

*Akebia quinata* [简体中文](#) [正體中文](#)

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Ranunculales	Lardizabalaceae

**Common name** chocolate vine (English), Akebia (Japanese), fiveleaf (English), fiveleaf akebia (English), mu tong (Chinese), Akébie à cinq feuilles (French), fingerblättrige akebie (German)

**Synonym** *Rajania quinata*, Houtt.

**Similar species** *Aristolochia* spp.

**Summary** *Akebia quinata*, also known as chocolate vine, is a twining woody vine that grows quickly and, if left unmanaged, can cover, out-compete and kill existing ground level herbs and seedlings, understory shrubs and young trees. Once established, its dense growth prevents seed germination and establishment of seedlings of native plants.



[view this species on IUCN Red List](#)

## Species Description

*Akebia quinata* grows as either a twining vine or vigorous groundcover and has slender, rounded stems that are green when young and brown at maturity. The palmate (like a hand) leaves of *A. quinata* alternate along the stem and are divided into five, or sometimes fewer, approximately equal parts called leaflets, the small stems of which meet at a central juncture. Leaflets are generally long, oval in shape, 1½ to 3 inches long, with a purplish tinge that becomes blue-green at maturity. Flowers are chocolate-purple coloured, fragrant, and about 1 inch across. Fruits are purple-violet, flattened sausage-like pods, 2 ¼ to 4 inches in length. The inside of the pod has a whitish, pulpy core with many tiny black seeds. *A. quinata* is deciduous in cooler climates but may remain evergreen in warmer regions. Flowers and fruits are uncommon.

## Notes

Plants in this genus are notably resistant to honey fungus. Plants are shy to fruit, as they possibly require hand pollination and some protection in the flowering season. It may not fruit in the United Kingdom. Flowers have the scent of vanilla, especially at night.

## Lifecycle Stages

*Akebia quinata* takes about 5 years to mature. Plant lifespan not found.

## Uses

*Akebia quinata* The edible fruits have a sweet taste and are also used in some cancer treatments. Soft, young shoots are used in salads or pickled. The leaves are used as a tea substitute. Taken internally, the stem controls bacterial and fungal infections and is used in the treatment of urinary tract infections and to induce menstruation and lactation. The stems are harvested in the autumn and dried for later use. The root acts as an antipyretic.



## Habitat Description

*Akebia quinata* tolerates shade and drought, and it can invade many types of habitats. It prefers light (sandy), medium (loamy), and heavy (clay) soils but requires a well-drained yet moist soil. *A. quinata* can succeed in either acid or alkaline conditions. Although it prefers partial shade and does well on northerly aspects, it can also succeed in full sun. The dormant plant is hardy to about -20°C, however, young growth in spring is frost-tender even on mature plants. It is semi-evergreen in milder winters.

## Reproduction

*Akebia quinata* spreads primarily by vegetative means. The scented flowers are monoecious (individual flowers are either male or female, but both sexes can be found on the same plant). This plant does not always produce fruits, and seeds are not known to be carried by wind or insects. While birds may play a role in seed dispersal, *A. quinata* appears to be spread largely by humans. The seeds of *A. quinata* usually germinate in 1 to 3 months at 15°C. Vegetative growth output ranges from twenty to forty feet in a single growing season.

## General Impacts

*Akebia quinata* This vine is invasive and ecologically dangerous as it tends to naturalise easily in favourable climates. Once established, it poses a serious threat to native flora, out-growing and displacing native plants and usurping light, water, nutrients, and space.

## Management Info

**Physical:** Small infestations of *Akebia quinata* can be controlled mechanically by cutting repeatedly, as needed, throughout the growing season. At a minimum, akebia should be cut back to the ground at the end of the summer. Vines may be dug up, removing as many of the roots as possible. To ensure long term control, repeated cutting, digging, or pulling and monitoring will be necessary.

**Chemical:** For large infestations, use of a labeled systemic herbicide, such as glyphosate (e.g., Roundup) or triclopyr (e.g., Garlon), is probably the most effective method of control.

## Pathway

It was brought to the United States in 1845 as an ornamental plant and has since naturalized in the warmer climates.

**Principal source:** [Plant Conservation Alliance, Alien Plant Working Group \(19 August 1998\).](#) ;

**Compiler:** National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG)

**Review:** Jil Swearingen, Entomologist / IPM Coordinator, Center for Urban Ecology.USA

**Publication date:** 2005-01-24

## ALIEN RANGE

[1] UNITED KINGDOM

[19] UNITED STATES

## BIBLIOGRAPHY

6 references found for *Akebia quinata*

### Management information

Blueyonder, 2002. Elusive Garden Links: *Akebia quinata*.

**Summary:** The site gives information on family, common name, growth, origin, hardiness, description, and uses of the plant.

[European and Mediterranean Plant Protection Organization \(EPPO\), 2006. Guidelines for the management of invasive alien plants or potentially invasive alien plants which are intended for import or have been intentionally imported. EPPO Bulletin 36 \(3\), 417-418.](#)



# GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Akebia quinata*

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Reese, A., R. E. Lyons, and J. M. Swearingen. 1998. Fiveleaf Akebia (*Akebia quinata*). Washington, DC: National Park Service, Plant Conservation Alliance, Alien Plant Working Group.

**Summary:** Report on description, ecological threat, current management approaches, distribution, and habitat in the United States.

## General information

[ITIS \(Integrated Taxonomic Information System\), 2004. Online Database \*Akebia quinata\*](#)

**Summary:** An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.

Available from: [http://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=18857](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=18857) [Accessed December 31 2004]

[Plants For A Future, 1998. \*Akebia quinata\*](#)

**Summary:** A searchable database and resource and information centre for edible and other useful plants.

Available from: [http://www.ibiblio.org/pfaf/cgi-bin/arr\\_html?Akebia+quinata&CAN=LATIND](http://www.ibiblio.org/pfaf/cgi-bin/arr_html?Akebia+quinata&CAN=LATIND)

USDA, ARS, 2003. National Genetic Resources Laboratory, Beltsville, Maryland. Germplasm Resources Information Network - (GRIN). [Online Database].

**Summary:** Available from: <http://www.ars-grin.gov/npgs/tax/> [Accessed February 2003].