

GROWING KIWI IN THE HOME GARDEN

By Wallace P. Howell

WSU Benton - Franklin County Master Gardener

Introduction

Almost everyone in this country knows and likes kiwi fruit. However, relatively few people are familiar with any variety other than the large, fuzzy kind seen in supermarkets and food specialty stores.

Hardiness

All kiwis belong to the *Actinidia* family. Currently, five species are known. These include *Actinidia arguta*, *kolomitka*, *cordifolia*, *purpurea*, and *deliciosa* (the fuzzy kiwi). *A. arguta*, *kolomitka*, *cordifolia*, and *purpurea* species are all very hardy, with *Actinidia kolomitka* being the most cold-tolerant of all (about -40°F).

The domesticated *A. deliciosa* varieties will be seriously damaged or killed at temperatures of around 15°F, so they are not suited for the arid areas east of the Cascade Mountains. However, the hardy kiwis grow very well in the Tri-Cities area.

Background

The various wild kiwis are native to Northern China, Southern Siberia, and Korea. Domesticated hardy kiwis are all closely related to those plants. Unlike the fuzzy kiwi, there has been relatively little horticultural development of the hardy kiwi, so most available varieties are simply the offspring of selected wild plants which had superior characteristics.

Typically, the fruits of hardy kiwi are smooth-skinned and substantially smaller than the fuzzy kiwis seen in supermarkets. However, they are sweeter, and higher in vitamin C content than the fuzzy variety we usually see. In spite of the smaller size, they can be used very much like the fuzzy variety, and eaten fresh, used in salads or gelatin desserts, and in elegant jams.

Varieties

There are three known varieties of the *A. arguta* species, “Annasnaja”, “Dumbarton Oaks”, and “Issai”. Of these, the first two have larger fruits and excellent flavor. “Issai” is medium-sized, and will set tasty fruit the first year after planting. The others will set fruit the third or fourth year after planting. All have short cylindrical fruit, with rounded ends.

The other three species each have only one known variety. *A. cordifolia* plants currently have no variety names. The fruit is very sweet, and has a globular shape. It is the earliest variety of all. *A. kolomitka* “Arctic Beauty” is the hardiest of all, but the structure of the plants is somewhat smaller and trimmer than the other species. It blooms and fruits somewhat earlier than the *arguta* species. One special characteristic of the male plants is their pink, white, and green variegated leaf coloration. The fruit shape is similar to the *arguta* species, but the size is slightly smaller.

A. purpurea “Hardy Red” has fruit similar in size and shape to the “Annasnaja” and “Dumbarton Oaks”, but the skin and flesh are red, and the flavor has a bit of tartness. The vines are very vigorous, like those of the *arguta* species.

Culture

While as easy to grow as grapes, the kiwi vines need a lot of water during the growing season and they are vulnerable to frost damage after the leaves and shoots start to grow. The vine’s vigorous growth habits are very similar to grapes, requires aggressive pruning. Like grapes, they also need a very sturdy support, such as a strong fence or trellis. A fence, no more than four or five feet in height, will make fruit picking easiest, but they do very well on trellises, and can provide excellent shade in hot climates.

The bloom period of most varieties is in the late spring, and the harvest period is from late summer to early fall. With one exception, the kiwis are all dioecious, requiring both male and female plants to produce fruit. A single male vine will be sufficient to pollinate about eight female vines. If one doesn't have space for more than one plant, the variety *A. arguta* "Issai" may be chosen, since it is self-fertile (having both male and female blossoms on the same plant.)

When purchasing kiwi vines, it is desirable to obtain them from a reputable nursery which has broad knowledge of the plants. There are four such nurseries in the Northwest. They are the Raintree Nursery in Morton, Washington; Northwoods Nursery in Canby, Oregon; One Green World, in Molalla, Oregon; and Oregon Exotics Nursery, in Grants Pass, Oregon. Canes on the vines of new plants should be at least 1/4 inch in diameter. I prefer to plant new plants in the spring, so I can promptly tell if they are going to grow, and I recommend that planting time to others, for the same reason.

The vines require rich, well-drained soil, with adequate water during the growing season. Soil modification with several pounds of compost per vine each spring is desirable. I also use about 1/3 to 1/2 pound of ammonium sulfate per vine every spring. To boost fruit production and size, it is desirable to fertilize at least once more, in mid-summer or early fall.

The fruits tend to grow in loose bunches, so thinning will also help to increase fruit size, significantly.

There is one special warning about soil modification around kiwis - do not add boron! The kiwi vines are very sensitive to boron, and I lost a full year of growth and one crop of fruit by giving them the same boron treatment I give to my raspberry vines.

The *Argutas* all seem to be especially well-adapted to the climate and soils in the Tri-Cities. The four vines I purchased were all of the "Annasnaja" variety, and have been completely satisfactory. (Annasnaja is

Russian for pineapple.) They are now about 12 years old and each of the three female vines produces about 50 pounds of fruit each year. Individual fruits average about 3/4 inch in diameter, and 1 1/4 inch in length.

Harvesting

The fruit matures in October, and I tend to leave them on the vines until they are just a bit soft before picking. I eat some fresh, and give some to friends, but use most of them for jam.

They tend to lose some of their distinct flavor, like strawberries, when making cooked jam, so it's desirable to combine them with other fruit juices that are a little tart. However, they can be made into freezer jam, and will retain most of their fresh flavor.

The best recipes I have found are in the Ball Blue Book, which WSU Extension has among their references.

If one is going to eat most of them fresh, they should be picked when still firm, refrigerated, and taken from the refrigerator for additional ripening as needed. They will keep that way for six to eight weeks. The fruits may be eaten without removing the skins, but if one eats a large number of them whole, diarrhea may result.

I have found hardy kiwis to be a very worthwhile addition to a home garden that has berries, grapes and other small fruits. They are reasonable in price, easy to grow, essentially disease and pest free, very productive and tasty!