

## ***Nylanderia (=Paratrechina) pubens***

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae

**Common name** Caribbean crazy ant (English), Raspberry crazy ant (English), hairy crazy ant (English)

**Synonym** *Paratrechina* , sp. nr. *pubens*

**Similar species** *Prenolepis imparis*, *Paratrechina guatemalensis*

**Summary** *Nylanderia (=Paratrechina) pubens*, or the hairy crazy ant, is an invasive pest which infests residences and businesses with vast colonies. Thought native to either South America or parts of the Caribbean, *N. pubens* establishes population explosions that are extremely problematic. It is known to accumulate in electrical equipment causing short circuits, clogging switching mechanisms, and causing equipment failure. Reports have also implicated it as an agricultural pest due to high densities of plant feeding Hemiptera that are tended by the ants.



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

## **Species Description**

*Nylanderia pubens* is a medium-small, 2.6-3 mm long, monomorphic, golden-brown to reddish-brown ant. Its body surface is smooth and glossy, and covered with dense hairs. Worker ants have long legs and antennae and their bodies have numerous, long, coarse hairs. Their heads are shiny, sparsely pubescent, and subcordate. The antenna have 12-segments with no club, and their antennal scape is nearly twice the width of the head. After feeding, the ant's gaster, rear portion of the abdomen, will appear to be striped due to stretching of the light-colored membrane connecting segments of the gaster. Its thorax is densely pubescent with long, abundant light-brown hairs. There is a small circle of hairs, called the acidopore, present at tip of the abdomen, as opposed to the typical stinger found in most ants, a characteristic of formicine ants found within the Formicinae subfamily. *N. pubens* is a social insect that is usually found in extremely large numbers and lives in large colonies or groups of colonies that seem to be indistinguishable from one another (Warner & Scheffrahn; Trager, 1984; AgriLife, 2008).

## **Notes**

*Nylanderia pubens* (Forel) was originally described as *Paratrechina pubens* Forel from St. Vincent, Lesser Antilles, and has been found on other West Indian islands, including Anguilla, Guadeloupe, and Puerto Rico (Trager 1984). The species was renamed *Nylanderia pubens* in 2010 ([LaPolla et al. 2010](#))

## **Lifecycle Stages**

Little is known about the life cycle of *Nylanderia pubens*. Colonies may have several hundred thousand to millions of individuals and appear to be polydomous, nesting in several locations, and polygamous, having multiple queens (Warner & Scheffrahn, 2008; Vazquez, undated)

## Habitat Description

*Nylanderia pubens* is a semi-tropical ant and potential northern distribution will be limited by cooler weather conditions. They have been found to emerge as temperatures reach 60°F. *N. pubens* does not build centralized nests, beds, or mounds, and does not emerge to the surface from nests through central openings. Colonies can be found under or within almost any object and may occur under landscape objects like rocks, timbers, piles of debris, stumps, soil, concrete, potted plants, etc. Introduced populations of *N. pubens* are found to be closely associated with urban, industrial, and disturbed areas. In urban environments worker ants forage indoors, into homes and other structures. Few worker ants forage during cooler winter months. In spring foraging activity begins and colonies grow, producing millions of workers that increase dramatically by mid-summer. Ant numbers remain high through fall. *N. pubens* has been observed emerging from soffits, between railroad ties used in landscaping, under wooden debris, underground electrical conduits, and cracks in cement (Warner & Scheffrahn, 2008; AgriLife, 2008; Deyrup, 2000).

## Reproduction

Colonies contain many queen ants. Broods consist of larval and pupal stages. Pupae are "naked" or without cocoons. They periodically produce winged male and female forms called sexual, alates or reproductives. Colonies are thought to spread or propagate by "budding" with breeding occurring at or near the edge of the nest, creating new colonies at the periphery. Distribution rates ~20 and ~30 m per month have been observed for residential and an industrial areas, respectively (AgriLife, 2008; Meyers, 2008).

## Nutrition

*Nylanderia pubens* is omnivorous and consumes almost anything. Worker ants commonly "tend" sucking hemipterous insects such as aphids, scale insects, whiteflies, mealy bugs, and others that excrete a sugary liquid called "honeydew" extracted from host plants when stimulated by the ants. Workers are attracted to sweet parts of plants including nectaries, damaged and over-ripe fruit. Worker ants also consume other insects and other small vertebrates for protein. *N. pubens* forms loose foraging trails as well as forage randomly non-trailing and crawl rapidly and erratically (AgriLife, 2008; Warner & Scheffrahn, 2008).

## General Impacts

*Nylanderia pubens* establishes vast colonies of up to millions of individuals that infest residences and businesses. In Houston, Texas and the surrounding areas large numbers of *N. pubens* have caused great annoyance to residents and businesses. Another population explosion of *P. pubens* has occurred in St. Croix where the ants have overrun several properties and home owners have reported having to sweep dust pans full of dead ants daily. Similar reports have come from home and business owners in Florida as well. They are irritating to people and domestic animals and seem to displace other animals in infested areas. *N. pubens* also accumulates in electrical equipment causing short circuits, clogging switching mechanisms, and causing equipment failure. It has caused electrical shortages in a variety of apparatuses including phone lines, air conditioning units, chemical-pipe valve computers, and sewage lift pump stations. In some cases the ants have caused several thousand dollars in damage and remedial costs. St. Croix agriculturalists have blamed *N. pubens* for crop damages due to high densities of plant feeding Hemiptera that are tended by the ants.

The ecological impacts of *N. pubens* have not yet been evaluated. Observations suggest they cause a homogenization of ant fauna and/or a reduction or displacement of native ant populations. In areas where it is well established in Florida, another invasive, the red imported fire ant (*Solenopsis invicta*), has been completely displaced. Although it is not a native species, such a displacement by *N. pubens* indicates a substantial threat to native ants (Warner & Scheffrahn, 2008; Meyers, 2008; Meyers & Gold, 2006; Drees et al, undated; AgriLife, 2008; Wetterer & Keularts, 2008)

## Management Info

**Chemical:** There are treatments available for this ant that offer temporary ("buffer zones") using contact insecticides applied to surfaces, such as those containing acephate, pyrethroid insecticides (bifenthrin, cypermethrin, cyfluthrin, deltamethrin, lambda-cyhalothin, permethrin, s-fenvvalerate, and others) or fipronil. These treatments are often breeched within 2-3 months post application. Effective products involved with the treatments are not readily available to the consumer. If you suspect your house or property is infested with these ants, call a professional pest control provider. After treatment, or when making multiple applications over time, piles of dead ants must be swept or moved out of the area in order to treat the surface(s) underneath. Termidor and Talstar have received expanded use approval through a Section 18 Quarantine Exemption from the Texas Department of Agriculture (TDA) and the Environmental Protection Agency (EPA) for the control of these ants. These are only available for use in counties with confirmed infestations of the Raspberry crazy ant. See product labels and supplemental labels for specific use directions: This exemption will expire on October 21, 2012 (AgriLife, 2008).

Dinotefuran exhibited high laboratory efficacy against *Nylanderia pubens*, while treatments using novaluron were inconclusive. The use of expanded-use Termidor® demonstrated trends in these data that suggest it as the treatment of choice. Other field treatments, such as Termidor and Top Choice®, Termidor and Advance Carpenter Ant BaitTM, and Transport® and Talstar® G, did not attain the success found in the expanded-use Termidor treatment. Most treatments examined were determined ineffective against high populations of *N. pubens*. Additional and more intensive population management regimes should be investigated. Abating further population proliferation to other regions will only be realized from additional control research supplemented with state and federal interdiction policies (Meyers, 2008; [Drees et al, undated](#)).

Sweet liquid ant bait was fed upon when placed directly on an active trail, but recruitment to the bait was not observed. Sprays and granular applications of residual insecticides seemingly have had little or no effect in controlling this non-biting nuisance ant. The use of contact residual insecticides sprayed along active trails and nest sites is recommended to reduce ant populations, followed a few days later by sweet ant baits placed at numerous locations along trails and frequently replaced with fresh bait (Warner & Scheffrahn, 2008).

## Pathway

*Paratrechina pubens* shows the likelihood of being transported through movement of almost any infested container or material. The movement of infested garbage, yard debris, bags or loads of compost, potted plants, bales of hay, can transport these ant colonies by truck, railroad, and airplane (AgriLife, 2008).

**Principal source:** [Warner, John and Rudolph H. Scheffrahn, 2008. Caribbean Crazy Ant \(proposed common name\), \*Paratrechina pubens\* Forel \(Insecta: Hymenoptera: Formicidae: Formicinae\)](#) EENY-284 series of Featured Creatures from the Entomology and Nematology Department, Florida.

Wetterer, James K., Keularts, Jozef L. W. 2008. Population explosion of the hairy crazy ant, *Paratrechina pubens* (Hymenoptera: Formicidae), on St. Croix, US Virgin Islands. Florida Entomologist. 91(3). SEP 2008. 423-427.

[AgriLife Research and Extension, 2008. Raspberry Crazy Ant \*Nylanderia\* sp. near \*pubens\* Center for Urban and Structural Entomology.](#)

**Compiler:** National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG)

Updates with support from the Overseas Territories Environmental Programme (OTEP) project XOT603, a joint project with the Cayman Islands Government - Department of Environment

**Review:** Dr. John Warner, University of Florida, Fort Lauderdale Research and Education Center

**Publication date:** 2010-09-24

## ALIEN RANGE

**[1] ANGUILLA**

**[1] ARGENTINA**

[1] BERMUDA  
 [1] COLOMBIA  
 [1] GUADELOUPE  
 [1] MEXICO  
 [1] PUERTO RICO  
 [2] UNITED STATES

[1] BRAZIL  
 [1] CUBA  
 [1] MARTINIQUE  
 [1] PANAMA  
 [1] SAINT VINCENT AND THE GRENADINES  
 [1] VIRGIN ISLANDS, U.S.

## BIBLIOGRAPHY

25 references found for ***Nylanderia (=Paratrechina) pubens***

### Management information

[AgriLife Research and Extension, 2008. Raspberry Crazy Ant \*Nylanderia\* sp. near \*pubens\* Center for Urban and Structural Entomology.](#)

**Summary:** Available from: [http://urbanentomology.tamu.edu/ants/exotic\\_tx.cfm](http://urbanentomology.tamu.edu/ants/exotic_tx.cfm) [Accessed 12 December 2009]

[AntWeb, 2010. Species: \*Paratrechina pubens\*](#)

**Summary:** Available from: <http://www.antweb.org/description.do?name=pubens&genus=paratrechina&rank=species&project=floridaants> [Accessed 12 December 2009]

[Drees, Bastiaan M., Paul Nester, and Roger Gold., Control of Raspberry Crazy Ants In and Around Homes and Structures. Texas AgriLife Extension Service, Texas A&M System, College Station, TX](#)

**Summary:** Available from: [http://urbanentomology.tamu.edu/pdf/RCA\\_control\\_fact\\_sheet.pdf](http://urbanentomology.tamu.edu/pdf/RCA_control_fact_sheet.pdf) [Accessed 12 December 2009]

[IUCN/SSC Invasive Species Specialist Group \(ISSG\), 2010. A Compilation of Information Sources for Conservation Managers.](#)

**Summary:** This compilation of information sources can be sorted on keywords for example: Baits & Lures, Non Target Species, Eradication, Monitoring, Risk Assessment, Weeds, Herbicides etc. This compilation is at present in Excel format, this will be web-enabled as a searchable database shortly. This version of the database has been developed by the IUCN SSC ISSG as part of an Overseas Territories Environmental Programme funded project XOT603 in partnership with the Cayman Islands Government - Department of Environment. The compilation is a work under progress, the ISSG will manage, maintain and enhance the database with current and newly published information, reports, journal articles etc.

[LaPolla J. S, Brady S. G, Shattuck S. O. 2010. Phylogeny and taxonomy of the \*Prenolepis\* genus-group of ants \(Hymenoptera: Formicidae\). Systematic Entomology 35: 118-131.](#)

[Meyers, Jason M., 2007. Field efficacy of Phantom SC, Advance granular bait, and present and expanded label usage Termidor SC against exotic pest ant, \*Paratrechina\* sp. nr. \*pubens\*. Presentation Monday, December 10, 2007 - 8:29 AM 0547. Annual Meeting Entomological Society of America.](#)

**Summary:** Available from: [http://esa.confex.com/esa/2007/techprogram/paper\\_29155.htm](http://esa.confex.com/esa/2007/techprogram/paper_29155.htm) [Accessed 12 December 2009]

[Meyers, Jason M. 2008. Identification, Distribution and Control of an Invasive Pest Ant, \*Paratrechina\* sp. \(Hymenoptera: Formicidae\), in Texas. A Dissertation Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of Doctor of Philosophy August 2008.](#)

**Summary:** Available from:

[http://www.mississippientomologicalmuseum.org.msstate.edu/Researchtaxapages/Formicidaepages/ant\\_pubs\\_other\\_authors/meyer\\_dissertation.pdf](http://www.mississippientomologicalmuseum.org.msstate.edu/Researchtaxapages/Formicidaepages/ant_pubs_other_authors/meyer_dissertation.pdf) [Accessed 12 December 2009]

[Meyers, Jason M. and Gold, Roger E. 2007. Laboratory Evaluation of Dinotefuran and Novaluron Amended Baits Against \*Paratrechina\* sp. nr. \*pubens\*. Journal of Agricultural and Urban Entomology July 2007 : Vol. 24, Issue 3, pg\(s\) 125-136.](#)

[Warner, John and Rudolph H. Scheffrahn, 2010. Caribbean Crazy Ant \(proposed common name\), \*Nylanderia \(=Paratrechina\) pubens\* \(Forel\) \(Insecta: Hymenoptera: Formicidae: Formicinae\)](#)

**Summary:** Available from: <http://edis.ifas.ufl.edu/pdffiles/IN/IN56000.pdf> [Accessed 24 September 2010]

### General information

[Deyrup, Mark., 2003. An Updated List of Florida Ants \(Hymenoptera: Formicidae\) The Florida Entomologist, Vol. 86, No. 1 \(Mar., 2003\), pp. 43-48](#)

[Deyrup, M., Davis, L., Cover, S. 2000. Exotic Ants in Florida. Transactions of the American Entomological Society \(1890-\), Vol. 126, No. 3/4 \(Sep. - Dec., 2000\), pp. 293-326.](#)

[Global Biodiversity Information Facility \(GBIF\), 2010. Species: \*Paratrechina pubens\* \(Forel, 1893\)](#)

**Summary:** Available from: <http://data.gbif.org/species/13783093> [Accessed 15 June 2010]

[Integrated Taxonomic Information System \(ITIS\)., 2010. \*Paratrechina pubens\* \(Forel, 1893\)](#)

**Summary:** Available from: [http://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=577389](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=577389) [Accessed 12 December 2009]

[IUCN USA Multilateral Office, 2009. Ants in Houston. Tramp ants threaten businesses, agriculture and biodiversity in Houston, Texas](#)

**Summary:** Available from: [http://www.iucn.org/about/union/secretariat/offices/usa/about\\_usa/invasive/ants\\_in\\_port\\_houston/](http://www.iucn.org/about/union/secretariat/offices/usa/about_usa/invasive/ants_in_port_houston/) [Accessed 12 December 2009]

[LaPolla, John S., Brady, Sean G., & Shattuck, Steven O. 2010. Phylogeny and taxonomy of the \*Prenolepis\* genus-group of ants \(Hymenoptera: Formicidae\). Systematic Entomology \(2010\), 35, 118-131.](#)

**Summary:** Available from: [http://entomology.si.edu/StaffPages/Brady/2010\\_LaPolla-et-al.pdf](http://entomology.si.edu/StaffPages/Brady/2010_LaPolla-et-al.pdf) [Accessed 12 December 2009]

[Meyers, Jason M. and Gold, Roger E. 2006. Evidence of an exotic \*Paratrechina\* sp. \(Hymenoptera: Formicidae\) in the Continental United States: Description, Distribution and Laboratory Control. Department of Entomology, Texas A&M University. Center for Urban and Structural Entomology.](#)

**Summary:** Available from: <http://ncue.tamu.edu/proceedings/pdf/2006proceedings.pdf#page=129> [Accessed 12 December 2009]

[Meyers, J.M. and Gold, R. 2008. Identification of an exotic pest ant, \*Paratrechina\* sp. nr. \*pubens\* \(Hymenoptera: Formicidae\), in Texas. Sociobiology Volume 52, Issue 3, 2008, Pages 589-604.](#)

Global Invasive Species Database (GISD) 2026. Species profile *Nylanderia (=Paratrechina) pubens*.

Available from: <https://iucngisd.org/gisd/species.php?sc=1553> [Accessed 13 February 2026]

Miller, Scott E., 1994. Dispersal of Plant Pests into the Virgin Islands. *The Florida Entomologist*, Vol. 77, No. 4 (Dec., 1994), pp. 520-521

[Trager, James C., 1984. A Revision of the Genus \*Paratrechina\* \(Hymenoptera: Formicidae\) of the Continental United States. \*Sociobiology\* Vol. 9, No 2, 1984](#)

**Summary:** Available from: <http://antbase.org/ants/publications/2902/2902.pdf> [Accessed 12 December 2009]

[Vazquez, Ricardo., undated. Current Research Summary Bayer Environmental Science Young Scientist of the Year 2008](#)

**Summary:** Available from: <http://www.npmapestworld.org/PW08YoungScientist/documents/VazquezRicardoResearch.pdf> [Accessed 12 December 2009]

[Warner, John and Rudolph H. Scheffrahn, 2008. Caribbean Crazy Ant \(proposed common name\), \*Paratrechina pubens\* Forel \(Insecta: Hymenoptera: Formicidae: Formicinae\) FENY-284 series of Featured Creatures from the Entomology and Nematology Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Published: March 2003. Revised: February 2004. Reviewed: March 2008.](#)

**Summary:** Available from: <http://edis.ifas.ufl.edu/pdf/IN/IN56000.pdf> [Accessed 12 December 2009]

Warner, John and Scheffrahn, Rudolph H. 2003. Caribbean Crazy Ant (proposed common name), *Paratrechina pubens* Forel (Insecta: Hymenoptera: Formicidae: Formicinae). Department of Entomology and Nematology, Ft. Lauderdale Research and Education Center, University of Florida, Ft. Lauderdale.

[Wetterer, James K. 2007. \*Paratrechina pubens\* \(Forel, 1983\) \(Hymenoptera: Formicidae\), a candidate for the plague ant of 19th century Bermuda. \*Myrmecological news\*, Vol 10: pg 39-40.](#)

**Summary:** Available from: [http://myrmecologicalnews.org/cms/images/pdf/volume10/mn10\\_39-40\\_non-printable.pdf](http://myrmecologicalnews.org/cms/images/pdf/volume10/mn10_39-40_non-printable.pdf) [Accessed 12 December 2009]

Wetterer, James K., Keularts, Jozef L. W. 2008. Population explosion of the hairy crazy ant, *Paratrechina pubens* (Hymenoptera: Formicidae), on St. Croix, US Virgin Islands. *Florida Entomologist*. 91(3). SEP 2008. 423-427.

[Wynalda, Racheal. 2008. Nutrient Regulations of an Exotic, Unidentified \*Paratrechina\* sp. \(Hymenoptera: Formidae\) Found in Texas: Thesis, Texas A&M University.](#)

**Summary:** Available from: <http://repository.tamu.edu/bitstream/handle/1969.1/85930/Wynalda.pdf?sequence=1> [Accessed 12 December 2009]