GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Pachycondyla chinensis***

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:

Pubblication date: 2011-11-03

ALIEN RANGE

[1] UNITED STATES

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