## SHORT COMMUNICATION

# Leptospermum: Rare or threatened species in New South Wales.

Briggs & Leigh (1988) list eleven species of Leptospermum as rare or threatened in New South Wales, of which all but L. epacridoideum were undescribed at the time. A series of codes were used to distinguish the different taxa. Since then Thompson (1989) has revised the genus and described the new taxa but does not give the codes or provide information on the conservation status of any of the species. In the light of Thompson's study, the present paper seeks to clarify the names and conservation status of the rare taxa listed by Briggs & Leigh for New South Wales, together with one they overlooked (L. crassifolium), as well as providing additional information on the distribution and ecology of the species. This information is based on the specimens at the National Herbarium of New South Wales and identified by Thompson; it has not involved any additional field checking.

Symbols used in the conservation code of Briggs & Leigh are as follows; 2 — geographic range < 100 km; 3 — geographic range 100+ km; V — vulnerable; R — rare; K — poorly known; C — population reserved; i — inadequately reserved; — adequacy of reservation unknown.

# Leptospermum argenteum J. Thompson

Previously sp. 1 Briggs & Leigh (1988).

DISTRIBUTION: Northern Tablelands; restricted to Barrington Tops, from Tomalla to the Mount Royal Range.

ECOLOGY: Locally abundant along creeks (e.g. Polblue Creek), associated with woodland of *Eucalyptus stellulata* or *E. pauciflora* on basalt soils. Above 1200 m elevation.

Conservation status: coded 2RC – by Briggs & Leigh (1988). Some populations are within Barrington Tops National Park, others within State Forest.

#### Leptospermum blakelvi J. Thompson

Previously sp. 12 Briggs & Leigh (1988).

DISTRIBUTION: Central Tablelands, known from only two sites within 5 km of Lithgow; Hassans Walls (last collected 1981) and on ridge overlooking Lithgow Water Supply (last collected 1939), population confirmed 1990 (P Hind & R Coveny pers. comm.)

ECOLOGY: occurs in heath on shallow sandy soil, on exposed sandstone escarpments above 1100 m. In Pagoda Rock Complex of Keith & Benson (1988). Above 1100 m elevation. Flowers November-December.

Conservation status: coded 2R by Briggs & Leigh (1988). Not recorded for any proclaimed conservation reserve but may be more common in the immediate area, in appropriate habitats, than collections indicate.

## Leptospermum crassifolium J. Thompson

DISTRIBUTION: Southern Tablelands; northern Budawang Range — restricted to Mount Corang and south end of Quiltys Mountain. Range about 15 km.

ECOLOGY: locally abundant shrub in open-heath on sandstone and conglomerate ridgetops and plateaus in peaty sand in joints and rock crevices or on seepage slopes. About 800 m elevation. Flowers February and perhaps later.

CONSERVATION STATUS: A very restricted species with all known populations within Morton National Park, this species should be coded as 2RCa sensu Briggs & Leigh (1988).

## Leptospermum deanei J. Thompson

Previously sp. 15 Briggs & Leigh (1988).

DISTRIBUTION: Central Coast; north of Sydney between Port Jackson and Broken Bay, recorded sporadically along upper Lane Cove River and Devlins Creek, Middle Harbour Creek, Calna Creek and Marramarra Creek.

ECOLOGY: tall shrub, locally common in patches on sandy soils on lower hill-sides and along permanent freshwater creeks in Hawkesbury Sandstone areas. Below 100 m elevation. Flowers October-November, mature fruits in December.

Conservation status: coded 2V by Briggs & Leigh (1988), but recorded for Davidson State Recreation Area and Marramarra National Park. Also in Pennant Hills Park and Berowra Valley Bushland Park, both managed by Hornsby Shire Council. Vulnerable to weed invasion through eutrophication and pollution of creeks. Upper catchment disturbance already present in most creeks in which it occurs.

### Leptospermum deuense J. Thompson

Previously sp. 6 Briggs & Leigh (1988).

DISTRIBUTION: South Coast; confined to rocky ranges between the Deua and Moruya River, about 20 km west of Moruya. Total range about 10 km.

ECOLOGY: on steep rocky ridges and cliff faces in skeletal soil on rhyolite (Comerong Volcanics), locally common shrub in shrub community including *Acacia subtilinervis, Eriostemon trachyphyllus* and *Prostanthera porcata*. Elevation 650 m.

CONSERVATION STATUS: coded 2RCa by Briggs & Leigh (1988) indicating that all known populations are conserved within the Deua National Park.

#### Leptospermum epacridoideum Cheel

DISTRIBUTION: South Coast, around Jervis Bay (Currarong; ACT Territory) and up to 25 km inland (Flat Rock Creek; Yerriyong)

Recent investigations of sandstone areas north of the Shoalhaven River by Kevin Mills of the University of Wollongong have failed to confirm a collection made at Austinmer in 1933.

ECOLOGY: locally common in heathy scrub with species such as *Eucalyptus gummifera*, *Kunzea ambigua* and *Melaleuca thymifolia*, on shallow sandy soil over sandstone. Altitude less than 200 m.

Conservation status: coded 2RC – by Briggs & Leigh (1988) who indicate that the species is recorded for the Gurumbi and Jervis Bay Nature Reserves and Morton National Park though the extent of the conserved populations is not known.

# Leptospermum petraeum J. Thompson

Previously sp. 11 Briggs & Leigh (1988).

DISTRIBUTION: Central Tablelands; known from only two sites; Rocky Top, 5 km west of Kanangra Walls (last collected 1985) and Blackheath (exact location unknown, last collected 1923).

ECOLOGY: in *Eucalyptus stricta* scrub (Montane Heath of Keith & Benson 1988) on a broad, exposed rocky ridgetop with shallow sandy loam, above 1200 m elevation. No details for Blackheath site. Flowers November-April.

CONSERVATION STATUS: coded 2RC – by Briggs & Leigh (1988) indicating that the species has been recorded within Kananga-Boyd National Park, though the extent and size of the population is unknown.

## Leptospermum rupicola J. Thompson

Previously sp. 2 Briggs & Leigh (1988).

DISTRIBUTION: Central Tablelands; Glen Davis, upper Blue Mountains Blackheath to Wentworth Falls, Berrima (last collected 1901). Central Coast; Kangaroo Valley (last collected early this century).

ECOLOGY: not common, found at base of sandstone clifflines and bases of caves. Elevational range 500 — 1000 km (no information on Berrima and Kangaroo Valley sites). Flowers March-May and September-October.

Conservation status: coded 3RC – by Briggs & Leigh (1988). A poorly known species, some populations in the upper Blue Mountains are within Blue Mountains National Park but whether the species still survives in the other areas is not known.

# Leptospermum sejunctum J. Thompson

Previously sp. 14 Briggs & Leigh (1988).

DISTRIBUTION: Central Coast; South Coast junction; within 3 km of Nowra — only three collections — near Bomaderry Creek Weir (last collected 1989); 'Alum Rock' Bomaderry Creek (last collected 1944) and Flat Rock Creek (on Yalwal Road) (last collected 1981).

ECOLOGY: Locally common on sandy soil over sandstone in scrub and woodland with species such as *Eucalyptus gummifera*, *E. punctata*, *Kunzea ambigua*, *Allocasuarina littoralis* and *Hakea sericea*. Elevation range 15–20m.

CONSERVATION STATUS: coded 2K by Briggs & Leigh (1988) indicating that the

taxon was poorly known. As it is apparently restricted to bush remnants very close to Nowra, none of which appear to be conserved, it would appear to be vulnerable if not endangered.

# Leptospermum spectabile J. Thompson

Previously sp. 5 Briggs & Leigh (1988).

DISTRIBUTION: Central Coast; found only along the Colo River.

ECOLOGY: localised small populations found in sandy alluvium or among boulders on river banks in area subject to flooding, in thickets of *Tristaniopsis laurina* and *Lomatia myricoides*. Elevation less than 140 m.

Conservation status: coded 2RC – by Briggs & Leigh (1988), populations in the upper Colo River are within Wollemi National Park, though their size and condition is unknown. Weed invasion may pose threats in lower parts of the River.

# Leptospermum subglabratum J. Thompson

Previously sp. 3 Briggs & Leigh (1988).

DISTRIBUTION: Southern Tablelands, Budawang Range from Sallee Creek to Pigeon House Mountain. Also an old specimen (collected 1911) from North Head, Ulladulla (South Coast). Range about 30 km.

ECOLOGY: abundant in sand among rocks and in crevices around edges of plateaus and mesas, but generally not on extensive flat plateaus, nor on slopes below clifflines. Elevation about 750 m. Flowers December-January.

Conservation status: coded 2RC – by Briggs & Leigh (1988) and probably adequately conserved within Morton National Park. Rediscovery of the population at Ulladulla would be interesting.

# Leptospermum thompsonii J. Thompson

Previously sp. 4 Briggs & Leigh (1988).

DISTRIBUTION: Southern Tablelands; confined to top of Clyde Mountain pass, 30 km north-west of Batemans Bay. Range probably less than 3 km.

ECOLOGY: on top of escarpment in open-forest of *Eucalyptus cypellocarpa* and *E. radiata* along swamp edges or along permanently moist creek banks. Also reported on road verge. Elevation about 750 m.

Conservation status: coded 2V by Briggs & Leigh (1988), not recorded for any conservation area, and vulnerable because of its localised occurrence near a major road.

### References

Briggs, J.D. & Leigh, J.H. (1988). Rare or threatened Australian plants. Australian National Parks and Wildlife Service Special Publication No. 14 (A.N.P.W.S.: Canberra).

Keith, D.A. & Benson, D.H. (1988). The natural vegetation of the Katoomba 1:100 000 map sheet. *Cunninghamia* 2(1): 107–143

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