feet. The branches are slender with a twiggy type of growth habit and reddish in color. Shrubs may be found from the rocky shores of eastern Quebec and Manitoba south to Washington, D.C. and

even in the sand dunes of the Great Lakes. The fruits are small, purplish black, astringent and scarcely edible, however the shrub is useful as an ornamental.

Prunus tomentosa, the Nanking Cherry or Chinese Bush fruit, is native to Japan, Northern China and Manchuria. It is found in the U.S. from New Mexico to North Dakota, and many other cold regions where it is extremely winter hardy. It is a compact upright or spreading tree-like shrub. The young growth and leaves are very pubescent. The Nanking cherry is among the earliest flowering shrubs and consequently is very attractive as an ornamental. The flowers are white with a red calyx and are borne sessile on the branch. The fruits are bright currant red, one-half the size of and similar to a sour cherry, but covered with inconspicuous hairs, juicy and pleasantly acid.

The trees are propagated by budding or from suckers. Seeds are easily germinated, however many seedlings may be unproductive, therefore only named varieties or productive clones should be propagated.

Only limited efforts have been made to obtain improved types. The Minnesota Experiment Station introduced the variety Drilea. Nanking cherries are also very susceptible to brown rot.

Prunus glandulosa and *P. japonica* or Korean cherry are very hardy dwarf ornamental shrubs with deep red to purplish black fruits which are used for making pies, sauces and jellies.

Some dwarf cherries require cross pollination, however a few are self-fruitful.

ACTINIDIA

(*Actinidia arguta*)

Actinidia is a very vigorous, deciduous climbing shrub with a twining habit and may grow to a height of 50 or more feet. This species appears to be hardy in northern climates but is more fruitful further south. It can grow on a wide range of soil types in full sun or partial shade. The vines may be used ornamentally on arbors or pergolas as well as on walls. The foliage is attractive, dark green with reddish midribs. The flowers are small, white, saucer shaped with a prominent mass of stamens in the center. The fruits are greenish yellow resembling a gooseberry, about 1 inch long, mild flavored and subacid. The fruit has no commercial significance, but is pleasant to eat and used in making jam and sauce.

Other species such as *A. chinensis* or the Chinese gooseberry, have larger fruits up to 2 inches but are not hardy in the Northern states. In New Zealand, 65 acres were grown at one time. The growing season is often not long enough to mature the fruits. In southern California good crops are produced. The fruits are tart until fully ripe when they become sweet with a texture similar to that of a fresh fig.

Actinidias are propagated by seeds, layers, and soft- and hardwood cuttings. No varieties are available, because of the vigorous growth habit and delayed fruiting habit which make it unattractive to the fruit breeder. Not all plants fruit as they are frequently monoecious (only one sex on a plant). A Russian plant breeder released five varieties; however none of them are available, and since then the species has been completely neglected.

ORIENTAL QUINCE

(*Chaenomeles lagenaria*)

There are four species of Oriental quinces which are grown for ornamental purposes of which *C. lagenaria* is of some value for its fruit. The plants are native to China producing a spreading shrub 3-6 feet in height with spiny branches. The flowers are borne in clusters of 2-5 and are 1½-2 inches in diameter. The fruit has little flavor. It is generally used in making jelly or preserves when mixed with other fruits because of its high pectin content. *C. lagenaria* var. *grandiflora* has fruits 3-4 inches in length weighing ¼ to ½ lb. Quinces are self-sterile requiring more than one for pollination. *C. sinensis* is a small tree with fruits up to 6 inches in length. The foliage turns brilliant

scarlet in the fall thus making an attractive tall hedge: however this species is not as hardy as the others.

FLOWERING CURRANT

(*Ribes odoratum*)

The flowering currant, commonly called the Golden Currant, Missouri Currant or Spice Bush is a hardy American shrub grown in Minnesota south to Arkansas and westward to the Rockies. It is a bushy shrub reaching a height of 6 feet and very ornamental in early spring with yellow, clove-scented flowers which appear with the leaves. It is sometimes confused with *R. aureum* which is very similar but smaller in every way with less fragrant flowers. The berries are strong flavored, shiny black and borne in very short clusters. They are useful in making pies and jellies.

Plants grow well on a wide range of soil types and are extremely winter hardy. They can be propagated by seed, layers, and soft- and hardwood cuttings.

Crandall is a large fruited variety which was introduced many years ago. Little effort has been made to improve this species besides selection of superior clones.

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