

## Mini data sheet on *Akebia quinata* (Lardizabalaceae)

Added in 2008 - Deleted in 2012

### Reasons for deletion:

*Akebia quinata* was added to the EPPO Alert List in 2008 but as no immediate risk was perceived, it was transferred to the Observation List in 2012.

### Why

*Akebia quinata* (Lardizabalaceae) is a twining vine or vigorous groundcover plant native to Asia. Its common name is "chocolate vine", or "fiveleaf" in English. The plant has been introduced for ornamental purposes and is still sold as such. Within the EPPO region, its distribution is still limited. Because this plant has shown invasive behaviour where it has been introduced elsewhere in the world and is still limited in the EPPO region, it can be considered as a potential emerging invader in Europe.

### Geographical distribution

**EPPO region:** France (Aquitaine), United Kingdom (South-East England, invasive).

**Asia (native):** China (Anhui, Fujian, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shandong, Sichuan, Zhejiang), Japan (Honshu, Kyushu), Republic of Korea.

**North America (invasive):** USA (Connecticut, Delaware, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, Massachusetts, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Virginia, West Virginia).

### Morphology

This deciduous or half evergreen shrub can grow up to 12 m or more, and has slender, rounded stems that are green when young and brown at maturity. The palmate leaves are divided into 5 (or fewer) equal parts and are alternate. Leaflets are 3-6 cm long, glaucous on the lower side. Female flowers are purplish brown, 25-30 mm in diameter; male flowers are rosy purple, much smaller, and appear on short stalks of 5 mm length. Flowers have the scent of vanilla, especially at night. The fruit is a purplish-violet, flattened pod of 6-8 cm length containing numerous tiny, black seeds.

### Biology and ecology

*A. quinata* is deciduous in cooler climates, but may remain evergreen in warmer regions. It grows extremely quickly (6-12 m per year). The vine spreads mainly vegetatively. This plant does not always produce fruits; seeds are known to be carried by birds, but are not carried by wind or insects. *A. quinata* is largely spread by human activities. It tolerates shade and drought and is hardy to about -20°C, however young growth in spring is frost-tender even on mature plants. It can grow in light (sandy), medium (loamy), and heavy (clay) soils but requires a well-drained yet moist soil. It can succeed in either acid or alkaline conditions.

### Habitats

*A. quinata* thrives in many habitats, particularly in riparian zones, wetlands and urban areas.

### Impact

*A. quinata* forms dense curtains of intertwined stems that cover, out compete and kill existing ground level herbs and seedlings, understory shrubs and young trees, and overtop canopy trees. Once established, the plant prevents germination and establishment of native species.

### Control

Mechanical control of small infestations is achieved by cutting plants several times a year due to their rapid growth. At least, plants should be cut back to the ground at the end of the summer. Vines may be pulled out, removing as many roots as possible. Large infestations can be treated with systemic herbicides such as glyphosate or triclopyr.

### Sources

Global Invasive Species Database. <http://www.issg.org/database/species/ecology.asp?si=188&fr=1&sts=>  
Weber, E (2003) Invasive Plant Species of the World. CABI Publishing Wallingford, (UK) pp. 548, p. 34.

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