

Linepithema humile



Taxon	Family / Order / Class / Phylum
<i>Linepithema humile</i> (Mayr, 1868)	Formicidae / Hymenoptera / Insecta / Arthropoda

COMMON NAMES (English only)

Argentine ant

SYNONYMS

Iridomyrmex humilis (Mayr, 1868)

more synonyms at:

http://atbi.biosci.ohio-state.edu:210/hymenoptera/nomenclator.name_entry?text_entry=linepithema+humile

SHORT DESCRIPTION

Ant of light brown colour; females are 4.5-4.9 mm long and workers 2.1-3.0mm long. They are omnivorous, feeding on honeydew, nectar, insects and carrion.



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Adult of *Linepithema humile*

Photo: Alex Wild, www.myrmeecos.net

BIOLOGY/ECOLOGY

Dispersal mechanisms

Local dispersal by budding of large unicolonial nests (up to 150 m / year); long-distance dispersal within the introduced ranges human-mediated.

Reproduction

Haplodiploid system with sterile workers; polygynous (multi-queened) nests; social organisation variable in its native range (from multicolonial to unicolonial), but entirely unicolonial in introduced range, with surface area covered by single supercolonies ranging from 2500m² to many km².

Known predators/herbivores

Only a few parasitoids are known, e.g. a nematode (*Diploscapter lycostoma*), but their use as biological control is currently not considered feasible.

Resistant stages (seeds, spores etc.)

In the absence of queens, workers can lay unfertilized eggs, which develop into fully functional males.

HABITAT

Native (EUNIS code)

G: tropical and subtropical natural forests

Habitat occupied in invaded range (EUNIS code)

I: Regularly or recently cultivated agricultural, horticultural and domestic habitats, G4: Mixed deciduous and coniferous woodland; preferably associated with disturbed, human-modified habitats in its introduced range, but may also invade natural habitats (e.g., oak and pine woodland in the Mediterranean).

Habitat requirements

Moderate temperature and moisture level

DISTRIBUTION

Native Range

South America (Argentina, Brazil, Paraguay, Uruguay)

Known Introduced Range

The species occurs throughout the world on all continents, especially in mediterranean-type climates, and many oceanic islands.

Trend




Ecological niche models predict that with changing climate the species will expand at higher latitudes.

MAP (European distribution)

Only outdoor occurrences are indicated on the map.



Legend

	Known in country		Known in CGRS square		Known in sea
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INTRODUCTION PATHWAY

Transported with vehicles (airplanes, ships) together with goods and materials, soil, plants, etc.

IMPACT

Ecosystem Impact

The supercolonies, by reducing costs associated with territoriality, allow high worker densities and interspecific dominance in invaded habitats. It has displaced, even leading to species extinction in some cases, native ant species in many parts of the world. It also competes with other arthropod species for resources (e.g., for nectar with bees) and reduces local arthropod diversity; taxa other than arthropods are also affected (e.g. nest failure of birds). Ecosystem level impacts such as reduction of seed dispersal capacity and disruption of mutualistic associations with other species are documented.

Health and Social Impact

Regarded as a nuisance for tourism at some places on the Mediterranean coast.

Economic Impact

Homoptera-tending may increase Homoptera populations causing some crop loss. However, costs are considered to be low.

MANAGEMENT

Prevention

Unknown.

Mechanical

Unknown.

Chemical

Several toxicants applied via “ant baits”, including insect growth regulators. Application needs supervision to optimize results and to minimize side-effects on non-target species.

Biological

Since Argentine ants prefer disturbed sites, any extensification of land use or reduction in monoculture may help prevent high densities of this species.

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