Macrolearia semidentata

COMMON NAME

Hangatere, Chatham Island aster, swamp aster

SYNONYMS

Olearia semidentata Decne., Olearia semidentata Decne. var. semidentata, Olearia semidentata var. albiflora Dorrien-Smith, nomen nudum, Eurybia semidentata (Decne.) F.Muell

FAMILY

Asteraceae

AUTHORITY

Macrolearia semidentata (Decne.) Saldivia

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Yes

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

OLESEM

CHROMOSOME NUMBER

2n = 108

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: IE, RR

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: IE, RR 2009 | At Risk – Naturally Uncommon | Qualifiers: IE

2004 | Range Restricted

BRIEF DESCRIPTION

Small tree with narrow leathery saw-edged dark green leaves that are white underneath and large pinkish-purple daisy-like heads inhabiting swamps on the Chatham Islands. Leaves 3.5-7cm long by 0.5-1cm wide, widest at middle, with large thick teeth spaced along edge. Flowers 2.5-3.5cm wide.

DISTRIBUTION

Endemic. Chatham Islands only

HABITAT

More or less confined to restiad bog where it is one of three woody shrubs capable of growing amongst *Sporadanthus traversii* (the others are mataira karupuru (*Myrsine coxii*) and *Dracophyllum scoparium*). It is a rapid coloniser of burnt peat bog.

WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

Almost always is a hydrophyte, rarely in uplands (non-wetlands).





A heavily flower shrub at Rangaika, Chatham Islands. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Rangaika, Chatham Islands (January). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Spindly, erect, sparingly branched shrub up to 2 m tall, trunk erect, slender and brittle; bark grey, grey-brown, chartaceous, flaking readily. Branches erect to suberect, (2-)4(-6) mm diameter, quadrangular, brittle, young branches densely invested in white floccose tomentum; tomentum discolouring and shedding in irregular patches as branch matures. Leaves alternate, subsessile, coriaceous; petiole if present, 1.5-2.6 mm long, plano-convex, densely covered in white, appressed to floccose hairs; lamina 30-74(-80) × 6-9(-12) mm, narrow-lanceolate, lanceolate to oblong-lanceolate, adaxially dark green, glossy, initially moderately densely to sparsely covered in white appressed floccose / lanate hairs, glabrescent abaxially, thickly covered in white, appressed hairs, margins weakly, rarely prominently, serrate in distal half to one third, teeth when present in (6-)8-10 pairs, sometimes entire; apex acute, subacute; base shortly attenuate. Inflorescences numerous at apex of branches, terminal, subterminal, axillary. Peduncules 50-80(-100) mm long, initially erect or curved, then spreading, slender (3-6 mm diameter), terete, white tomentose, bracteate, bracts 1-3-many, lanceolate, entire or toothed (2-3)4x, surfaces copiously white, tomentose. Capitula (30-)40 mm diameter. Involucrellum narrowly urceolate to obconic, involucral bracts imbricate, numerous, up to 10 mm long, narrowly lanceolate, deltoid, acute, abaxially maroon-black, covered in pilose / cob-webbed hairs, hairs especially prominent on margins; ray-florets (24-)26-30, 10-12 × 4-5(-6) mm, glabrous, linear-oblong, oblanceolate, apices obtuse, subacute or acute, usually minutely retuse, mucronate, mucro minute; surfaces initially purple, maturing lilac often fading to white tinged lilac; disc-florets(20-)22-26, corolla, magenta to violet-purple, anthers orange yellow, stigma dark magenta. Cypsela 2.5-4.2 mm long, narrowly oblong, narrowly obtriangular, obovate-triangular, compressed, often biconvex, base cuneate, ribbed 8-11, otherwise smooth, almost glabrous, sparsely furnished with short, white antrorse hairs, sparsely glandular, surface brown to grey-brown. Pappus 4.5–6.2 mm long, buff, pale orange-yellow.

SIMILAR TAXA

Easily distinguished from the other *Macrolearia* species by the spindly, sparingly branched shrub growth habit (specimens up to 2 m tall), short and dark mauve (rarely pink) ray florets. The leaves are also diagnostic in that they are oblanceolate with teeth present in the upper third of the lamina, while the teeth are not calloused and are distant from each other (see Saldivia et al. 2022). On the Chatham Islands hangatere (*M. semidentata*) could only be confused with keketerehe (*M. chathamica*). However, keketerehe is a much larger more heavily branched small tree (6–8 m tall) that usually forms a broadly domed canopy. The leaves of keketerehe are much longer, and more finely denticulate than those of hangatere which are shorter sparingly, or coarsely toothed in the upper half to third, while the capitula of keketerehe have dark aubergine coloured disc florets, and longer, narrower, white, white tinged pinkish (very rarely pale mauve) ray florets. Occasional hybrids between hangatere and keketerehe have been collected, notably from Rangaika where the ranges of both species overlap due to past land disturbance along the fringes of a restiad bog.

FLOWERING

November - March

FLOWER COLOURS

Violet/Purple, White

FRUITING

January - June

THREATS

Threatened by loss of habitat through peat bog drainage, over burning of restiad bog, accompanied by drying out of the peat soils, and also by browsing pressure from cattle.

ETYMOLOGY

semidentata: Partially toothed

WHERE TO BUY

Not commercially available.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 28 April 2022. Description by P.J. de lange (27 April 2022).

REFERENCES AND FURTHER READING

Saldivia, P.; Wagstaff, S.J.; Breitwieser, I.; Orlovich, D.A.; Lord, J.M. 2022: A Generic Taxonomic Synopsis of the *Pleurophyllum* Clade (Asteraceae: Astereae: Celmisiinae) with the Recognition of the New Zealand Endemic New Genus *Macrolearia*. *Systematic Botany* 47: 607–634

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Macrolearia semidentata Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

https://www.nzpcn.org.nz/flora/species/macrolearia-semidentata/ (Date website was queried)

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/macrolearia-semidentata/