# Epacris virgata

FAMILY: EPACRIDACEAE

**BOTANICAL NAME:** *Epacris virgata* Hook.f., *London J.* 

Bot. 6: 271 (1847)

**COMMON NAME:** pretty heath

**COMMONWEALTH STATUS:** (EPBC Act) Endangered

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

The Tasmanian endemic shrub 'Epacris virgata' is considered here to consist of two geographically disjunct taxa, Epacris virgata (Beaconsfield) and Epacris virgata (Kettering) (Keith 1998). Epacris virgata (Beaconsfield) occurs in the state's north near Beaconsfield (mostly on serpentinite), while Epacris virgata (Kettering) occurs in the state's southeast in the Channel and Peninsula areas.

The morphometric study of the 'Epacris tasmanica complex' by Crowden and Menadue (1991) concluded that these two taxa were morphologically inseparable, a view reiterated by Crowden (2007).

The decision to consider the two as separate taxa follows the approach taken by Keith (1998) in the *Recovery Plan – Tasmanian Forest Epacrids 1999–2004*, and reflects the taxa's recognised ecological and genetic differences (Keith 1998; Gilmour *et al.*, 2000). It is hoped that additional morphometric analyses will formally resolve the situation in the near future.



Epacris virgata (Beaconsfield) Image by P. Black



Epacris virgata (Kettering) Image by P. Black





Epacris virgata (Beaconsfield) Image by P. Black



Epacris virgata (Kettering) Image by P. Black

# **Survey Time and Habitat Guide** (*black* = best, *dark grey* = possible, *light grey with slash*=poor time to survey, as guided by collection dates of specimens and records)

ĺ	Epacris virgata	Spring						Summer						Autumn						Winter					
	pretty heath	S	S	О	О	N	N	D	Þ	y	Ŋ	F	F	М	M	A	Ą	M	M	y	Ŋ	Ŋ	Ŋ	Α	Α

- There are two types of this erect multi-branched woody shrub. *Epacris virgata* (Beaconsfield) flowers in spring and is distinguished by its long ultimate branches, its non-pungent leaves and flowers with prominently exserted anthers and stigma. *Epacris virgata* (Kettering) flowers in spring and is distinguished by its slender branches, lanceolate prickly leaves, and small flowers with prominently exserted floral parts. An autumn-flowering variant is sometimes ascribed to *Epacris virgata* (Kettering). *Epacris virgata* can be identified at any time of the year using vegetative characters but flowers aid detection (old flower spikes are almost always present so separation from other species in the *Epacris tasmanica* species-complex is possible).
- Epacris virgata (Beaconsfield) is restricted to a small area of undulating terrain in the foothills of the Dazzler Range near Beaconsfield, where it occurs on serpentinite-derived soils in dry sclerophyll forest at an elevation of 40 to 80 m above sea level. Epacris virgata (Kettering) occurs among foothills in south-eastern Tasmania in dry sclerophyll forest on hilly terrain at elevations of 10 to 300 m above sea level, mainly on dolerite, though sometimes close to the geological boundary of dolerite and Permian mudstone. It is generally associated with grassy/heathy Eucalyptus ovata woodland/forest, but is also occasionally found in grassy/heathy Eucalyptus pulchella woodland/forest.

# Epacris virgata (Beaconsfield)

# **Description**

Epacris virgata (Beaconsfield) is an erect shrub, branching near the base, and growing up to 1.5 m tall. Its branches are slender, bearing thick ovate flat leaves, 4–6 mm long and 2–3 mm wide with short stalks (<1 mm long), an obtuse-acute apex and semi-conspicuous mid-vein on the lower surface. Flowering occurs in spring. Flowers are white, solitary in the leaf axils, subsessile and scattered sparsely along long new branches. The corolla tube is 2.5–3 mm long, while the five corolla lobes are 3.5–4.2 mm long. The style is 4–4.5 mm long, and the stigma and anthers protrude from the corolla tube.

The species is distinguished by its long virgate ultimate branches, its non-pungent leaves and flowers with prominently exserted anthers and stigma (Keith 1998).

#### **Distribution and Habitat**

*Epacris virgata* (Beaconsfield) is endemic to Tasmania. The species is restricted to a small area of undulating terrain in the foothills of the Dazzler Range near Beaconsfield, where it occurs on serpentinite in dry sclerophyll forest; the elevation range is 40–80 m. An outlying population occurs on dolerite near Pipers River east of the Tamar (Crowden 2005, pers. comm.). The linear range of the species is 44 km.

# **Key Species and Populations**

Key sites for the conservation of *Epacris virgata* (Beaconsfield) include Mt Vulcan, Hinds Road and Pipers River. There are two populations, the first near Beaconsfield with more than 1,700,000 plants in an area of 150 to 170 ha, and the second at Pipers River with about 3000 plants in an area of less than 1 ha.

## **Known Reserves**

Reserved in Andersons Creek Regional Reserve, Dans Hill Conservation Area and Pipers River Regional Reserve.

#### **Ecology and Management**

This species is known to be susceptible to the exotic soil-borne disease *Phytophthora cinnamomi* (root rot) (Barker 1994). Recruitment after fire may only occur if there is sufficient rainfall. Shade, promoted by a decrease in the fire frequency and increase in weed abundance, is detrimental to this species (TPLUC 1996). Other threats include a high fire frequency, land clearance, mining activities and invasion by weeds (Keith 1998).

The species is included in the *Recovery Plan – Tasmanian Forest Epacrids 1999–2004* (Keith 1998). Management strategies aim to mitigate threatening processes such as disease, vegetation clearance, habitat degradation, weed invasion and adverse fire regimes. Some of the Epacris *virgata* (Beaconsfield) populations are within designated *Phytophthora cinnamomi* management areas (Schahinger *et al.* 2003), while an ecological burn of habitat in the Beaconsfield area was conducted in 2002.

#### **Conservation Status Assessment**

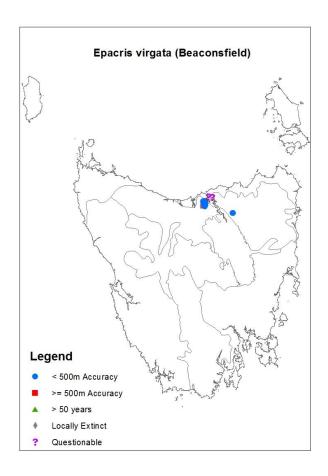
*Epacris virgata* (Beaconsfield) is currently protected at the State and National levels under the listing of *Epacris virgata* Hook.f

#### **Further Information**

- ➤ Barker, P.C.J. (1994). *Phytophthora cinnamomi*: The susceptibility and management of selected Tasmanian rare species. Forestry Tasmania and Australian Nature Conservation Agency.
- ➤ Gilmour, C.A., Crowden, R.K., Vaillancourt, R.E., and Koutoulis, A. (2000). Genetic variation in the *Epacris tasmanica* complex (Epacridaceae). *Papers and Proceedings of the Royal Society of Tasmania* 134: 75–78.
- ➤ Keith, D. (1998). *Recovery Plan Tasmanian Forest Epacrids 1999–2004*, Parks and Wildlife Service, Hobart.
- ➤ Schahinger, R., Rudman, T., and Wardlaw, T. (2003). *Conservation of Tasmanian Plant Species and Communities threatened by* Phytophthora cinnamomi. Nature Conservation Branch Technical Report 03/03, Department of Primary Industries, Water and Environment, Hobart.
- ➤ Tasmanian Public Land Use Commission (1996). *Environment & Heritage Report Vol IV, Background Report, Part C.* Tasmanian Commonwealth Regional Forest Agreement, Hobart.

#### **Tasmanian Distribution**

(Natural Values Atlas May 2015)



# Epacris virgata (Kettering)

# **Description**

Epacris virgata (Kettering), commonly known as twiggy hearth, is an erect multistemmed shrub, sometimes branching near the base and growing up to 2 m tall. Its branches are slender, bearing thick lanceolate-ovate leaves, 4–6 mm long and 2–3 mm wide with short stalks (<1 mm long), an acute apex and conspicuous midvein on the lower surface. Flowering occurs in spring. Flowers are white, solitary in the leaf axils, subsessile and scattered along the upper branches. The corolla tube is 3–4 mm long and the five corolla lobes 3.8–4.7 mm long. The stigma and anthers protrude from the corolla tube.

The species is distinguished by its slender branches, lanceolate 'prickly' leaves, and small flowers with prominently exserted floral parts (Keith 1998).

#### **Distribution and Habitat**

Epacris virgata (Kettering) is endemic to Tasmania. It occurs among foothills around the D'Entrecasteaux Channel and Tasman Peninsula. The species occurs in dry sclerophyll forest on hilly terrain at elevations of 10–300 m above sea level, mainly on Jurassic dolerite, though sometimes close to the geological boundary of dolerite and Permian mudstone. The species is generally associated with grassy/heathy Eucalyptus ovata woodland/forest, but is also occasionally found in grassy/heathy Eucalyptus pulchella woodland/forest.

An autumn-flowering variant of *Epacris virgata* (Kettering) is found in the Thumbs area south of Orford. This variant is known informally as *Epacris virgata* 'var. autumnalis' (Keith 1998), and more recently as *Epacris virgata* (Thumbs). Crowden (2007) considers it to be part of a newly circumscribed *Epacris tasmanica*.

# **Key Species and Populations**

Key sites include Summerleas Road, Hickmans Hill, Birchs Bay, Old Bernies Road, Van Moreys Road, Humphreys Rivulet and Murdunna.

*Epacris virgata* (Kettering) is known from at least 29 populations, with more than 1,500,000 mature plants. The largest known population, Summerleas Road, contains c. 600,000 plants.

#### **Known Reserves**

Reserved within Tasman National Park, South Bruny National Park, Wellington Park, Woodvine Nature Reserve, Sherwood Hill Conservation Area and Coningham Nature Recreation Area. It also occurs on five private properties in areas covered by a conservation covenant under the Tasmanian *Nature Conservation Act* 2002.

# **Ecology and Management**

The main threats to *Epacris virgata* (Kettering) are land clearance, subdivision/housing, weed invasion (especially spanish heath) and inappropriate fire regimes. The exotic soil-borne disease *Phytophthora cinnamomi* (root rot) may also pose a threat to the species, though definitive field symptoms have yet to be observed.

## **Conservation Status Assessment**

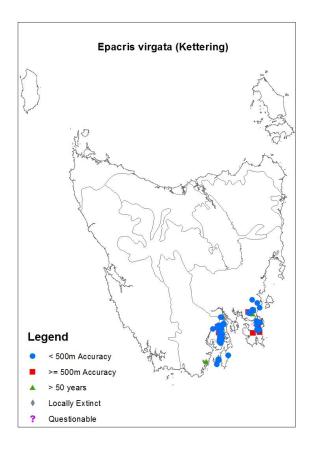
*Epacris virgata* (Kettering) is currently protected at the State level under the listing of *Epacris virgata* Hook.f.

#### **Further Information**

- ➤ Crowden, R.K. (2007). Additions to *Epacris* (Epacridoidae, Ericaceae) in Tasmania. *Muelleria* 25: 115–128.
- ➤ Crowden, R. K., and Menadue, Y. (1990). Morphometric analysis of variation in the 'Epacris tasmanica Complex' (Epacridaceae). Australian Systematic Botany 3: 253–264.
- ➤ Keith, D. (1998). *Recovery Plan Tasmanian Forest Epacrids 1999–2004*. Parks and Wildlife Service, Hobart.
- Tasmanian Public Land Use Commission (1996). *Environment & Heritage Report Vol IV, Background Report, Part C.* Tasmanian Commonwealth Regional Forest Agreement, Hobart.

#### **Tasmanian Distribution**

(Natural Values Atlas May 2015)



## Cite as:

Threatened Species Section (2016). *Notesheet for* Epacris virgata (pretty heath). Department of Primary Industries, Parks, Water and Environment, Tasmania.

#### View

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.

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