

## *Pachycondyla chinensis*

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae

**Common name** Asian needle ant (English)

**Synonym**

**Similar species**

**Summary** *Pachycondyla chinensis* commonly known as the Asian needle ant and a native to East Asia was introduced to the United States around the 1930's from Japan. Habitats where it is established include anthropogenic habitats, agricultural habitats and mature forests. It is considered a potential public health threat on account of its poisonous sting. Results of studies show that diversity and abundance of native ants are negatively associated with the presence and abundance of *P. chinensis*. In the temperate deciduous forests of eastern North America *P. chinensis* is also associated with the disruption of an ant-plant seed dispersal mutualism and is potentially reducing abundance of ant-dispersed plants



[view this species on IUCN Red List](#)

## General Impacts

The results of a study conducted by Guenard & Dunn (2010) found that 'diversity and abundance of native ants were negatively associated with the presence and abundance of *P. chinensis*'.

The results of a study by Rodriguez-Cabal *et al* (2011) concluded "that *P. chinensis* is associated with the disruption of an ant-plant seed dispersal mutualism and is potentially reducing abundance of ant-dispersed plants. They found that *P. chinensis* causes precipitous declines in the abundance of the keystone mutualist, *Aphaenogaster rudis*. *A. rudis* in the temperate deciduous forests of eastern North America is responsible for between 48 and 100% of all seed dispersal events. This displacement 'causes reduced seed dispersal in invaded areas, leaving the seeds susceptible to predation by rodents and competition with parent plants'. The authors concluded that the impacts of *P. chinensis* on seed dispersal were similar in magnitude to the impacts of the Argentine ant *Linepithema humile*.

## Principal source:

**Compiler:** IUCN SSC Invasive Species Specialist Group

**Review:**

**Publication date:** 2011-11-03

## ALIEN RANGE

[1] UNITED STATES

## BIBLIOGRAPHY

9 references found for *Pachycondyla chinensis*

Global Invasive Species Database (GISD) 2025. Species profile *Pachycondyla chinensis*. Available from: <https://www.iucngisd.org/gisd/species.php?sc=1848> [Accessed 16 August 2025]

## Management information

Bednar, D. M.; Silverman, J., 2011. Use of termites, *Reticulitermes virginicus*, as a springboard in the invasive success of a predatory ant, *Pachycondyla* (= *Brachyponera*) *chinensis*. *Insectes Sociaux*. 58(4). NOV 2011. 459-467.

Guenard, Benoit; Dunn, Robert R., 2010. A New (Old), Invasive Ant in the Hardwood Forests of Eastern North America and Its Potentially Widespread Impacts. *PLoS One*. 5(7). JUL 21 2010. Article No.: e11614.

**Summary:** Available from: <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0011614> [Accessed 10 November 2011]

Guenard, Benoit; Silverman, Jules, 2011. Tandem carrying, a new foraging strategy in ants: description, function, and adaptive significance relative to other described foraging strategies. *Naturwissenschaften*. 98(8). AUG 2011. 651-659.

Nelder, Mark P.; Paysen, Eric S.; Zungoli, Patricia A.; Benson, Eric P., 2006. Emergence of the introduced ant *Pachycondyla chinensis* (Formicidae : Ponerinae) as a public health threat in the southeastern United States. *Journal of Medical Entomology*. 43(5). SEP 2006. 1094-1098.

Rodriguez-Cabal, M. A., Katharine L. S., Benoit G., Robert R. D., Nathan J. S., 2011. Disruption of ant-seed dispersal mutualisms by the invasive Asian needle ant (*Pachycondyla chinensis*). *Biol Invasions* DOI 10.1007/s10530-011-0097-5

Yashiro, Toshihisa; Matsuura, Kenji; Guenard, Benoit; Terayama, Mamoru; Dunn, Robert R., 2010. On the evolution of the species complex *Pachycondyla chinensis* (Hymenoptera: Formicidae: Ponerinae), including the origin of its invasive form and description of a new species. *Zootaxa*.(2685). NOV 24 2010. 39-50.

## General information

[AntWeb, 2011. Species: \*Pachycondyla chinensis\*](#)

**Summary:** Available from:

<http://www.antweb.org/description.do?name=chinensis&genus=pachycondyla&rank=species&project=philippinesants> [Accessed 3 November 2011]

[Encyclopedia of Life \(EOL\), 2011. \*Pachycondyla chinensis\* Overview](#)

**Summary:** Available from: <http://eol.org/pages/485763/overview> [Accessed 3 November 2011]

MacGown, J. A., 2009. The Asian Needle Ant, *Pachycondyla chinensis* (Emery) (Hymenoptera: Formicidae), Reported from Alabama. *Midsouth Entomologist* 2: 88-89