

# *Lepidium flexicaule*



Image by Micah Visoiu

**FAMILY:** BRASSICACEAE

**BOTANICAL NAME:** *Lepidium flexicaule*  
Kirk, *Trans. & Proc. New Zealand Inst.* 14:  
380 (1882)

**COMMON NAME:** springy peppercress

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

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

## Description

*Lepidium flexicaule* is a summer-green perennial herb forming densely leafy patches. It has a strongly pungent aroma, and a fleshy tap-root up to 300 mm long. Its stems are weakly flexuous, prostrate to decumbent, up to 80 cm long and 5 mm in diameter, pale yellow-green to dark green, sometimes tinged maroon and finely puberulent with short papillate or tapered hairs (becoming glabrous with age). The leaves are glabrous, firmly fleshy to succulent, glossy dark-green to yellow-green, turning yellow at senescence. Rosette and lower stem leaves withering at fruiting. Leaves up to 90 mm long by 30 mm wide, pinnatifid, obovate to oblanceolate or spatulate, the apices bluntly toothed to crenate. The leaf margins usually have minute protrusions (papillae) or scales. Flowers are sweetly fragrant, arranged in racemes 10 to 50 mm long, terminal and leaf-opposed. The sepals are about 1 mm long, broadly ovate to oval with a broadly obtuse apex, centrally green with a white margin, while the petals are slightly shorter and narrower, white, spreading and clawed; stamens 2. The fruit is a capsule, orbicular, obovate to ovate, c. 3.5 mm by 3.5 mm, slightly winged in the upper quarter, and the apex shallowly notched. Seeds 2, 1.5 to 2 mm long, ovoid to suborbicular, red-brown to brownish-black. Flowering is likely to occur from October to February, and fruiting from December to April. (description from Flora of Australia 1982 and de Lange et al. 2013). **Confusing species:** The naturalised *Lepidium didymum* and *Lepidium coronopus* are similar (de Lange et al. 2013).

## Distribution and Habitat

*Lepidium flexicaule* is known from New Zealand and Tasmania (Flora of Australia 1982, de Lange et al. 2013). In Tasmania the species has been recorded from coastal areas of the State's southwest, with about a dozen sites over a 130 km stretch of coastline, and an historic record from Bruny Island. *Lepidium flexicaule* is considered to be a strictly coastal species, typically growing in rock crevices and the strandline of

bouldery beaches (Garnock-Jones & Norton 1995), co-occurring species including *Apium prostratum* and *Asplenium obtusatum*.

[The species has been recorded from Three Hummock Island in the State's northwest (Harris & Balmer 1996); however, given the disjunct nature of the site and the lack of a voucher specimen it has been flagged as 'questionable' in DPIPWE's Natural Values Atlas database.]



*Lepidium flexicaule*: Collection from mouth of Rheuben Creek, 22 Feb 1985 (HO 406782)

### **Key Sites and Populations**

Port Davey (Gull Reef and Black Swan Island), Hibbs Bay, Endeavour Bay, Nye Bay, Rheuben Creek, Elliott Point, Hobbs Island, Trumpeter Islets, Mutton Bird Island.

### **Known Reserves**

Southwest Conservation Area, Southwest National Park.

### **Ecology and Management**

*Lepidium flexicaule* tends to occur within the spray zone and in sites prone to frequent disturbance, including sea bird rookeries. Plants may die down to rootstock in winter or in times of adversity, resprouting in spring (de Lange et al. 2013). The seeds of *Lepidium flexicaule* are mucilaginous when wet, and are likely to be dispersed by birds, and possibly by wind and water (Thorsen et al. 2009).

Potential threats to the species include oil spills (Carlyon et al. 2013).

### **Conservation Status Assessment**

At the time of its listing as rare on the TSP Act in 1995, *Lepidium flexicaule* had been recorded from nine sites in Tasmania's southwest (dating from 1977 to 1986), with an historic record from Bruny Island. Most of these sites were discovered during surveys undertaken by the Tasmanian Herbarium in the mid-1980s, notes on abundance ranging from 'Rare' to 'Localised. Common'.

Three new sites have been recorded in the interim, each on islands in the southwest within a kilometre or two of the coast (Carlyon et al. 2013). The new sites essentially

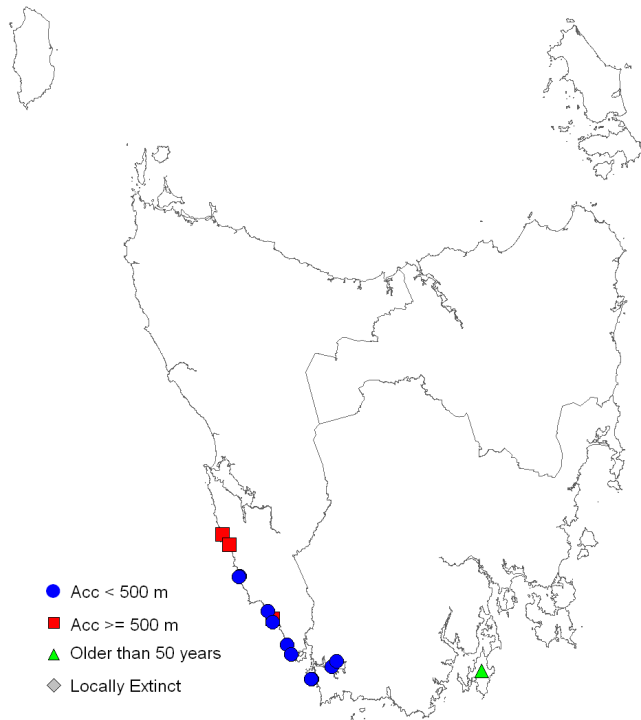
represent ‘infills’, with plant numbers typically fewer than a dozen (Visoiu, pers. comm.). The general impression is of a species that is sparsely distributed and localised, though one that is likely to have been under-recorded due to the area’s remoteness. Surveys of older sites are required to determine their current status and threats before a meaningful re-assessment of the species’ conservation status can be made.

### **Further Information**

- Carlyon, K., Philips, A., Rudman, T. & Visoiu, M. (2013). *Islands of the Port Davey Area: Biodiversity and Oil Spill Response Survey*. Resource Management and Conservation Division, DPIPWE, Hobart, Nature Conservation Report Series 13/07.
- de Lange, P.J., Heenan, P.B., Houlston, G., Rolfe, J.R. & Mitchell, A.D. (2013). New *Lepidium* (Brassicaceae) from New Zealand. *Phytokeys* 24: 1–147.
- Flora of Australia (1982). *Volume 8: Lecythidales to Batales*, Griffin Press Limited, South Australia.
- Garnock-Jones, P.J. & Norton, D.A. (1995). *Lepidium naufragorum* (Brassicaceae), a new species from Westland, and notes on other New Zealand coastal species of *Lepidium*. *New Zealand Journal of Botany* 33: 43–51.
- Harris, S. & Balmer, J. (1996). The Vegetation and Flora of Three Hummock Island, Western Bass Strait. *Papers and Proceedings of the Royal Society of Tasmania* 131: 37–56.
- Thorsen, M.J., Dickinson, K.J.M. & Seddon, P.J. (2009). Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309.

## Tasmanian Distribution

(As per Threatened Species Section records, September 2016)



### 1:25 000 Map Sheets

Breaksea, Cloudy (?) Elliott, Endeavour, Hibbs, Hilliard, Mainwaring, Mulcahy, Melaleuca, Rugby, Settlement.

Date last modified: 5/09/2016

### View

[www.dpipwe.tas.gov.au/threatenedspecieslists](http://www.dpipwe.tas.gov.au/threatenedspecieslists)

### Contact details

Threatened Species Section, Department of Primary Industries, Parks, Water and Environment, GPO Box 44, Hobart, Tasmania, Australia, 7001. Phone (03) 6165 4340.

### Permit

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