

# Invasive Ant Threat



INFORMATION SHEET Number 14 • *Monomorium sechellense* Emery

Risk: Low

## *Monomorium sechellense* Emery

### Taxonomic Category

Family:	Formicidae
Subfamily:	Myrmicinae
Tribe:	Solenopsidini
Genus:	<i>Monomorium</i>
Species:	<i>sechellense</i>

**Common name(s):** kado-hime-ari (Japan)

**Original name:** *Monomorium fossulatum* subsp. *sechellense* Emery

**Synonyms or changes in combination or taxonomy:** *Monomorium fossulatum* Emery

### General Description (worker)

#### Identification

**Size:** monomorphic. Total length about 1.5 mm.

**Colour:** body essentially uniform in color: yellow to yellowish brown.

**Surface sculpture:** surface of mesopleuron and lateral portions of propodeum with fine punctures; remainder of the body smooth and shining.

**General description:** antennae 12-segmented, including a large 3-segmented club. Eyes minute and point-like, of only one or two ommatidia. Mandibles each with 4 teeth, which decrease in size from apex to base. Clypeus with a pair of longitudinal carinae present posteriorly, tending to fade out anteriorly. Median part of clypeus distinctly raised, anterior margin without projecting teeth. Metanotal groove distinct. Propodeum without spines, but posterodorsal border sharply angulate in lateral view. Two nodes (petiole and postpetiole) present. Petiole higher and less broadly rounded than postpetiole; ventral outline of petiole roundly convex in profile. All dorsal surfaces of head and body with fine erect setae, except propodeum, where they are sparse or absent.

Sources: www1; Wilson & Taylor 1967

### Behavioural and Biological Characteristics

#### Feeding and foraging

No information found. Not reported as an abundant species at any location or as foraging in buildings.

#### Colony characteristics

No information found. Probably relatively small colonies, and not obvious.

### *Dispersal*

No information found. Probably winged dispersals.

### *Habitats occupied*

This species is found in open habitats and nests under stones, in the bark of trees, or in plant cavities (Wilson & Taylor 1976; www1). It has been found in irrigated lowland habitats in the Philippines (Way *et al.* 1998). In Hawaii it is reported from dry and mesic (< 250 cm rainfall) zones below 900 m (Reimer 1994).

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

#### *Native to*

Unknown, but thought to be tropical Asia (Wilson & Taylor 1967). Locality records also include the western Pacific (Japan, Thailand, Taiwan and the Philippines) and Myanmar (Way *et al.* 1998; Wilson & Taylor 1967).

#### *Introduced to*

Many sites in the Pacific region (e.g. Hawaii – Reimer *et al.* 1990; Tonga – Wetterer 2002), where it was introduced by human commerce (Wetterer 2002). Also collected from Barbados (www55). It is unlikely *M. sechellense* is native to the Seychelles Islands.

#### *History of spread*

Wetterer (www55) recently (2003) collected specimens in Barbados, which represents a record very remote from any other reported locations and indicates continued spread. Given the widespread collection records and small size it would not be surprising if this ant was established in many other locations.

#### *Interception history at NZ border*

There has been one interception of *M. fossulatum* (= *M. sechellense*) in fresh produce from Fiji in 2003, where until recently (Ward *in prep.*) it had not been reported as present. There have also been 26 interceptions (including 2 queens and eggs) of unidentified *Monomorium* species in Auckland and Canterbury. Much of the material (including the queens) was intercepted from countries known to have *M. sechellense*.

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

A very small species (< 2mm) that has spread widely through the Pacific and could easily establish in New Zealand without being detected. It would be very difficult to eradicate. There has been at least one interception at the New Zealand border.

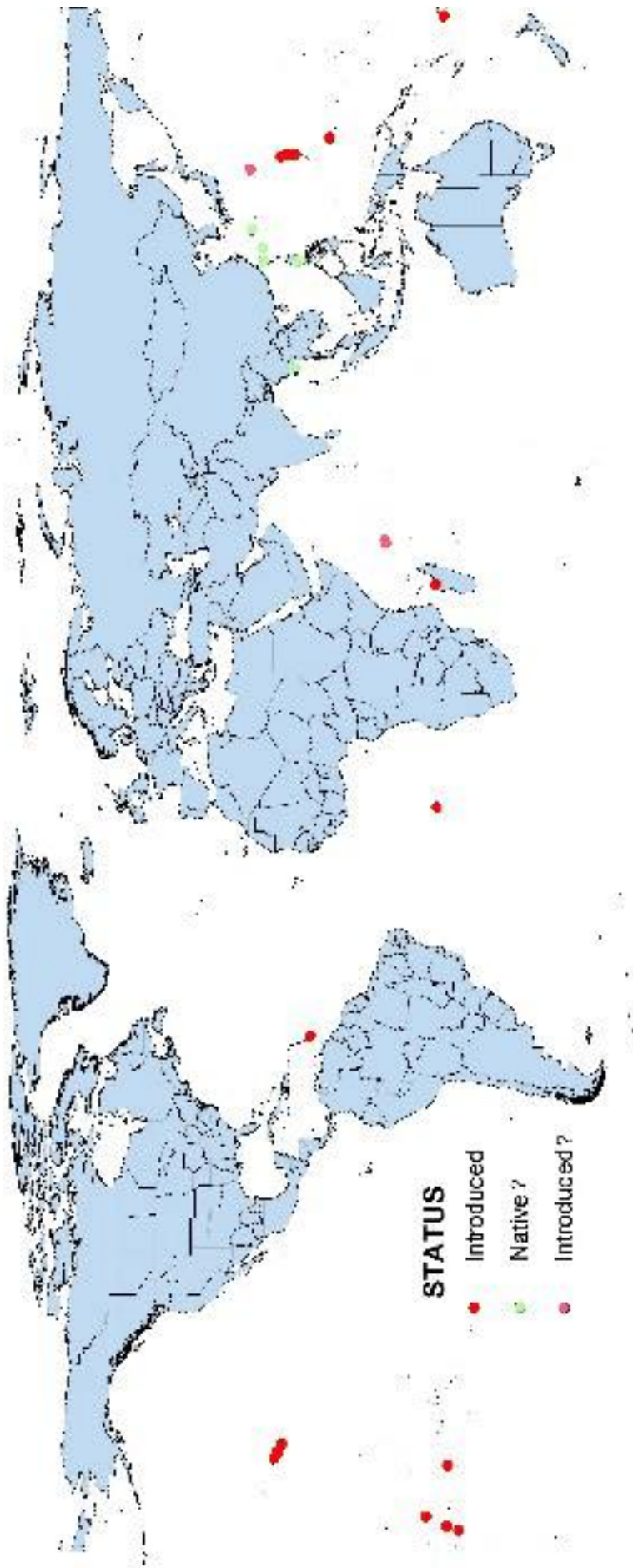
#### *Mitigating factors*

There is little climate similarity between locations within the known range of *M. sechellense* and New Zealand. No information was found indicating that it can be abundant or have detrimental impacts.

## Control Technologies

None known

*Compiled by Richard Harris & Jo Berry*



Global distribution of *Monomorium sechellense* Emery