

# Invasive Ant Threat



INFORMATION SHEET Number 18 • *Paratrechina flavipes*

Risk: Low

## *Paratrechina flavipes* (Smith)

### Taxonomic Category

Family:	Formicidae
Subfamily:	Formicinae
Tribe:	Plagiolepidini
Genus:	<i>Paratrechina</i>
Species:	<i>flavipes</i>

**Common name(s):** none known

**Original name:** *Tapinoma flavipes* F. Smith

**Synonyms or changes in combination or taxonomy:** *Prenolepis flavipes* (F. Smith)

### General Description (worker)

#### Identification

**Size:** monomorphic. Total length 2.0–2.5 mm.

**Colour:** head yellowish brown, darker on top; alitrunk yellow, yellowish brown or blackish brown; gaster brown or with tergite 1 yellow and posterior tergites banded yellow and brown. Legs and antennae yellow.

**Surface sculpture:** most surfaces shiny though this obscured by pubescence, especially on head.

**General description:** antenna 12-segmented, without a club; scape exceeding posterior margin of head by 1/3 its length, and with several suberect hairs. Each funicular segment longer than wide. Eyes relatively small; ocelli small and rather obscure, but 3 are recognizable. Head broad with rounded sides; mandibles each with 6 teeth, subbasal tooth subequal in size to median and basal teeth. Clypeus without longitudinal carinae. Alitrunk slightly longer than head length; pronotal dorsum convex in profile; mesonotal dorsum straight; metanotal groove deeply incised. Propodeum without spines. One node (petiole) present. Head and gaster with abundant erect hairs: pronotal dorsum with several erect hairs; mesonotal dorsum with four; none on propodeum. Hind femora and tibiae with erect or suberect hairs. Stinger lacking; acidopore present.

Sources: Trager 1984; www1

Formal description: Trager 1984

### Behavioural and Biological Characteristics

#### Feeding and foraging

*P. flavipes* is a generalist feeder. It feeds on plant nectar, and small dead animals (www1). It is a seed disperser and has also been recorded moving and protecting sap-sucking insects to exploit honeydew (Espadaler & Collingwood 2000; www33; www39).

### *Colony characteristics*

*P. flavipes* nests in leaf litter, rotting wood, and in the soil of grasslands and forests (www1). Colonies are monogynous (Ichinose 1986 in Passera 1994; Ichinose 1994) and queens can facultatively occupy two to six nests (Ichinose 1994).

### *Dispersal*

Alate queens and males have been collected in spring (April in Taiwan and May in Pennsylvania) (Trager 1984). Newly emerged alates overwinter in the nest (Trager 1984; www1). Nuptial flights occur from May to June in the Northern Hemisphere (www1).

### *Habitats occupied*

*P. flavipes* does not inhabit open habitat (Trager 1984). It prefers moist, primary, old secondary hardwood or mixed forest or forest remnants (USA and Japan) and is primarily successful in forests, parks and gardens in, or fairly close to, urban areas (Trager 1984; Collingwood et al. 1997; Espadaler & Collingwood 2000).

### **Global distribution (See map)**

*P. flavipes* is native to temperate Asia and has been introduced to the north-east USA, Niue, and urban centres in the United Arab Emirates and Spain.

### *History of spread*

Probable mode of arrival in USA was from potted plant material or logs for growing mushrooms brought in by immigrants from China in the early 20th century (Trager 1984). Spread to United Arab Emirates (relatively recent) was probably via plant material (Collingwood et al. 1997).

### *Interception history at NZ border*

There have been no recorded interceptions of this species at the border. There have, however, been 56 interceptions (7 separate queens) of unidentified *Paratrechina* species, some of which may have been *P. flavipes*.

### **Justification for Inclusion as a Threat**

*P. flavipes* is a temperate species that has become established outside its native range. It is a generalist that prefers moist forest (of which New Zealand has lots!!).

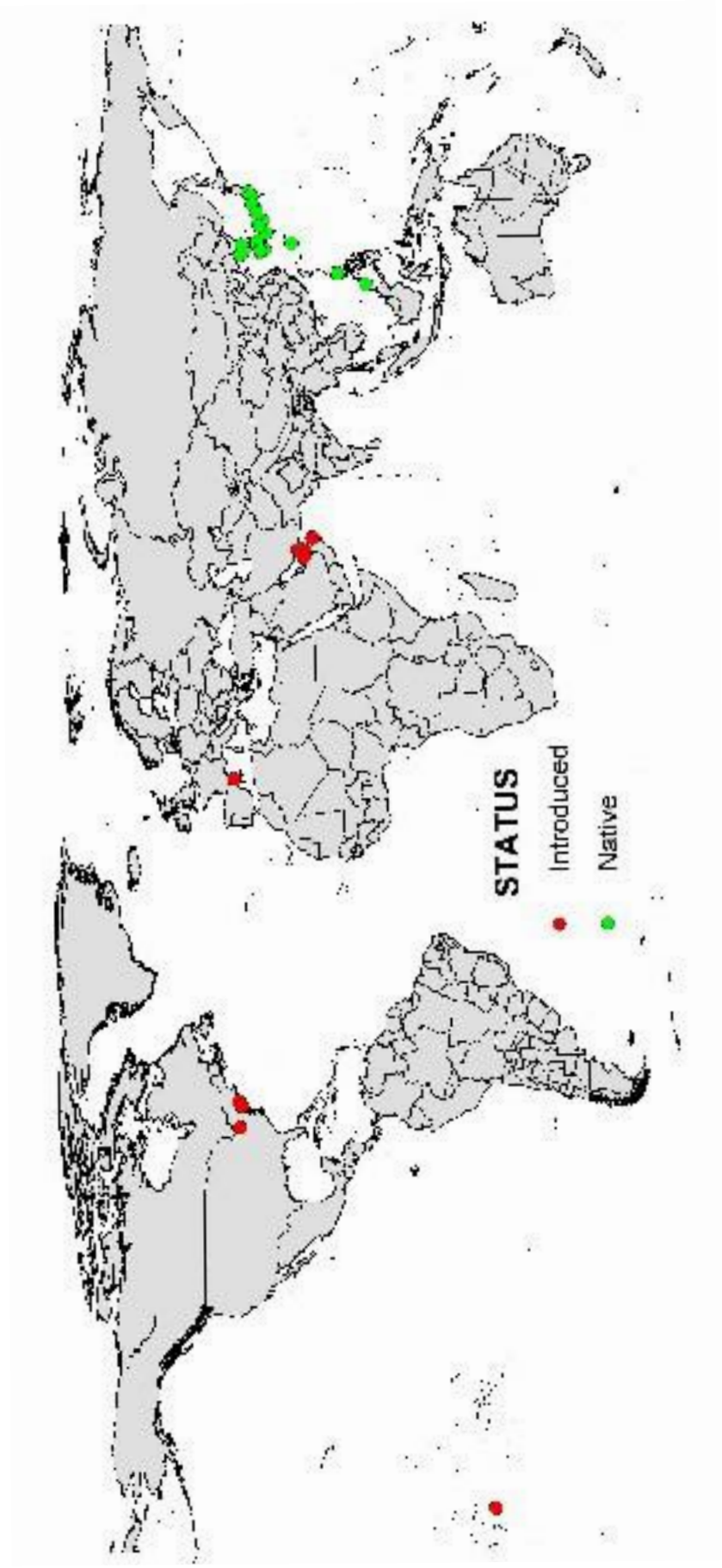
### *Mitigating factors*

There have been no recorded interceptions of this species at the border (although 56 interceptions (seven separate queens) of unidentified *Paratrechina* species). Only reported from a single location in the Southern Hemisphere. No reports of ecological dominance or pest status in urban areas (Collingwood et al. 1997) suggesting impacts of establishment in New Zealand would be minimal.

### **Control Technologies**

There is no information on control technologies for this species.

*Compiled by Margaret Stanley, Richard Harris, & Jo Berry*



Global distribution of *Paratrechina flavipes* (Smith)