

# *Stylidium despectum*



Image by Micah Visoiu

**FAMILY:** STYLIDIACEAE

**BOTANICAL NAME:** *Stylidium despectum*  
R.Br., *Prodr. Fl. Nov. Holland.* 571 (1810)

**COMMON NAME:** Small triggerplant

**COMMONWEALTH STATUS (EPBC Act):** Not Listed

**TASMANIAN STATUS (TSP Act):** rare

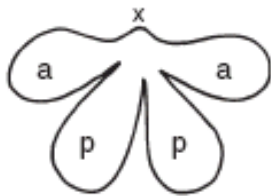
## Description

Annual herb, 1 to 10 (to 15) cm high; flowering stems red or greenish-reddish, erect, simple or with a few branches from near the base. Leaves scattered on stem, crowded at base or arranged in a discrete rosette, subulate to linear or ovate, 1 to 12 mm long, 0.2 to 0.5 mm wide, margin entire, glabrous. Inflorescence a monochasial or dichasial cyme, or with flowers solitary, 1 to c. 45 flowers per plant. Hypanthium (calyx tube) oblong, 1.5 to 6 mm long, 0.3 to 1.5 mm wide, glabrous or with sparse glandular hairs; the five calyx lobes are 0.5 to 1.8 mm long, with three free and two fused for more than half their length. Corolla tube 0.2 to 0.5 mm long, with 0 to 6 minute, white or yellowish tooth-like appendages in the throat; lobes pink with white bases and a yellowish throat, more rarely all white, pale on reverse. Four main corolla lobes in fan-shaped arrangement relative to the much-reduced fifth lobe (= labellum); anterior lobes (the pair either side of the labellum) elliptic, broader than posterior lobes, 1 to 2.2 mm long, 0.5 to 1.2 mm wide; posterior lobes narrowly obovate, 1 to 2.2 mm long, 0.4 to 0.9 mm wide. Filaments of the two stamens united with the style to form a column, anthers attached at its top, with the stigma between them; column immobile, arching towards the posterior corolla lobes, 1 to 3.2 mm long, glabrous. Fruit a dry capsule, obloid, 4 to 10 mm long, containing numerous minute brown seed. Flowering from late September to early January, with a peak in October and November (depending on seasonal conditions). (Description based on Wege 2011)

**Taxonomic issues:** Curtis (1963) listed three annual *Stylidium* species for Tasmania, *S. brachyphyllum*, *S. despectum* and *S. perpusillum*, with *S. brachyphyllum* later being listed as synonymous with *S. inundatum* (Buchanan 2005). The treatment followed here, that of Wege (2011), also recognises three species for Tasmania, *Stylidium beaugleholei*, *S. despectum* and *S. perpusillum*, with the presence of *S. beaugleholei* J.H. Willis confirmed and a change of circumscription for *S. despectum* ('*S. inundatum*' now being considered endemic to Western Australia). Note that, aside from *S. perpusillum*, there is not a strict one-to-one relationship between the species

described by Curtis (1963) and those of Wege (2011), as Curtis's descriptions and illustrations included a contradictory combination of characters from up to three taxa (Wege 2011). Thus any records for *S. despectum* or *S. inundatum* (sensu Buchanan 2005) in Tasmania that lack supporting herbarium collections should be treated as unconfirmed pending field surveys of the locations in question.

**Confusing species:** *Stylidium despectum* is most likely to be confused with *S. beaugleholei*, a species with which it often co-occurs (Wege 2011). The corolla lobes of *S. beaugleholei* are white with a prominent pinkish-red colouration on the underside, whereas those of *S. despectum* are pale pink with a white base (rarely completely white). The posterior corolla lobes of *S. beaugleholei* are almost twice the length of the anterior pair, but in *S. despectum* they are roughly equal to or slightly shorter than the anterior lobes (Figures 1–3 after Wege 2011). *Stylidium perpusillum* is another annual triggerplant that may be confused with *S. beaugleholei*; it differs most obviously in having a globose to ellipsoid capsule and a mobile column (Wege 2011).



**Figure 1.** Fan-shaped arrangement of corolla lobes: x = position of labellum, a = anterior lobe, p = posterior lobe.

**Figure 2.** *S. beaugleholei*

**Figure 3.** *S. despectum*

### Distribution and Habitat

On mainland Australia *Stylidium despectum* occurs in Western Australia, South Australia, Victoria and New South Wales (Wege 2011). In Tasmania the species has been recorded from King Island, the Midlands and Hobart area, near-coastal regions in the northeast, Clarke Island and possibly Flinders Island (unvouchered records). Habitat includes wet, sandy heaths, the margins of drying swamps, soaks and moist depressions (Gray 2011), associated herbs generally including species in the genera *Drosera*, *Utricularia* and *Centrolepis*.



*Stylidium despectum* at the margins of Lake Martha Lavinia, King Island: habitat and habit (images by Richard Schahinger)

## **Key Sites and Populations**

Lake Martha Lavinia, Nook Plains and Granite Lagoon (King Island), Powranna, Tom Gibson and Smiths Lagoon (Midlands), Stony Head, Waterhouse, Mt William and Cape Portland (Northeast).

## **Known Reserves**

Cape Portland Conservation Area, Lavinia State Reserve, Moulting Lagoon Game Reserve, Mount William National Park, Powranna Nature Reserve, Seal Rocks State Reserve, Tom Gibson Nature Reserve, Waterhouse Conservation Area.

## **Ecology and Management**

Plants of the genera *Stylidium* are known as ‘trigger plants’ ... when the base of the column bearing the anthers (pollen sacs) is disturbed, the column flicks forward, showering the back of visiting insects with pollen. This pollen is brushed off onto the female surface of other flowers visited (Curtis 1963).

With regard to threats and management, clearance of suitable habitat is considered a threat to sites on private land. Considerable areas of potential coastal heathland habitat have been cleared and converted to pasture since European settlement (Kirkpatrick 1977), and those that have not been converted are often subject to stock grazing. Areas where this species is encountered should be managed as stock-free zones, as the species is considered susceptible to trampling. Suitable fire frequencies may benefit the species by reducing the competition for light from surrounding taller shrubs.

## **Conservation Status Assessment**

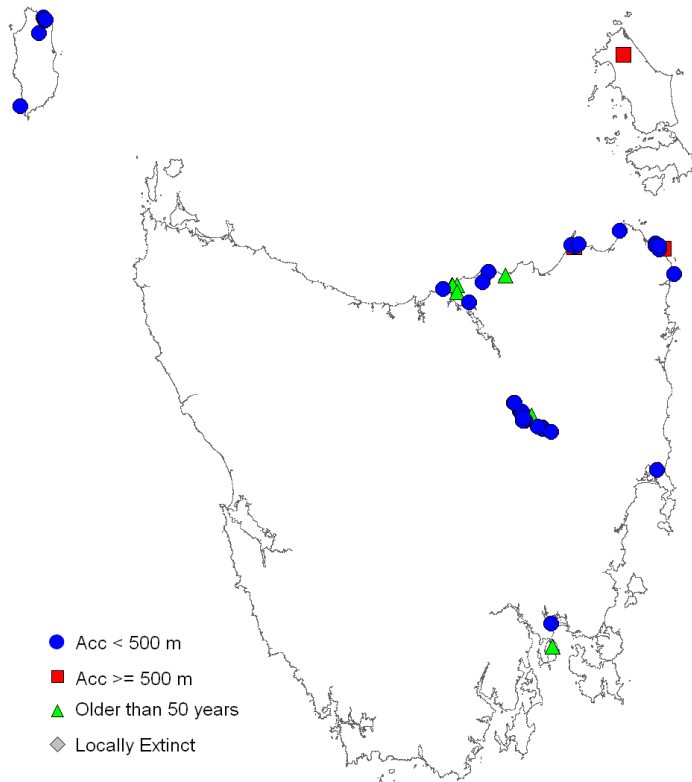
Numerous new sites have been discovered in Tasmania since the taxon was listed on the TSP Act in 1995, with significant populations located in formal reserves on King Island and the Midlands, as well as on private properties covered by conservation covenants in the Midlands. A re-assessment of its conservation status may be warranted, bearing in mind the taxonomic issues noted above.

## **Further Information**

- Buchanan, A.M. (2005). *A Census of the Vascular Plants of Tasmania & Index to the Student's Flora of Tasmania*. Tasmanian Herbarium, Tasmanian Museum and Art Gallery, Hobart.
- Curtis, W.M. (1963). *The Student's Flora of Tasmania, Part 2*. Government Printer, Hobart.
- Gray AM (2011). 127 Stylidiaceae, version 2011:1. In MF Duretto (Ed.) *Flora of Tasmania Online*. 9 pp. (Tasmanian Herbarium, Tasmanian Museum & Art Gallery: Hobart). [www.tmag.tas.gov.au/floratasmania](http://www.tmag.tas.gov.au/floratasmania)
- Kirkpatrick, J.B. (1977). *The Disappearing Heath*. Tasmanian Conservation Trust, Hobart.
- Wege, J. (2011). A taxonomic revision of the *Stylidium despectum* group (Stylidiaceae) from southern Australia. *Australian Systematic Botany* 24: 375–404.

## Tasmanian Distribution

(As per Threatened Species Section records, December 2011)



### 1:25 000 Map Sheets

Bell Bay, Cleveland, Cremorne, Cressy, Diamond, Eddystone, Egg Lagoon, Friendly, Greens Beach, Hobart, Low Head, Lyme Regis, Naturaliste, Nile, Saltwater, Stokes, Tam O'Shanter, Waterhouse, Weymouth, Wingaroo (also known from Clarke Island).

Date last modified: 30/01/2012

### View

<http://www.dpipwe.tas.gov.au/threatenedspecieslists>

### Contact details

Threatened Species Section, Department of Primary Industries, Parks, Water & Environment, GPO Box 44, Hobart, Tasmania, Australia, 7001. Phone (03) 6233 6556; fax (03) 6233 3477.

### Permit

It is an offence to collect, disturb, damage or destroy this species unless under permit.