Stylidium beaugleholei

Image by Micah Visoiu

FAMILY: STYLIDIACEAE

BOTANICAL NAME: *Stylidium beaugleholei* J.H.Willis, *Muelleria* 1(3): 153 (1967)

COMMON NAME: Blushing triggerplant

COMMONWEALTH STATUS (EPBC Act): Not Listed

TASMANIAN STATUS (TSP Act): rare

Description

Annual herb, 0.5 to 5 (to 7) cm high, with usually one (but up to four) red or greenish-reddish erect flowering stems that are sparingly glandular hairy or glabrous. Leaves in a basal rosette or crowded at the base of the stem, linear or subulate, more rarely obovate or elliptic, 0.8 to 12 mm long, margin entire, glabrous. Inflorescence a monochasial cyme or with flowers solitary, 1 to c. 15 flowers per plant. Hypanthium (calyx tube) obloid, 1.2 to 5 mm long, 0.4 to 1 mm wide, with sparse glandular hairs; the five calyx lobes 0.5 to 1.5 mm long, two fused for more than half their length. Corolla tube 0.2 to 1.5 mm long, with 0 to 6 minute, white tooth-like appendages in the throat; lobes white or pale pink, with prominent pinkish-red markings on their undersides. Four main corolla lobes in fan-shaped arrangement relative to the much-reduced fifth lobe (= labellum); two anterior (labellum-side) lobes obovate or spathulate, 0.7 to 1.1 mm long, 0.5 to 0.7 mm wide; two posterior lobes obovate, 1.2 to 2 mm long, 0.5 to 0.8 mm wide, that is, nearly twice as long as the anterior lobes. 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 somewhat towards the posterior corolla lobes, 1 to 2.5 mm long, glabrous. Fruit a dry capsule, obloid, 2.5 to 7 mm long, containing numerous, minute dark-brown seed. Flowering mid-October to early January, with a peak in 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 beaugleholei* is most likely to be confused with *S. despectum*, a species with which it often co-occurs (Wege 2011). The corolla lobes of *S. despectum* are very pale pink with a white base (rarely completely white), whereas those of *S. beaugleholei* are white with a prominent pinkish-red colouration on the underside. The posterior corolla lobes of *S. despectum* are roughly equal to or slightly shorter than the anterior lobes, but in *S. beaugleholei* they are almost twice the length of the anterior pair (Figures 1–3 after Wege 2011). The leaves of *S. despectum* are often scattered on the flowering stem, though they can also be arranged in a basal rosette like those of *S. beaugleholei*. *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).

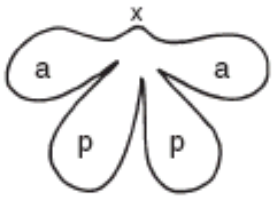


Figure 1. Fan-shaped arrangement of corolla lobes: x = position of labellum, a = anterior lobe, p = posterior lobe.

Figure 2. *S. beaugleholei*

Figure 3. *S. despectum*

Distribution and Habitat

On mainland Australia *Stylidium beaugleholei* occurs in Western Australia, South Australia and Victoria (Wege 2011). In Tasmania the species occurs in near-coastal situations on King Island and the northwest, the northeast, Cape Barren Island and Flinders Island, and also Clarke Island and Deal Island (Wege 2011). Habitat includes wet sandy heaths, moist depressions, soaks and hollows (Gray 2011), associated herbs generally including species in the genera *Drosera*, *Utricularia* and *Centrolepis*.

Stylidium beaugleholei: habitat at Seal Rocks (King Island) and habit at Nettley Bay (Arthur-Pieman) (images by Richard Schahinger & Janine Cranney)

Key Sites and Populations

Seal Rocks and Lavinia Plains (King Island), Sarah Anne Rocks (Arthur-Pieman), Mt William, Stony Head and Waterhouse (Northeast), Trousers Point (Flinders Island).

Known Reserves

Arthur-Pieman Conservation Area, Cameron Regional Reserve, Counsel Hill Conservation Area, Granite Point Conservation Area, Kent Group National Park, Killiecrankie Nature Recreation Area, Lavinia State Reserve, Mount William National Park, Patriarchs Conservation Area, Seal Rocks State Reserve, Strzelecki National Park, Waterhouse Conservation Area and West Point State Reserve.

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

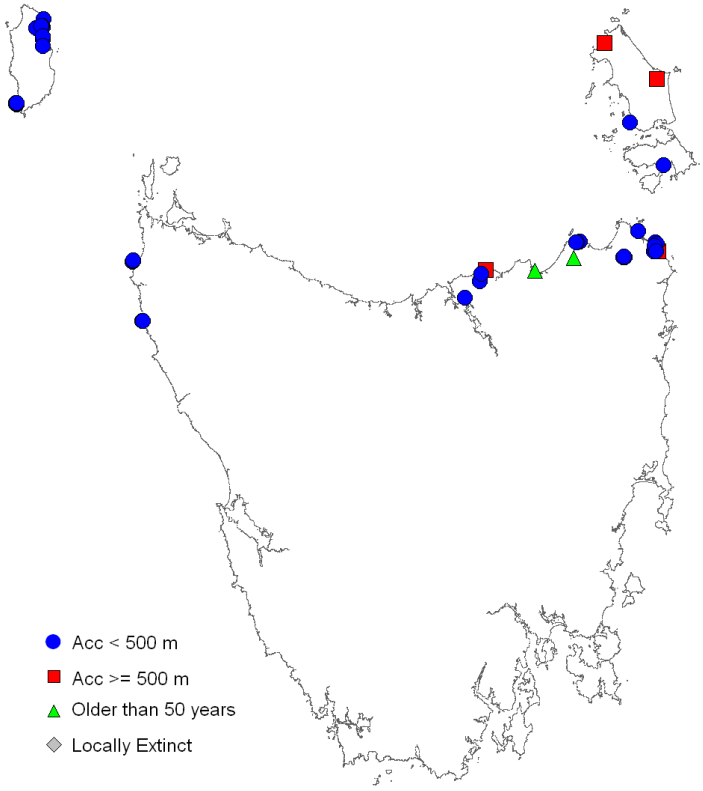
Several new sites have been discovered in Tasmania since the taxon was listed on the TSP Act in 1995, and its range extended considerably to include King Island and the northwest. A re-assessment of its conservation status may be warranted, bearing in mind the taxonomic issues noted above.

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
- 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, Bridport, Egg Lagoon, Gladstone, Kerford, Loccota, Lyme Regis, Marrawah, Naturaliste, Oxberry, Palana, Patriarchs, Saltwater, Stokes, Tam O'Shanter, Temma, Waterhouse, Weymouth (also known from Clarke Island and Deal Island).

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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.