

# Gastrodia sesamoides

## COMMON NAMES

gastrodia, pot-bellied orchid, cinnamon sticks

## BIOSTATUS

Native

## CATEGORY

Vascular

## STRUCTURAL CLASS

Orchids

## FLOWER COLOURS

Brown, Red/Pink

## DETAILED DESCRIPTION

Terrestrial, saprophytic, deciduous, fleshy, perennial herb lacking chlorophyll. Plant at flowering up to 1 m tall. **Rhizome** up to 80 × 30 mm, tuberous, elongated, swollen, mycorrhizal, pale pinkish-brown to brown to brownish-black, often covered in chartaceous scales and scale-leaves, especially toward the active apex. **Stem** 2–7 mm diameter, dark brown to brown with lighter brown coloured, small spots, erect, stout or slender, rather brittle when fresh. **Scale leaves** widely spaced, chartaceous.

**Flowers** mostly fewer than 20, mostly unscented, sometimes faintly scented; pendulous such that dorsal sepal frequently touches the stem axis. **Perianth** 10–16 × 4–8 mm, basally light brownish or mustard, pinkish or pinkish cream toward apex, unspotted, smooth, rarely with a few small tubercles; lobes slightly thickened toward margins. **Lateral** sepals fused almost to level of labellum-tip. **Labellum** 10 × 4 mm, white, cream, or yellowish, membranous above, thickened below, somewhat irritable, completely enclosed within floral tube (apex just visible), ovate-oblong, trilobed, base shortly fused to gibbous perianth-tube, lateral-lobes with upturned, irregular, crenate, margins; mid-lobe yellowish with flat but irregular margins, bearing several long median, verrucose, cristate, pinkish-white or cream calli. **Column** almost as tall as labellum, very narrowly winged throughout; anther terminal, erect and bending forwards, short and broad, operculate, filament smooth, pollen breaking into angular granules; stigma basal, set well apart from and far below anther, broad, hollow; rostellum flap-like, positioned under anther.

## SIMILAR TAXA

Easily distinguished by its ecology—as this species frequents coastal wetlands and favours disturbed habitats such that it is often found in locations completely overrun by naturalised plants. *Gastrodia sesamoides* has paler, flowers than the other two New Zealand species, and they lack spots and have a mostly non-tuberculate, smooth surface. Of critical diagnostic importance is that the column is almost the same length at the labellum.

## DISTRIBUTION

Indigenous. New Zealand: North Island, South Island (Marlborough and Nelson). Also Australia, South Africa (introduced and naturalised).



Te Paki. Photographer: Jeremy R. Rolfe, Date taken: 07/11/2007, Licence: CC BY.



Longitudinal section showing column almost as long as labellum. Hamilton, from a specimen collected by Peter de Lange. Photographer: Jeremy R. Rolfe, Date taken: 22/11/2013, Licence: CC BY.

## HABITAT

Coastal to montane (up to 1000 m as.l.). Favours disturbed habitats, coastal wetlands and associated shrublands, gumland scrub, and open sites along forest margins or in secondary regrowth. Often found in plantation forestry, and also occasionally found in urban areas often in traffic islands or public plantings, where it seems to be associated with pine bark mulch.

## CURRENT CONSERVATION STATUS

2023 | Not Threatened | Qualifiers: SO

## DETAILED TAXONOMY

### FAMILY

Orchidaceae

### AUTHORITY

*Gastrodia sesamoides* R.Br.

### SYNONYMS

None

### TAXONOMIC NOTES

New Zealand plants differ somewhat from Australian plants of *G. sesamoides* (from where it was first described) and they probably warrant formal separation at species rank.

### ENDEMIC TAXON

No

### ENDEMIC GENUS

No

### ENDEMIC FAMILY

No

### ECOLOGY

### FLOWERING

August–March

### FRUITING

October–May

### PROPAGATION TECHNIQUE

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

### OTHER INFORMATION

### ETYMOLOGY

**gastrodia**: Belly tooth (flower centre)

### MANAAKI WHENUA ONLINE INTERACTIVE KEY

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

### NVS CODE

GASSES

### CHROMOSOME NUMBER

2n = 38-40

## PREVIOUS CONSERVATION STATUSES

2017 | Not Threatened | Qualifiers: SO

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## REFERENCING AND CITATIONS

### 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).

### ATTRIBUTION

Description adapted from Moore and Edgar (1970)

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### MORE INFORMATION

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

### PDF DATE

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