Iridomyrmex anceps (Roger)

Taxonomic Category

Family:	Formicidae
Subfamily:	Dolichoderinae
Tribe:	Dolichoderini
Genus:	*Iridomyrmex*
Species:	*anceps*

Common name(s): flat-backed tyrant ants (*anceps* species group common name – Andersen 2002)

Original name: *Formica anceps* Roger

Synonyms or changes in combination or taxonomy: *Iridomyrmex excisus* Mayr, *Iridomyrmex gracilis subsp. papuana* Emery, *Prenolepis discoidalis* Donisthorpe

General Description

Identification

Size: 3.5–4.5 mm (Collingwood et al. 1997)

General description: antennae 12-segmented; mandibles with 7 teeth; members of this genus can be identified from the front margin of the clypeus above the mandibles which is highly modified with convex areas towards the sides and a central projection (this central projection varies from strongly to weakly developed). In addition, the compound eyes are placed relatively high on the head and away from the mandibles. The single petiolar node is in the form of a narrow, vertical scale

Sources: www4

There is currently no revision available of the *I. anceps* species group (Fraser et al. 2002) so it is unclear how many species are included in this group, if they are valid, and if *I. anceps* reported from Australia is the same as that reported from Asia.

One species of *Iridomyrmex* is already established in New Zealand, and is thought to be an undescribed Australian species and not in the *I. anceps* species group (A. Andersen, pers. comm.). This ant was previously considered to be *I. anceps* (Roger), a misidentification based on an initial provisional determination by R. W. Taylor (Faulds 1970).

Behavioural and Biological Characteristics

Very little information was found relating specifically to *I. anceps*.

Feeding and foraging

Most *Iridomermex* are general scavengers (www4). They may also tend aphids and coccids and will collect nectar when available (www4). Foragers of *I. anceps* can form symbiotic relationships with caterpillars, protecting them against predators in exchange for food (Travassos & Pierce 2000; Fraser et al. 2002). The *I. anceps* species group is commonly associated with the lycaenid butterfly *Jalmenus evagoras* (Atkins 1992). *Iridomyrmex* foragers are often attracted to seeds with elaiosomes (special lipid food bodies) and carry them into their nests (www4). Once the food bodies are taken from the seeds, the seeds are discarded.

Colony characteristics

Nests are located in soil (www4). The ant is polydomous and the main brood chamber is usually about 20 cm below the soil surface (Kitching & Taylor 1981). The species may be polygynous (Kitching & Taylor 1981).

Dispersal

No information on dispersal was found.

Habitats occupied

This species favors man-made, mesic environments in the arid United Arab Emirates (Collingwood et al. 1997). Probably would nest in relatively open habitat where there is bare ground, e.g., along roadsides (Ballmer 2003). Occurs in open forest in Australia (www4).

Global Distribution (See map)

Native to

South East Asia (McGlynn 1999). Unclear if native to Australia: it is not listed as introduced by Shattuck (www4), although is considered so by Clark (1941).

Introduced to

The Pacific (McGlynn 1999), United Arab Emirates and Iran (Collingwood et al. 1997).

It is likely this ant is far more widespread within Asia and possibly the Pacific than indicated by the few reported distribution records. Bingham (1903) reported it to be widespread in India, except in the north-west provinces and the Punjab.

History of spread

This ant appears to be still spreading globally; first collected in United Arab Emirates in 1995 (Collingwood et al. 1997), and in the Tokelau Islands in 2004 (Lester & Travite 2004).

Interception history at NZ border

Eight interceptions of *I. anceps* have been recorded by MAF (2 of which are post border), and there have been a further 21 interceptions of unidentified *Iridomyrmex*. However, given the difficulty with identification of many *Iridomyrmex* species and the taxonomic uncertainty within the *I. anceps* species group, some of the records of *I. anceps* could be misidentifications, and some of the unidentified specimens may be *I. anceps*.

Justification for Inclusion as a Threat

Iridomyrmex anceps is common in the Pacific and Australia, has established outside its native range (e.g., Arabia – Collingwood et al. 1997), and has been intercepted at the New Zealand border. It would be difficult to detect the arrival of this species in New Zealand due to its similarity to species already here (originally thought to be *I. anceps*).

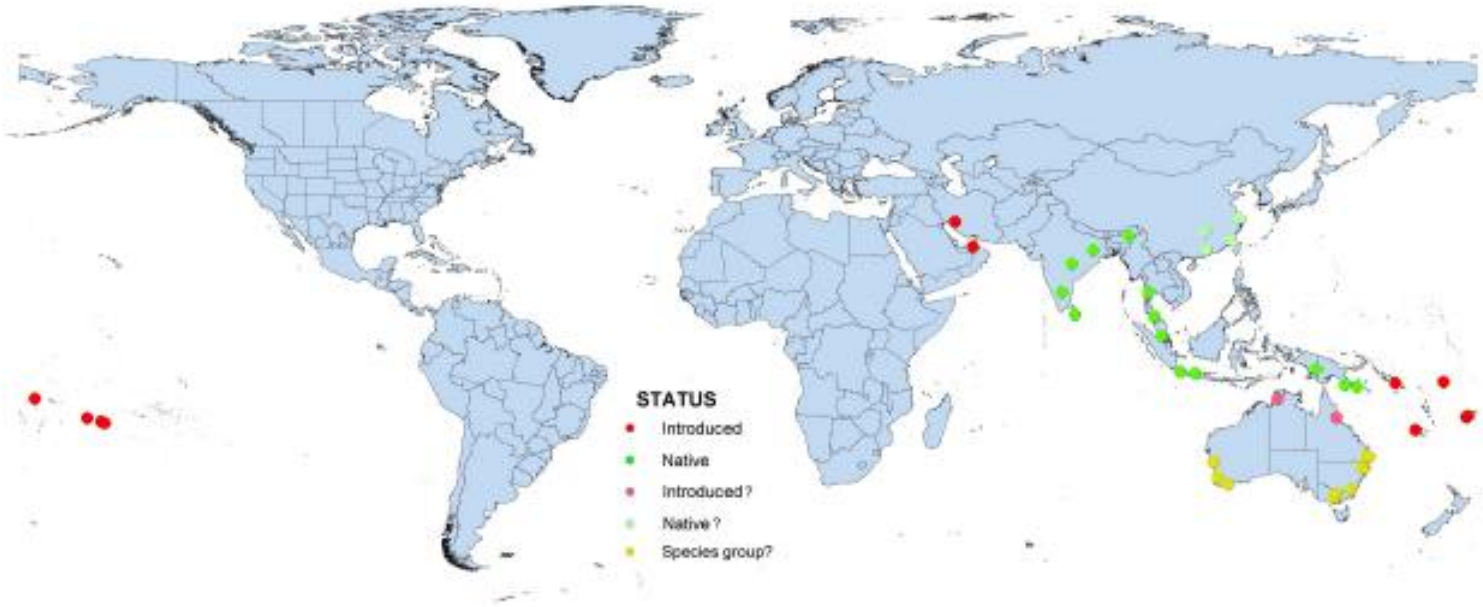
Mitigating factors

Likely low climate match as mostly from tropical localities, although there are representatives of the species group in temperate locations like Canberra. The status of this species as a pest is considered doubtful (Collingwood et al. 1997), and it is likely to be similar in biology to the undescribed *Iridomyrmex* species already established in New Zealand, which is not a significant pest (New Zealand ant information sheet no. 32).

Control Technologies

No specific control has been undertaken for this species.

Compiled by Richard Harris & Jo Berry



Global distribution of Iridomyrmex anceps *(Roger)*