

Hidden Gem Among Vines: *Actinidia arguta*

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The hardy kiwi (*Actinidia arguta*) is a vigorous vine with fruits that you are unlikely to find at your local grocery store. The grape-sized nuggets are like the large kiwifruit (*A. deliciosa*), simply smaller and hairless. When you cut open the dusky fruit, which sometimes blushes from green to red, you'll see a firework design of lime-colored flesh with an inner ring of tiny chocolate-brown seeds. The taste of *A. arguta* fruit is similar to the commercial kiwifruit, but I find it milder, with less acidic tang. A connoisseur might describe a more sophisticated bouquet of flavors.

My first experience with this plant was back in college when a horticulture professor brought a basket of the fruit for the class to sample. I was amazed that the fruit existed—a bite-sized, thin-skinned version of one of my favorite fruits. I quickly became obsessed with the vine, but I did not encounter it again until I came to the Arnold Arboretum where I got to experience the plant as a whole: the glossy leaves borne on bright red petioles, the exfoliating bark, and the delicate and rather inconspicuous white flowers. Native to northeastern Asia, *Actinidia arguta* numbers among sixty different species in the genus, but only a handful of these can be grown in colder climates. The common species, *A. deliciosa*, is only hardy to USDA Zone 8, which means the species cannot be grown in New England, while *A. arguta* can survive to a remarkable Zone 3. The Arboretum currently holds five additional kiwi species, which all produce edible fruit in various colors and shapes.

Despite the taste and ornamental foliage, *Actinidia arguta* is a fast-growing vine that has escaped from cultivation in western Massachusetts, the New York metro, and northern New Jersey. This complicates any recommendation to introduce the species (which can climb more than thirty feet in a single season) as a more widespread fruit crop, although I have never observed any spontaneous seedlings on the grounds of the Arboretum.

Three of our accessions of this species represent wild provenances. A particularly note-

worthy plant (accession 905-85*A) is located on the second vine terrace in the Leventritt Garden, twinning up a steel trellis. This accession was received from the Chollipo Arboretum in 1985, which collected the seed on Mount Gaya, in North Gyeongsang Province, South Korea. I'm partial to its sweet wild-tasting fruit and its impressive girth at the base, which sprouts into twisting curls on the trellis. Two additional plants (accession 403-97*B and C) on the upper terrace of the Leventritt represent a wild provenance in Jilin Province, China, where seed was collected from a deciduous mountain forest by the North America-China Plant Exploration Consortium (NACPEC). These two plants have been trained to arch over the path, allowing visitors to view the beautiful structure of the vine from beneath.

Buds that produce flowers and fruits occur on the interior portion of the current year's growth—usually obscured beneath the foliage. *Actinidia arguta* vines are typically dioecious, which means that two vines are needed to produce fruit—one with female flowers, the other with male flowers. The flowers may look very similar, however, because most flowers have both male and female parts, but only the males produce viable pollen and only the females have properly developed structures for receiving pollen and developing fruit. To confuse matters, some plants can produce both male and female flowers, and others have been reported with perfect flowers. The species may even change sexual expression from year to year. The specimens of *A. arguta* that I have observed at the Arboretum have never been consistent in their fruit production.

Hardy kiwi may never become a common fruit crop, and perhaps, given its swift growth and ability to escape from cultivation, it never should. Yet as you stroll through the pathways of the Arboretum, don't forget to stop to investigate our winding vines; you may discover hidden gems nestled beneath the leaves.

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