

New ZEAL fruitfulness

Recently, a wider range of kiwi fruit cultivars have become available to gardeners, worth growing for ornamental qualities as well as fruit. Kiwi specialist **Szczepan Marczyński** here, and on RHS Online, profiles some of the best

DURING THE 15 YEARS I have been cultivating smooth-skinned, small-fruited actinidias in Poland, I have grown to love these plants – and have yet to meet someone who didn't find them tastier than the most popular kiwi fruit (*Actinidia deliciosa*). They do need training and can have a rampant nature – their climbing, twining habit can give growth up to 10m (33ft) – yet their early-summer flowers and sometimes variegated or tinted foliage make them ornamental additions to gardens.

The most widespread species of the genus, and often grown in the UK, is *A. deliciosa*, the edible fruit of which is a robust, oval to egg-shaped, greenish brown berry, up to 7cm (3in) long and covered with hairy skin. However, in the last few years other species have been increasing in popularity. Their fruit may well be smaller, but as they have smooth skin they can be eaten unpeeled. They are also generally sweeter and have more aroma than *A. deliciosa*. This is especially true of three species: *Actinidia arguta*, *A. purpurea* and *A. kolomikta* (the latter is often grown as an ornamental in the UK).

All three species are much more frost hardy than *A. deliciosa*, although in spring the new growth is equally susceptible to slight frosts. They are undemanding and rarely affected by pests and diseases. ►

Actinidia arguta
'Geneva 2'

Distinctive features

Native to countries of the Far East (from Manchuria to Java), most actinidia are dioecious, meaning that male and female flowers are borne on separate plants. But there are also monoecious or polygamous (both bisexual and unisexual flowers on one plant) species available. In the UK, however, the only self-fertile cultivar available is *A. arguta* 'Issai'. Identifying the necessary compatible cultivars can be confusing, but commercial growers have the space for growing the necessary combinations. For a domestic garden, the ornamental value of these plants can often be just as rewarding as any potential fruit.

Actinidias come into flower in May and June (*A. kolomikta* about two weeks earlier than the other two species). They bear small (2–5 cm/¾–2in across), white flowers that are generally dioecious; *A. kolomikta* flowers are lemon-scented. Male flowers, borne in racemes of a dozen or so, have well-developed anthers and their pollen remains fertile for three to four days. Female flowers are borne individually or in clusters of two or three, and have a large pistil surrounded by barren stamens. For good pollination, ensure compatible male and female plants grow nearby (see panels, below, for more on cultivars).

*Actinidia arguta* 'Jumbo'*Actinidia arguta* 'Weiki' (male)*Actinidia kolomikta* 'Adam'

Actinidias grow best in warm, sunny or slightly shaded, wind-sheltered locations. Grow plants along wires stretched between posts against a wall or fence. They tolerate most soil types, although they prefer fertile, but light, well-drained soil that is moist, but not waterlogged, and somewhat acid (pH 5–6.5). In alkaline soil, they suffer from chlorosis but still grow. From the second year after planting they require balanced feeding. All actinidias can be used as ornamentals, providing you have the space: leave the plant to grow in an unrestrained manner, occasionally trimming as required.

However, for the best crop, you should train plants properly, along a T-shaped

trellis (see information on RHS Online); after three to four years, cut back annually to eight to 12 shoots and thin out weaker stems. Berries are borne on two- to three-year-old stems; flower buds are generally set on the seventh or eighth leaf of last year's wood.

Pick of the crops

Most cultivars (see panels below) start bearing fruit in the third or fourth year after planting, with the exception of *A. arguta* 'Issai' that sets fruit after one year. The berries of this species and *A. purpurea* ripen in September–October and need around 150 frost-free days, while *A. kolomikta* requires around 130 days without ground frosts in order to

yield fruit. The fruit ripens in August and falls immediately. The fruit are smooth-skinned, tasty (sweeter and more aromatic than kiwi fruit) and wholesome. They can be eaten raw, added to cakes, jellies and salads, dried as grapes (they will resemble raisins), frozen and marinated.

When grown outside, ensure that cultivars are planted at the same level as they were growing in a pot, into a hole dressed with compost or well-rotted manure. Commercial growers space the plants at 5 x 5m (16 x 16ft) intervals.

If choosing a dioecious selection, plant the male and females not too far apart (within 3–15m/10–50ft of each

other). When planting several actinidias together, it is enough to plant one male for every five to eight female plants.

During the first three to four years after planting, mulch (shredded bark or sawdust) around the base of the plant, 10–20cm (4–8in) away from the trunk to prevent rotting. Actinidias are shallow-rooted plants, so avoid loosening soil. They start their growing season quite early in spring so, to minimise possible frost damage to the emerging buds, you should avoid early watering and feeding in order not to speed up the process. Actinidias need plenty of water during the growing season so it is best not to plant in dry soils, unless ongoing irrigation is possible.

Ornamental value

Both *Actinidia arguta* and *A. purpurea* are mainly cultivated for their fruit, but their ornamental value (especially flowers and fruit) is also recognised. They are ideal for covering fences, pergolas and arbours, thanks to their vigorous, twining habit. Growing *A. arguta* and its cultivars in home gardens and allotments, and even in commercial plantations, is becoming more popular in New Zealand, Japan, the USA and Germany.

Actinidia kolomikta is already often recommended as an ornamental climber, with attractive green, white and pink

'FEMALE ACTINIDIA KOLOMIKTA BEAR TASTY AND WHOLESOME FRUIT. THEY ARE IDEAL FOR HOME GARDENS AND ALLOTMENTS'

foliage suitable for training against a range of vertical structures. Male plants are most attractive, but females bear tasty and wholesome fruit. They could be well accommodated in many more gardens. Most clones of *A. kolomikta* already in gardens have been selected for foliage rather than fruit.

Small-fruited actinidias really deserve more widespread planting, as there are few other plants that bear delicious fruit with such good ornamental value. ■

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@ Visit www.rhs.org.uk/plants/rhs-publications/journals/the-garden/2009-issues/november for additional cultivation information on pollination requirements, commercial plantations and pruning

i Suppliers of some of these cultivars include: Agroforestry Research Trust, Devon 01803 840776; Crüg Farm Plants, Gwynedd 01248 670232; Goscote Nurseries, Leicestershire 01509 812121

*Actinidia arguta* 'Issai'*Actinidia arguta* 'Weiki'**ACTINIDIA ARGUTA**

There is a good choice of cultivars of this vigorous climber (grows to 8m/26ft):

- 'Geneva 2' (female): earliest-ripening cultivar of the species. Medium-sized, sweet rounded berries ripen in September–October. In full sun they develop a reddish brown bloom.
- 'Issai' (self pollinating): a compact cultivar (to 4m/12ft), it comes into bloom later than the rest of the *A. arguta* cultivars. Tasty, medium-sized green berries ripen in mid-October. Prone to spider mite.

- 'Weiki' (male and female clones): the most ornamental cultivar of the species, it has two clones, a female and male. Male plants are good pollinators for cultivars of *A. arguta* and *A. purpurea*. Female plants are prolific and bear tasty medium-sized green berries that develop a red-brown bloom in direct sunlight. They ripen in late September or early October.
- 'Ken's Red' (female): large, durable and tasty berries ripen from late September to mid-October. When in full sun, both the skin and the

flesh are deep red. In shade, the berries stay green. Ripe berries do not soften excessively, which makes them suitable for transport.

- 'Jumbo' (female): an Italian cultivar bearing exceptionally large, oblong, slightly elongated fruit. Tasty, sweet and long-lasting berries ripen from late September to mid-October and are produced quite prolifically.

- Background image: *A. arguta* 'Ken's Red'

ACTINIDIA PURPUREA

Similar in appearance and requirements to *A. arguta*, but skin and flesh is red.

- 'Purpurna Sadowa' (female): a prolific grower, it is highly ornamental (outer skin is purple-red in full sun and red-green in shade). Berries have a delicate, sharp flavour and ripen from late September to mid-October.

ACTINIDIA KOLOMIKTA

This is a fairly vigorous, frost-hardy climber (to 4m/12ft). From the second year, in May, some leaves turn white then, later, pink (this is strongest on male plants in full sun). White, slightly lemon-scented flowers cover the plants in May. Cats often damage shoots or leaves of this plant, so be prepared to protect the base while young.

- 'Adam': ornamental variegated foliage and many male flowers; a good pollinator for all fruiting cultivars of *A. kolomikta*.
- 'Dr Szymanowski', with handsome white, pink and green foliage, and 'Sientiabskeja',

a prolific cropper, are also good selections, but are yet to become available in the UK.

The following cultivars, which are available here, have been recommended by Martin Crawford of Agroforestry Research Trust:

- 'Red Beauty' (female): fruits Aug–Sept, but needs pollinating with a male cultivar (see 'Adam' above) of the species.
- 'Tomoko' (female): has pink and white leaves if exposed to direct sunlight for at least part of the day. Lightly scented white flowers are followed by top-shaped, edible fruit.

*Actinidia kolomikta* 'Dr Szymanowski'*Actinidia kolomikta* 'Sientiabskeja'