# Piper excelsum subsp. excelsum

## COMMON NAMES
kawakawa (Te Reo Maori), Kokopere (Ta Re Moriori), pepper tree

## BIOSTATUS
Native – Endemic taxon

## CURRENT CONSERVATION STATUS
2023 | Not Threatened
Jump to previous conservation statuses

## CATEGORY
Vascular

## STRUCTURAL CLASS
Trees & Shrubs - Dicotyledons

## SIMPLIFIED DESCRIPTION
Fleshy shrub with jointed dark twigs bearing large dark green glossy heart-shaped leaves with hard green flower spikes inhabiting south to Banks Peninsula. Leaves to 120mm wide, veins radiating from middle, peppery to taste, often with insect holes. Fruit orange.

## DETAILED DESCRIPTION
Small tree to at least 5 m tall; stems erect (occasionally layering), not notably lenticellate, new shoots red-green or green (leaf nerves, petioles and new sterns with reddish colouring), taste peppery; pith of axes (including rachis of spike) without a mucilage core. Prophyll a collar to 0.3 (-2.2) mm high. Leaf blades submembranous, orbicular, suborbicular, at vegetative nodes to 100(-120) mm diameter, usually with 5-8 principal nerves, cordate at base, with a very narrow or closed sinus, occasionally basal lobes overlapping, upper surface of blade not bullate; petiole to 40(-60) mm long, c.0.4×as long as blade, the sheath 0.3-1.0(-2)× as long as non-sheathing part, truncate-rounded at apex and not produced there, the non-sheathing part of petiole to 4.0 mm diameter. Inflorescences solitary or 2-3 together on a short (rarely more than 10 mm long) axillary shoot, and (usually solitary) on the adjacent terminal shoot (occasionally this shoot not fertile); reduced leaf at apex of fertile shoot with a glabrous petiole and usually with a green oblong lamina at least 5 mm long, but lamina often ± lacking, especially on terminal fertile shoot. Female inflorescence erect in flowering and remaining so into fruit, peduncle to c. 1.5 cm long, spike to 60(-100) × c.6 mm diameter, with uniseriate usually 5-10-cellular hairs to 0.15 mm long on lower part of bract stalks and sparingly on rachis, these hairs not obvious on the peduncle just below the lowermost bracts; bracts peltate, bract heads 0.40-0.75 mm diameter; flowers at full emergence centred c.1.3 mm apart, emergent part of ovary ovoid; stigmas 3-4(-5), together c. 1.2 mm diameter. Male inflorescence erect, spike to c.110 mm long, proximally c.6 mm diameter, bracts and hairs as in female inflorescence; staminal filaments c. 0.25 mm long, anthers c.1.00 × 0.75 mm wide. Ripe infructescence c.10 mm diameter; fruitlets coalescent, sunken apically about the persistent dark stigmas, exocarp and mesocarp orange; seed oblong to slightly obovoid, apiculate at apex, c.2.0 × 1.5 dark brown, with (3-)4-5(-7) broad longitudinal furrows.

Hemi Matenga Scenic Reserve, Waikanae. Photographer: Jeremy R. Rolfe, Date taken: 15/02/2010, Licence: CC BY.

Male inflorescence. Tamahunga, Omaha. Photographer: Jeremy R. Rolfe, Date taken: 14/10/2009, Licence: CC BY.

## SIMILAR TAXA
Distinguished from the other subspecies by the wine-red to purple-black stems and petioles, and by the leaves which are never peltate, though on some of the Hauraki Gulf Islands, Tuhua (Mayor Island) and Chatham Islands plants often have overlapping leaf bases.

## DISTRIBUTION
Endemic. North and South Islands. Common from te Paki south to about Okarito, North Canterbury and Banks Peninsula.

## HABITAT
Coastal to lowland (extending up 500 m a.s.l. in warmer parts of the country). Usually an important understorey species in coastal forest.

## GENUS
Piper

## FAMILY
Piperaceae

## AUTHORITY
Piper excelsum G.Forst.

## SYNONYMS
Macropiper excelsum (G.Forst.) Miq. subsp. excelsum

## TAXONOMIC NOTES
The generic distinction between Macropiper and Piper has always been tenuous. Recently Jaramillo et al. (2008) have shown that Macropiper should be merged in Piper. However, they did not effect the full transfer of the New Zealand taxa to Piper. This action was taken by de Lange (2012) for Macropiper excelsum subsp. psittacorum, Macropiper excelsum subsp. peltatum f. peltatum and f. delangei.

## ENDEMIC TAXON
Yes

## ENDEMIC GENUS
No

## ENDEMIC FAMILY
No

## FLOWERING
August - November

## FRUITING
Throughout the year

## PROPAGATION TECHNIQUE
Easily grown from semi-hardwood cuttings and fresh seed. An attractive small tree that does best in dappled light, within a free draining but permanently moist soil. Very shade tolerant. Cold sensitive and will not tolerate frost.

## WETLAND PLANT INDICATOR STATUS RATING
UPL: Obligate Upland
Rarely is a hydrophyte, almost always in uplands (non-wetlands).

## CULTURAL USE/IMPORTANCE
Kawakawa is a member of the pepper family related to kava - used as a drink in the Pacific. The fruit and leaves are aromatic and Māori used leaves as poultices to treat bruises, and as a sign of mourning.
This Way Up producer Simon Morton interviews Johanna Knox about foraging for kawakawa (RNZ).

## ETYMOLOGY
**piper**: Pepper
**excelsum**: Tall

## NVS CODE
PIPESE

## CHROMOSOME NUMBER
2n = 26

## PREVIOUS CONSERVATION STATUSES
2017 | Not Threatened
2012 | Not Threatened | Qualifiers: Sp
2009 | Not Threatened
2004 | Not Threatened
Jump to current conservation status

## REGIONAL CONSERVATION STATUSES
Auckland: 2025 | Regionally Not Threatened | Qualifiers: DPS, DPT Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Auckland conservation status information is sourced from the "Conservation status of vascular plant species in Tāmaki Makaurau / Auckland" Simpkins E et al. (2025) report.

## REFERENCES AND FURTHER READING
de Lange, P.J. 2012: Taxonomic notes on the New Zealand flora: new names in *Piper* (Piperaceae). *New Zealand Journal of Botany* DOI:10.1080/0028825X.2012.708904
Gardner, R.O. 1997: Macropiper (Piperaceae) in the south-west Pacific. New Zealand Journal of Botany 35: 293-307.
Jaramillo, M.A.; Callejas, R; Davidson, C.; Smith, J.F.; Stevens, A.C.; Tepe, E.J. 2008: A phylogeny of the tropical genus Piper using ITS and the chloroplast intron psbJ-petA. Systematic Botany 33: 647-660.

## ATTRIBUTION
Fact sheet prepared for NZPCN by P.J. de Lange 30 August 2005. Description based on Gardner (1997).

## MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/piper-excelsum-subsp-excelsum/

## PDF DATE
25 May 2026