

Akebia quinata (M. Houttuyn) J. Decaisne
(*Rajania quinata*)

Fiveleaf Akebia

Other Common Names: Chocolate-Vine, Fiveleaf.

Family: Lardizabalaceae (Lardizabaleae).

Cold Hardiness: This vine is cold hardy in USDA hardiness zones 5 (4) to 8 (9), but tends to suffer in the heat of zone 9.

Foliage: Fiveleaf Akebia's name is a misnomer in that the alternate deciduous to semi-evergreen leaves are solitary at a node, but are palmately compound with five leaflets; the 1½" to 3" long pinnately veined mostly entire margined leaflets are oval to obovate with emarginate tips and acute to rounded bases; leaflets are light green when emerging, maturing to a blue-green color; the ¼" to ½" long petiolules are light green or sometimes with a hint of pink or purple flush, while petioles are equal or greater in length than the leaflets and usually light green; petiolules are subtended by a pulvinus; no fall color develops in our region, but the summer foliage can be quite handsome.

Flower: Monoecious, the 1" diameter flowers have three scoop-shaped chocolate purple, purplish rose, to maroon colored petaloid sepals and are borne in small axillary racemes on old wood in mid-spring; in colder climates, the flowers are prone to damage by late frosts; although both male and female flowers are present in the racemes, there appears to be a degree of self-sterility and more than one clone is necessary for good fruit set; male flowers have six stamens and are borne terminally on the racemes, while female flowers have three to twelve carpels and are at the base; hidden in the foliage, the flowers which tend to open at night, are only of minor visual effectiveness, but are valued for their strong vanilla fragrance.

Fruit: The bluish purple sausage-shaped ovoid-oblong 2¼" to 4" long pods, technically berries, are dehiscent along one side splitting open to reveal numerous black seeds in a whitish pulp which is reportedly edible; fruit are not frequently produced in our region, probably due to the use of single clones in a given planting or perhaps due to the lack of a suitable pollinator.

Stem / Bark: Stems — twining sinuous stems are initially purplish pink maturing to green and eventually brown with small light tan to whitish lenticels which tend to be vertically elongated and raised along their margins; Buds — divergent buds are a dark rich brown at maturity with glabrous imbricate bud scales; Bark — old stems are fairly smooth compared to many vines with gray-brown color to gray flushed with an overall purplish haze; stems can become thickened and a dense mass almost appearing to writhe in a snake-like assemblage.

Habit: Under favorable conditions *Akebia quinata* can become a dense mass of twining woody vine engulfing smaller structures upon which it climbs; at other times it is almost shrub-like, but mostly it is a 30' to 40' vine; the overall habit is more refined than many woody vines due to the softening texture of the divided palmate leaves; the overall texture is medium-fine in summer to medium in winter.

Cultural Requirements: This species can be a very aggressive rampant growing woody vine under favorable conditions, mostly in the northeastern portion of our region, but tends to be more limited in growth further west and south due to heat, drought, high pH soils or a combination of these factors; chlorosis of young leaves tends to develop on higher pH soils; although reportedly drought tolerant by some authorities, a steady moisture supply is usually required in Texas; this is a much more vigorous vine in the northeast portion of our region than elsewhere; vines climb by twining, hence they require a structure around which to wrap; pruning may be necessary to keep them in bounds; plants can be located in full sun to part shade, performing best with a bit of shade in southern areas.

Pathological Problems: Few disease or insect pests are consistent problems on this species.

Ornamental Assets: Flowers and fruit are mildly interesting, but the blue-green foliage and vigorous habit are the primary assets on arbors, trellises, etc.

Limitations & Liabilities: This vine has a potential to overwhelm structures and surrounding companion plants in the landscape; it may also escape cultivation in some settings becoming a weed, particularly in northeastern portions of our region.

Landscape Utilization: It is best used where it can be allowed to climb a strong structure alone; placement near pedestrian traffic will allow appreciation of the more subtle effects of flowers and fruit when they occur; where it can be grown effectively, Fiveleaf Akebia makes an attractive cover for trash piles, larger arbors,

pergollas, trellises, and large chainlink fences; Howard (1959) recommends the dainty foliage of this vine for the shade patterns it casts from arbors and trellises; plants can be used as groundcovers in isolated areas where they do not overwhelm companion plants.

Other Comments: *Akebia quinata* can be a prized vine or a weedy nuisance, depending upon one's perspective.

Native Habitat: Fiveleaf Akebia is native to China, Japan, and Korea, but has naturalized in some locations in the Southeastern U.S. and Europe.

Related Taxa: Only one species, *A. quinata*, is widely cultivated in the genus *Akebia* J. Decaisne; *Akebia trifoliata* (C.P. Thunberg) Koidz. (*Akebia lobata*, *Clematis trifoliata*), Three-Leaved Akebia, is sometimes seen in botanical gardens and arboreta, but seldom in the nursery trade; it has three coarser textured leaflets instead of five finer leaflets and more reddish purple flowers than *A. quinata*; hybrids between the two species are known as *Akebia* × *pentaphylla* (T. Makino) T. Makino; neither *A. trifoliata*, nor the hybrid, offer any improvements over *A. quinata* as an ornamental plant.

References: Burras, 1994; Dirr, 2009; Gates et al., 1994; Howard, 1959; Thomas, 1992; Wyman, 1949.

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