Invasive Ant Threat

INFORMATION SHEET Number 21 • *Paratrechina vaga* Risk: Medium

Paratrechina vaga (Forel)

Taxonomic Category

Family:	Formicidae
Subfamily:	Formicinae
Tribe:	Plagiolepidini
Genus:	*Paratrechina*
Species:	*vaga*

Common name(s): forest parrot ants – *P. vaga* species group name (Andersen 2002).

Original name: *Prenolepis obscura r. vaga Forel*

Synonyms or changes in combination or taxonomy: *Paratrechina (Nylanderia) vaga var. crassipilis* Santschi, *Paratrechina (Nylanderia) vaga var. irritans* Santschi, *Prenolepis obscurava var. vaga* Forel

General Description

Identification

Size: Length about 2.5 mm

Colour: head and body light to dark brown, legs and antennae light brown.

Surface sculpture: appearing more or less smooth and shining.

General description: Paratrechina can be identified by the following characters: the scape frequently surpassing posterior border of head by 4 or 5 times the maximum diameter of the scape or more; funiculus without a club; funicular segments longer than broad; terminal segment at least twice as long as any other segment.

Sources: www4, www13

Behavioural and Biological Characteristics

Feeding and foraging

This species has an omnivorous diet (www4). Workers tend plant-sucking insects (Carver et al. 1987; Carver et al. 1993) and can feed on small invertebrates including plant pests (Way et al. 2002). Foragers may be common and widespread but are not particularly aggressive nor behaviourally or numerically dominant (Morrison 1996b; Vargo 2000; Way et al. 2002). The species appears to be able to survive in the presence of behaviorally dominant species like *S. geminata* and *Pheidole oceanica* (Morrison 1996a; Way et al. 1998).

Colony characteristics

Nests are in the ground (www4), and are probably monogyne. This species is one of the early colonisers of disturbed

ground, and if the ground is flooded can be seen moving brood (Way et al. 1998).

Dispersal

Likely to have winged dispersals that found nests independently.

Habitats occupied

Paratrechina vaga is reported from woodland, and open forest areas in northern Australia (www4). In Tahiti it is an opportunistic species, thriving in cities, in the country, and in the difficult habitat of beaches (Percault 1987). In Hawaii it is found in disturbed habitats up to altitudes of 1200 m, but more common below 1000 m, and is not found in undisturbed sites (Reimer 1994).

Global Distribution (See map)

Native to

New Guinea and the western Pacific (Taylor1987; www4); it is unclear if records from the Philippines (Way et al. 1998) represent the native or introduced range.

Introduced to

Probably introduced to Australia (where it is found in coastal Northern Territory and northern coastal Queensland (www4)) and various islands in the Pacific (e.g., Morrison 1997; Reimer 1994). It is also reported on the Galapagos (Clark 1982). McGlynn (www24) also lists as introduced to Madagascar, but it is not recorded in checklists from Madagascar (Fisher 1997; Blard et al. 2003; www50), although *P. bourbonica* is listed (by Blard et al. 2003, but not www50).

History of spread

Widespread in the Pacific and likely spread to many islands via human assistance.

Interception history at NZ border

Commonly intercepted; with at least 66 recorded interceptions. Recorded interceptions are mostly on fresh produce (>90%) from Fiji (86%). They are predominantly workers, although a queen has been intercepted on taro from Fiji. Difficulties with the identification within the genus *Paratrechina* may mean some of the interception records identified as *P. vaga* may be other species, and some of the many unidentified *Paratrechina* intercepted may be *P. vaga*.

Justification for Inclusion as a Threat

This species is widespread in the Pacific and is also present in Australia (e.g., Morrison 1997; Wetterer 2002; www4). It has spread beyond its native range in the Pacific to Hawaii (www46) and elsewhere (e.g., Galapagos – Clark 1982). This ant is one of the most commonly intercepted ants at the New Zealand border. In Hawaii, *P. vaga* is considered a pest of pineapple (Carter 1967). They are nectar feeders and are likely to be abundant in urban areas and could be a minor horticultural pest. Due to the common occurrence of adventive *Paratrechina* around New Zealand cities (mistakenly thought originally to be *P. vaga*), this species could establish without being noticed.

Mitigating factors

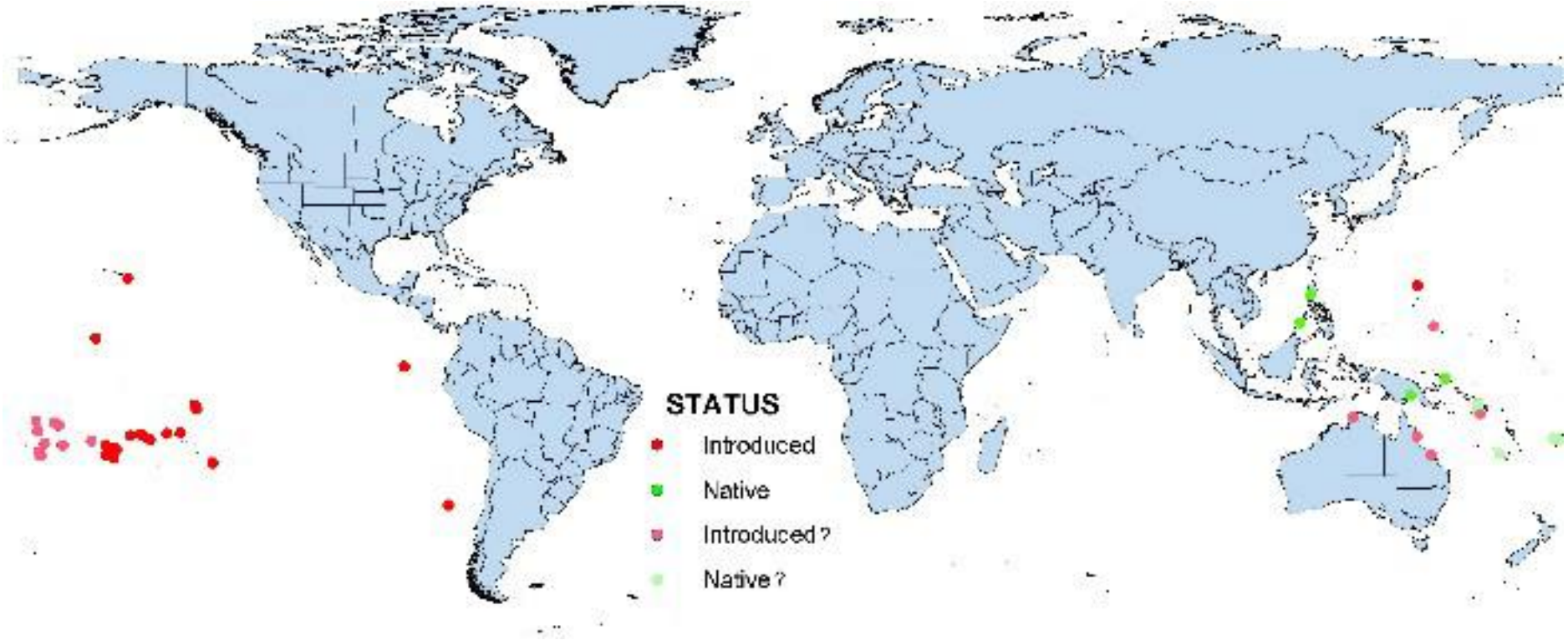
New Zealand has low temperatures compared to the sites from which this ant is reported. It is likely it would be mostly

restricted to human-modified habitats and have few environmental consequences. The main impacts may be on other adventive ants with which it would compete, and it is considered unlikely this ant would attain higher densities or have detrimental impacts beyond those of *Paratrechina* species already established in New Zealand.

Control Technologies

Foragers have been collected on peanut butter and also tuna baits (Morrison 1996b; Gruner 2000). *Paratrechina* species in New Zealand readily feed on Xstinguish Argentine ant bait but no efficacy trials have been conducted. *P. vaga* is susceptible to hydrogen cyanide treatment, particularly at the highest tested concentration – 4600 ppm (Hansen et al. 1991).

Compiled by Richard Harris & Jo Berry



Global distribution of Paratrechina vaga *(Forel)*