

# Invasive Ant Threat



INFORMATION SHEET Number 8 • *Labidus coecus* (Latreille)

Risk: Medium

## *Labidus coecus* (Latreille)

### Taxonomic Category

|            |                |
|------------|----------------|
| Family:    | Formicidae     |
| Subfamily: | Ecitoninae     |
| Tribe:     | Ecitonini      |
| Genus:     | <i>Labidus</i> |
| Species:   | <i>coecus</i>  |

**Common name(s):** army ant (one of 8 army ant genera)

**Original name:** *Formica coeca* Latreille

**Synonyms or changes in combination or taxonomy:** *Nycteresia coecus* Latreille, *Eciton vastator* Smith, *Labidus jurinii* Shuckard, *Eciton erratica* Smith, *Labidus latreillii* Jurine, *Myrmica rubra* Buckley, *Labidus saji* Haldeman, *Labidus atriceps* Smith, *Pseudodichthadia incerta* André, *Mutilla (Labidus) fulvescens* Blanchard, *Labidus pilosus* Smith, *Eciton smithii* Dalla Torre, *Eciton grassator* Forel, *Labidus panzeri* Smith, F., *Eciton coecum* var. *biloba* Emery, *Eciton (Labidus) coecum* var. *elsbethae* Forel, *Labidus servillei* Westwood, *Eciton (Labidus) coecum* var. *opacifrons* Wheeler, *Eciton nigrita* Emery, *Eciton coecum* r. *kulowi* Forel, *Eciton selysi* Forel, *Eciton (Labidus) serpentis* Weber

### General Description

#### Identification

**Size:** polymorphic. Total length markedly variable, from 2.9 to 9.7 mm.

**Colour:** dark brown to red-brown

**Surface sculpture:** most of body smooth and shiny except posterior half or more of alitrunk.

**General description:** antennae 12-segmented, extremely short. Scape reaching only about halfway to occiput. Eyes extremely small or absent. Frontal carinae very close together, not concealing antennal insertions. Propodeum without spines. Two nodes (petiole and postpetiole) present. Petiole with ventral tooth. Tarsal claw with an extra basal tooth.

Sources: Smith 1965

### Behavioural and Biological Characteristics

#### Feeding and foraging

Army ants display a migratory existence and group predation and forage along well-established trails (Keegans *et al.* 1993). *L. coecus* workers are light-avoiding and are not often seen, conducting raids primarily through underground tunnels (Smith 1965; Anderson & McShea 2001). Foragers only construct above ground tunnels to link sections of underground tunnel over areas of hard ground (Anderson & McShea 2001). Their diet includes arthropods, small mammals and birds, which they kill or scavenge (Smith 1965). They will attack colonies of other ants, including *Solenopsis*

*geminata*, forcing them to carry brood to the surface to escape attack (Perfecto 1992). Litter raids (attacks on social insect colonies, harvesting adults and brood, below the leaf litter or in the soil) occur in columns about 4 m wide (Kaspari 1996). Some ant species may avoid attack, possibly through chemical defence (Perfecto 1992). Nuts and foods of high protein content are also eaten (Kaspari 1996). Workers will also invade houses in search of food (Smith 1965). Rettenmeyer (1963, in Anderson & McShea 2001) reports that: “When *coecus* finds large insect prey which is not readily carried by one or a few ants, it also builds a dirt covering over it. The largest of these were about one centimeter in height and five centimeters across with no supporting pillars.”

### *Colony characteristics*

This species is migratory and has temporary nests in decayed logs and stumps, or in the ground beneath stones and other objects (Smith 1965). They also nest beneath basement floors or in and around foundation walls. Colonies are exceedingly large, containing many thousands of individuals.

### *Dispersal*

All army ant species exhibit obligate fission in which a colony divides into autonomous parts (Peeters & Ito 2001). Queens are permanently wingless (ergatoid) (Peeters & Ito 2001). In Austin, Texas, males are commonly collected at lights from late March through late April (www13).

### *Habitats occupied*

Recorded at 3000m near Villa Mills in Costa Rica (www41). In Southern Bahia, Brazil, this species is recorded from 4 of the habitat types listed by Delabie (www9) (urban, “cultures”, “restinga”, “cacao”). In Colombia, foragers were collected in pasture and mature forest (www54).

## **Global Distribution (See map)**

### *Native to*

Southern USA south to Argentina (Smith 1965)

### *History of spread*

This species has not been recorded outside its native range.

### *Interception history at NZ border*

There have been no interceptions of this genus at the New Zealand border.

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

A new world tropical species with large colonies, usually with many thousands of individuals (www13). These ants are highly mobile and feed on other arthropods, small mammals, and birds. Workers bite and sting fiercely, and will enter buildings and damage structures (Smith 1965). Although tropical (range Argentina to Texas – www13) it can occur at cooler high altitude sites – reported from 3000m in Costa Rica (www41).

### *Mitigating factors*

Not established outside its native range. No interceptions of this genus at the New Zealand border. Climate similarity may

be low.

### **Control Technologies**

No reports of control methods found. May be attacked by Phorid flies and ant-mimicking spiders as such associations have been recorded for another species in the genus (Cushing 1997; [www53](#)).

*Compiled by Richard Harris & Jo Berry*



*Global distribution of Labidus coecus (Latreille)*