

Tithonia diversifolia (Hemsl.) A.Gray

Family:

Asteraceae

Gray, A. (1883) *Proceedings of the American Academy of Arts & Sciences* 19 : 5.

Common name:

Japanese Sunflower; Mexican Sunflower

Stem

Flowers and fruits as a shrub about 2-4 m tall.

Leaves

Leaf blades rather variable in size and shape, about 7-12 x 2.5-9 cm. Upper surface clothed in short erect hairs. Lower surface clothed in white matted felty hairs. Terminal buds and twigs clothed in matted hairs. Petiole grooved on the upper surface. Twigs fluted.

Flowers

Flowers perfumed, produced in heads with disk florets surrounded by a ring of about 10-15 sterile orange-yellow ray florets and bracts. (The whole structure would be interpreted as a single flower by most casual observers.) Ray floret perianth about 40 x 20 mm. Peduncle hollow towards the apex and rather pithy. Anthers with a lanceolate appendage at the apex. Anthers fused to one another but the filaments free. Ovary and stigmas papillose or hairy.

Fruit

Individual fruits pubescent, at least on the lower half, about 8-10 mm long including the 2 apical spines each about 3 mm long. A glabrous skirt connects the two apical spines.

Seedlings

Hypocotyl clothed in very short hairs just visible with a x10 lens. Stem above the cotyledons clothed in long white erect hairs. First pair of leaves with toothed margins. At the tenth leaf stage: leaves generally deeply lobed, lower surface of the leaf blade densely clothed in white matted hairs. First 5 or 6 pairs of leaves are opposite, subsequent leaves alternate. Freshly broken roots emit an odour very like that of carrots (*Daucus carota*). Seed germination time 7 days.

Distribution and Ecology

An introduced species originally from Central America, now naturalised in NEQ, CEQ and southwards as far as north-eastern New South Wales. Altitudinal range in NEQ from near sea level to 850 m. Grows as a weed of agricultural land and in waste places but also found in clearings and along roads in rain forest.

Natural History & Notes

This species may repel termites.

Synonyms

Mirasolia diversifolia Hemsl., *Biol. Cent. Am. Biol.* 2: 168(1881), Type: Mexico, E. Bourgeau 2319; holo: ?.

RFK Code

3413



Leaves and Flowers. © CSIRO



Scale bar 10mm. © CSIRO



10th leaf stage. © CSIRO



Cotyledon stage, epigeal germination. © CSIRO



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