

Gastrodia minor

COMMON NAME

gastrodia

SYNONYMS

None

FAMILY

Orchidaceae

AUTHORITY

Gastrodia minor Petrie

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Orchids

CHROMOSOME NUMBER

2n = 40

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North Island, South Island, Stewart Island/Rakiura, Chatham Islands.

HABITAT

Lowland to montane (up to 1200 m a.s.l.). Usually in shrubland, often dominated by kahikatoa (*Leptospermum scoparium* J.R.Forst. et G.Forst.) or members of the kānuka (*Kunzea* spp.) genus. Also commonly seen within pine plantations and growing amongst Spanish heather (*Erica lusitanica* Ruldophi).



Flower open from Iwitihi, 9/1/1997.

Photographer: Eric Scanlen, Licence: CC BY-NC.



Eastern Wairarapa. Photographer: Jeremy R. Rolfe, Date taken: 02/01/2010, Licence: CC BY.

DETAILED DESCRIPTION

Terrestrial, saprophytic, deciduous, fleshy, perennial herb lacking chlorophyll. Plant at flowering up to 300 mm tall.

Rhizome mycorrhizal, tuberous, rather swollen, short-lived, extensively branched, individual sections up to 40 × 10 mm, dull pale brown to brownish-black, sparsely clad in chartaceous scales, especially toward the active apex. **Stem** 1.5–2 mm diameter, dark brown to brown-black, slender, rather brittle when fresh. **Scale leaves** chartaceous, few, small and widely spaced. **Flowers** up to 10, brownish-black, usually cleistogamous, unscented, erect to spreading, tubular, sparsely tuberculate toward base, tubercles paler in colour. **Perianth** 6–10 × 2–4 mm, lobes slightly thickened toward margins. **Lateral sepals** fused slightly above the gibbous base otherwise with their margins lying close together. **Labellum** 2.5–4 × 1.0–2.0 mm, white, narrow-oblong, membranous, not irritable, completely enclosed within floral tube (apex just visible in the open flowers) and mostly fused to it, thickened distally, margins narrow, slightly undulose, bearing two long median, cristate, pinkish white calli, apex yellow. **Column** very short, wing a minute, erect, process; anther terminal, erect and bending forwards, short, ellipsoid, operculate, filament scarcely pleated at the back, pollen breaking into angular granules; stigma basal, immediately below anther, ellipsoid, hollow; rostellum flap-like, positioned under anther.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

[Key to native orchids of New Zealand](#)

SIMILAR TAXA

Easily distinguished from the other New Zealand *Gastrodia* species by its much smaller size (up to 300 mm tall), and fewer flowered (< 10), much narrower, smaller, mostly blackish-brown, tubular flowers that scarcely open (if at all). The perianth lobes are internally white, and the labellum distinctly yellow-tipped.

FLOWERING

November–March

FLOWER COLOURS

Black, Brown

FRUITING

January–April

LIFE CYCLE

Minute seeds are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

A saprophytic species which should not be removed from the wild. Difficult to grow.

ETYMOLOGY

gastrodia: Belly tooth (flower centre)

minor: Smaller

WHERE TO BUY

Not commercially available

ATTRIBUTION

Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore LB, Edgar E. 1970. Flora of New Zealand, Volume II. Indigenous Tracheophyta: Monocotyledones except Gramineae. Government Printer, Wellington, NZ. 354 p.

Rolfe J. 2017. [Guide to New Zealand Gastrodia \(Orchidaceae\)](#) (pdf, 5Mb).

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/gastrodia-minor/>