## Australian Tropical Rainforest Plants - Online edition

## Muellerargia timorensis Cogn.

#### Family:

### Cucurbitaceae

Cogniaux, C.A. (1881) Monographiae Phanerogamarum 3: 630. Type: Timor, Reinwardt; BO, BR; Bauer 56

Common name:

Spitting Cucumber

#### Stem

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

#### Leaves

Leaf blades about  $3-10.5 \times 3.5-11$  cm, petioles about 1-5.5 cm long. Both the upper and lower leaf blade surfaces +/- sparsely clothed in short white hairs and glands. Tendrils simple, unbranched, tightly coiled, about 13 cm long, leaf-opposed.

#### **Flowers**

Male flowers: Inflorescence up to 17 cm long, main peduncle about 13 cm long, pedicels about 1.5-2.5 cm long. Calyx tube (hypanthium) about 3 mm long, lobes about 1 mm long. Corolla tube about 2.5-3 mm long. Stamens three, two anthers bilocular and one anther unilocular. Connective produced above the apex of the anther cells. Pollen yellow. Female flowers: Pedicels about 5 mm long, clothed in hooked hairs. Flowers about 10 mm diam., outer surface clothed in hooked hairs. Calyx tube (hypanthium) about 11 mm long. Corolla tube about 4 mm long. Ovary about 5 mm long, clothed in soft trichomes (or hairs). Stigma 3-lobed.

#### Fruit

Fruits globular, about 20-30 mm long, clothed in soft spiny outgrowths about 5-7 mm long. Fruit has the capacity to eject seeds from the fruit when fully ripe. Seeds about 8-9 x 4 mm, margins thickened. Seeds enveloped in an aril or sarcotesta. Embryo about 6.5-7 mm long. Cotyledons almost as long as the embryo. Radicle straight, about 1 mm long.

## Seedlings

Cotyledons oblong-elliptic, about 22-25 x 13-15 mm. Both the upper and lower surfaces clothed in hairs, more so on the upper surface. Cotyledons 3-veined at the base with another pair of veins further up. First leaves cordate, apex apiculate, base auriculate. Leaf blades palmately veined, margins toothed with about 13-16 teeth on each side. Both the upper and lower leaf blade surfaces clothed in translucent hairs. Leaves and roots emit an odour like that of cucumber (Cucumis sativus) when crushed. At the tenth leaf stage: leaf blade cordate, apex shortly mucronate, base shallowly auriculate. Margin with about 12-16 teeth on each side, some teeth coarse, lobe-like but not peglike. Venation palmate. Midrib raised on the upper surface. Lateral veins about 2 or 3 on each side of the midrib but only in the apical half of the leaf blade. Both the upper and lower leaf blade surfaces clothed in stiff, bristly hairs. Tendrils simple, not axillary but produced near the leaf axils. Seed germination time 7 days.

## Distribution and Ecology

Occurs in WA, NT, CYP and NEQ. Altitudinal range from near sea level to 550 m. Grows in beach forest, vine thicket and monsoon forest. Also occurs in Malesia.

### Natural History & Notes

Known as Spitting Cucumber because the seeds are ejected up to 1 m when fruit falls or is pulled from the vine.

## Synonyms

Zehneria ejecta F.M.Bailey, *The Queensland Flora* 2: 699(1900), Type: Thursday Island, E. Cowley (inflorescence 1893). I only received fruit in 1897. Holo: BRI. **Melothria subpellucida Cogn.**, *Bulletin de L'Academie Royale des Sciences, des Lettres et des Baeux-Arts de Belgique ser.* 3, 14: 356(1887), Type: Queensland, Endeavour River, W. Persieh 1179; syn: BR, MEL. **Melothria ejecta (Bailey) Cogn.**, *Das Pflanzenreich Heft* 66: 108(1916).

## **RFK Code**

2553





Female flowers. © CSIRO



Fruit. © K.R. McDonald



Leaves, flowers and fruit. © CSIRO



Scale bar 10mm. © CSIRO



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# Cotyledon stage, epigeal germination. © CSIRO



10th leaf stage. © CSIRO















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