

# Macrolearia semidentata

## COMMON NAMES

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

2023 | At Risk – Naturally Uncommon | Qualifiers: IE, RR

## PREVIOUS CONSERVATION STATUSES

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

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

2009 | At Risk – Naturally Uncommon | Qualifiers: IE

2004 | Range Restricted

## SIMPLIFIED 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. Peduncles 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, involucrellal 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 keketererehe (*M. chathamica*). However, keketererehe is a much larger more heavily branched small tree (6-8 m tall) that usually forms a broadly domed canopy. The leaves of keketererehe 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 keketererehe have dark aubergine coloured disc florets, and longer, narrower, white, white tinged pinkish (very rarely pale mauve) ray florets. Occasional hybrids between hangatere and keketererehe 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.

## PLANT OF THE MONTH

This plant has been featured as a Plant of the Month – see [Trilepidea: NZPCN newsletter for April 2009](#) for the full story.

## 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/>

## PDF DATE

01 October 2024