

While cutting a track through an area of native bush interplanted with rhododendrons, I located two specimens of *Gastrodia* (*perei*). Stems were 33 and 35 cm long, terminated by 24 and 35 flowers respectively. The flowers are 15 mm long, olive brown in colour, stripy, and with paler stipples and raised knobs. Lacking both leaves and chlorophyll, the overall appearance is rather ghostly. The external surface of the flowers is reminiscent of the skin of a gecko. The interior of the flower is velvety white and the labellum is tipped by a vivid yellow. They are sweetly fragrant.

Longitudinal sections through the flowers reveal that both the column and labellum are elongate and of comparable length. Thus they resemble an undescribed species referred to as *Gastrodia* 'long column' by Wilson (1982, p. 294) in *Stewart Island Plants*, a name also used by St George in *New Zealand Native Orchids* (1999, p. 95).

In detail, the Warrington plants differ from those described by Wilson and St George in having shorter stems, blooming later in the summer, and by possible differences in flower structure. Additionally, St George does not record *Gastrodia* 'long column' in the Dunedin region. Dr St George kindly offered to examine these orchids. He confirmed the "long column" identification and that it is a new record for the region, and adds "There do seem to be several taxa in that aggregate, and I am no expert on their differences, suffice it to say all are undescribed."

Blooms were first seen on 29 January. They extended progressively up the raceme with the terminal buds opening on March 3.

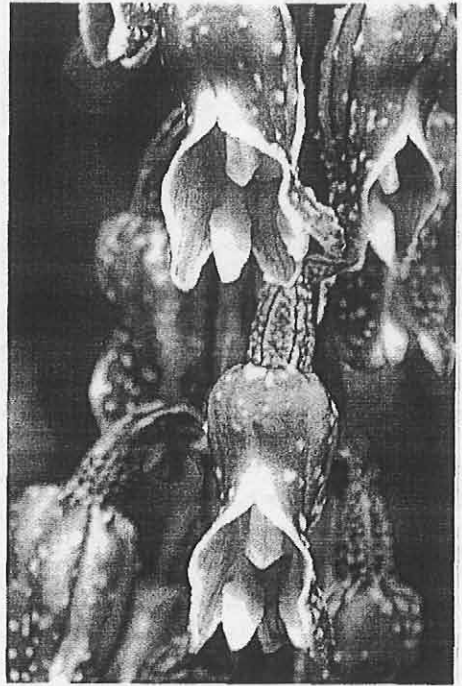
Additional notes:

1. *Gastrodia* are parasitic on mycorrhizal fungi associated with tree and shrub roots. St George (p.93) reports that the more common and widespread species *G. cunninghamii* is associated with *Pinus nigra* and rhododendrons, as well as native *Nothofagus*. Although I did not dig out any tubers from the Warrington plants, they are closely associated with roots of *Rhododendron thomsonii*.
2. St George notes (personal communication) that some *G.* 'long column' appear to be self-pollinating while others (with fragrance) are probably insect pollinated. On two occasions I observed a translucent colourless insect (aphid-like but larger) with conspicuous black eyes inside these orchid flowers. In appearance, they seemed well suited to the ghostly *Gastrodia*.
3. Several authors (e.g. Webb et al. *Flowering Plants of New Zealand*) refer to *Gastrodia* as Potato orchids. This is reference to their starchy tubers (*huperei*), which were collected as winter food by the early Maori, particularly the Tuhoe (Crowe, 1981: *A Field Guide to Native Edible Plants of N.Z.*)
4. Hugh Wilson (1982) refers to the Stewart Island *Gastrodia* as "black orchids". This certainly adds an additional mystique to these unusual flowers. Remarkably, the current issue of the Royal Horticultural Society's journal *The Garden* (Vol. 129, Pt 3, 2004) includes a beautifully illustrated article on Black Orchids by Isobyl La Croix. She describes the black orchid as "a holy grail for plant hunters" but points out that although some orchids have flower parts that could be described as black, all so-called black

orchids are mainly brown or deep purple. The Warrington *Gastrodia*, while dark in colour, are certainly not black. Thanks to Ian St George, Brent Murdoch and Carol Landis for comments and suggestions. Photos: L *Gastrodia* by *Rhododendron thomsonii* at Warrington. – Carol Landis.



R Black Orchid, Stewart Island, - Rosemarie Smith



Southland Community Nursery. Native Plants for Free!

Chris & Brian Rance, Invercargill

Southland Community Nursery is a nursery, but unlike many others - we don't sell plants and we grow only native plants! At the Community Nursery we help people to grow native plants for their own projects - for farms, schools, conservation group projects or for people's gardens.

All work in the nursery is done on a voluntary basis (including the running of the nursery), but it is funded from Environmental grants which are spent mainly on potting mix and pots. The nursery has been operating since 1996 and in that time thousands of native plants grown in the nursery are now flourishing all over Southland.

Because people do the work themselves, they can take away the plants they pot up for free, but we do ask for a little help to weed and water those plants during summer. We run the nursery from our own home property in Grant Road, Otatara and the nursery is set up like any other nursery with shade houses, plant standing areas and covered areas for seeds and cuttings. We supply seedlings from locally collected seed