

**A NOTE ON THE CURRENT KNOWN DISTRIBUTION OF
PARONYCHIA BRASILIANA DC.
(BRAZILIAN WHITLOW) IN NEW ZEALAND**

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This species was brought to my attention by Peter de Lange in 2005, while on a DoC threatened plant expedition with Paul Cashmore in the Ohiwa Harbour area of the Bay of Plenty, where Peter pointed it out in mown rough lawn at an access way to the beach at Piripai Spit east of Whakatane. I have kept an eye out for it since then and have vouchered it at National Forestry Herbarium (NZFRI) from Mayor Island (Mayor Island Ecological District (ED)), Lake Rerewhakaaitu (Rotorua Lakes ED), near the Tarawera River mouth (Te Teko ED) and Pukehina Beach (Tauranga ED).

My first impressions were that it was a species more or less confined to the Bay of Plenty but then as I found more of it and communicated with Peter I could see that it was a bit more widespread than that, so I decided to investigate its recorded distribution. This note collates data from vouchered specimens (see Table 1) from the Allan Herbarium (CHR), Auckland Museum Herbarium (AK), NZFRI and University of Waikato Herbarium (WAIK). The Museum of New Zealand (WELT) holds only duplicates from other herbaria.

Paronychia is a much branched perennial prostrate herb that grows on a variety of substrates varying from semi-stabilised back-dunes to rough lawns in sandy situations. It forms a mat which may be reasonably dense or quite open to 30 cm or so diameter. The colour of the leaves has been seen to differ between grey-green and brightish green but whenever observed the reddish colour of the sepals appears to be quite characteristic. Quite obvious are the awns on the sepals and the mucros at the leaf apex. It may be that the awns on the sepals facilitate the adherence to footwear before the seed has ripened.

Although the seed of this plant is small, smooth and round it has spread remarkably quickly from areas of infestation to similar habitats that have vehicular or foot access. The spread to White Island must have been via footwear from boat passengers and to Mayor Island on footwear or on camping equipment. Only one plant was found at Lake Rerewhakaaitu suggesting a recent introduction. The recent collection from the Tauranga ED, I suggest, is a case of it having been overlooked as I found it without trouble at several locations between Otamarakau and Maketu on an expedition to investigate this. Comments on several voucher labels have mentioned the possibility of footwear and vehicles as dispersal agents. It is probable that *Paronychia* is far more widespread than indicated in the table.

Table 1. Collection dates for *Paronychia brasiliiana*. Only the first collection in an Ecological District is listed and some vouchers have been duplicated in other herbaria.

COLLECTION DATE	VOUCHER NUMBER	LOCATION	ECOLOGICAL DISTRICT
1975_1215	CHR 285975	Pikowai	Otanewainuku
1980_0113	CHR 362991	Whakatane	Te Teko
1989_0827	WAIK 11712	Te Kaha.	Motu
1989_0828	WAIK 11719	Te Araroa.	Pukeamaru
1990_1105	NZFRI 17336	White Island	White Island
1994_0618	AK 214508	Hastings	Heretaunga
1999_1222	AK 246925	Papakura	Manukau
2000_0213	CHR 534888	Central Otago	Old Man
2000_1022	AK 251355	Waikumete Cemetery	Tamaki
2004_0226	CHR 570499	Wanganui	Foxton
2006_0115	CHR 580870	Huntly	Meremere
2006_1219	AK 298036	Taupo	Taupo
2007_0922	CHR 591911	White Rock Beach	Eastern Wairarapa
2008_0116	AK 304780	Macraes Flat	Macraes
2009_0127	AK 304196	Whitianga	Tairua
2009_0209	NZFRI 27474	Mayor Island	Mayor Island
2009_0423	NZFRI 27606	Lake Rerewhakaaitu	Rotorua Lakes
2009_0509	NZFRI 27619	Pukehina Beach	Tauranga



Figure 1. Locations of *Paronychia brasiliiana* in New Zealand (□).

Paronychia was not seen at Boulder Bay or Sulphur Bay areas of Whale Island during a visit there on 24-27 February 2009.

Paronychia brasiliiana originates from Southern Brazil, Uruguay and North-east Argentina (Webb *et al.* 1988)

A close-up photo of this plant will be available for viewing in due course at the following web site:

<http://www.ensisjv.com/DesktopModules/ZetaHerbarium/ZetaHerbariumDetail.aspx?HerbID=926506>

Look-alike species are *Polygonum aviculare* (glabrous annual), *Spergularia rubra* (leaves linear, mucronate, glabrous or with glandular hairs), *Euphorbia maculata* (leaves glabrous to sparsely hairy), *Persicaria prostrata* (leaves without mucro). *Paronychia* leaves are narrow elliptic with a distinct mucro and have hairs directed towards the apex..

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REFERENCE

Webb CJ, Sykes WR, Garnock-Jones PJ 1988. *Flora of New Zealand. Vol. IV.* Christchurch, DSIR Botany Division.