

Cardiospermum grandiflorum Sw.

Family:

Sapindaceae

Swartz, O.P. (1788) *Nova Genera & Species Plantarum seu Prodrromus* : 64. Type: Jamaica, collector unknown.

Common name:

Balloon Vine; Vine, Heart Seed; Heart Seed Vine; Vine, Balloon

Stem

A slender vine not exceeding a stem diameter of 2 cm.

Leaves

Leaves trifoliolately bipinnate. Leaflet blades about 3.5-8 x 2-5 cm, leaflet stalks 0-1 cm long. The middle leaflet in each group is usually larger than the associated lateral leaflets. Lateral veins extend from the midrib to both the marginal teeth (or lobes) and the sinuses (or bays) in the leaflet blade margin. Twig pith rather copious.

Flowers

Coiled tendrils usually present at the apex of the inflorescence peduncle. Calyx lobes (sepals) arranged as two pairs, the inner pair larger, about 8 x 4-5 mm, the outer pair about 2-3 mm long. Petals about 9-10 x 4-5 mm. Two large petal-like scales attached to the petals, each scale ending in a bright yellow lobed apex. Stamens eight, filaments fused towards the base. Disk consists of two long peg-like lobes. Ovary hairy on the outer surface.

Fruit

Fruits inflated, +/- three-lobed in section, about 3.5-5 x 3.5 cm, style persistent at the apex, sepals persistent at the base. Seeds globular, about 6-7 mm diam., attached to the middle of a wing about 35-40 x 22-25 mm (Seed wings develop from the walls of the fruit locules.). Embryo globular, about 5-6 mm diam. Cotyledons folded and rolled around one another. Radicle about 1 mm long.

Seedlings

Cotyledons thick and fleshy, about 13-17 x 4-5 mm, cuneate or oblong, caducous, apex +/- truncate, petioles very short or absent. First leaves trifoliolate, leaflets sessile and coarsely toothed or lobed. Third leaf bipinnate. At the tenth leaf stage: leaf compound, bipinnate, terminal leaflet larger than the lateral leaflets. Lateral leaflets +/- sessile. Terminal leaflet blade about 5-6 x 1.5-2 cm. All leaflet margins coarsely toothed with about two to five teeth on each side. Upper and lower leaflet surfaces clothed in pale brown prostrate hairs. Midrib raised on the upper surface. Stems, branches, compound leaf petioles and compound leaf axes clothed in long brown erect hairs. Two-branched tendrils present in the axils of the compound leaf, if not at the tenth leaf stage then normally by the 11th or 12th leaf stage. Stipules persistent, about 0.5 mm long. Seed germination time 30 to 37 days.

Distribution and Ecology

An introduced species originally from the West Indies and Tropical America, now naturalised in NEQ, CEQ and southwards to coastal central New South Wales. Altitudinal range in NEQ from near sea level to 800 m. Grows on rain forest edges on wasteland near towns. Also naturalised in New Guinea.

Natural History & Notes

Although not known to have been used in Australia, the plant has entered into medicinal treatments elsewhere. Cribb (1981).

Synonyms

Cardiospermum hirsutum Willd., *Species plantarum 4th edn.* 2: 467(1799), Type: New Guinea, collector unknown.

RFK Code

2544



Leaves and fruit. © CSIRO



Leaves and Flowers. © CSIRO



Scale bar 10mm. © CSIRO



Cotyledon stage, epigeal germination. © CSIRO



10th leaf stage. © CSIRO



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