

8 Insects

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## On Certain Tropical Ants Introduced Into the United States.

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In a collection of Formicidæ belonging to the Philadelphia Academy of Natural Sciences and sent me for identification by Dr. Henry Skinner, I find a number of specimens of *Monomorium destructor*. This ant, originally described from India by Jerdon,\* though introduced into the tropics of the New World, has not been recorded heretofore from the United States. The specimens are labeled "Black Warrior River, Tuscaloosa County, Alabama," and "Seminole Point, Monroe County, Florida," collected by Mr. Clarence B. Moore. As these localities are widely separated, one being at the tip of the peninsula of Florida, the other in the northwestern portion of Alabama, we may infer that the species has either been recently introduced at different points or is already widely distributed in the eastern Gulf States. That it is of comparatively recent importation from the tropics there can be little doubt.

In his original description of *Atta destructor*, Jerdon gives the following brief account of the habits of the diminutive workers: "They live in holes in the ground or in walls, etc.,

\* Madras Journ. of Litt. and Sc. xvii, 1851, p. 105, abstracted in Ann. Mag. Nat. Hist. (2), xlii, 1854, p. 47.

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and are very numerous in individuals. They prefer animal to vegetable substances, destroying dead insects, bird skins, etc., but also feed greedily on sugar. They are very common in all parts of India, and often prove very troublesome and destructive to the naturalist.' The bad reputation of this ant is expressed in two other names which have been given it by Frederic Smith and Gerstæcker, on the supposition that it had not been previously described; the former calling it *Myrmica vastator*, the latter *Myrmica ominosa*. The insect is repeatedly met with in the literature under these and other names like *Monomorium atomaria* and *M. basale*.

There are now three imported species of *Monomorium* in the United States, all of which have probably been carried by ships from their original home in southeastern Asia, namely: *M. pharaonis*, *M. floricola* and *M. destructor*. The first is a widely distributed house-ant, not only in the tropics, but also in temperate Europe and America; the second is tropicopolitan, though it manages to subsist in our northern green-houses; the last, as I have just shown, has begun to spread into temperate North America. In a recent paper\* I recorded the introduction of a fourth *Monomorium* (*M. salomonis* Linn), a well-known North African species, into the Bahamas.

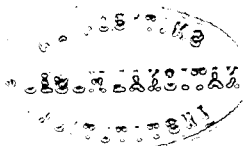
Another small tropical ant which has recently gained a foothold in the United States is *Iridomyrmex humilis* Mayr. This species has been taken in numbers in New Orleans by Mr. E. S. G. Titus. As a native of the New World, it was supposed to be confined to South America (Brazil and Argentina). It is not included among the known Mexican or Central American ants, nor can I find any record of its occurrence in the West Indies.

According to Stoll† this ant has also been imported into Madeira where it has become a pest in houses and has supplanted another previously introduced ant (*Pheidole megacephala* Fabr.) which was the house-ant of Madeira in the days of Heer.‡ Some idea of the numbers of *Ph. megacephala* in Madeira in the middle of the last century may be gained from

\* The Ants of the Bahamas. Bull. Am. Mus. Nat. Hist. xxi, 1905, p. 89.

† Zur Kenntniss der geographischen Verbreitung der Ameisen. Mitt. d. schweiz. entom. Gesell. x, 3, 1898, pp. 120-126.

‡ Ueber die Hausameise Madeiras. An die Züricher Jugend auf das Jahr 1852 v. d. naturforsch. Gesell. 54 Stuck, 1852, pp. 1-24 Taf.



the following extract from Heer's work : " It occurs throughout the southern portion of the island of Madeira up to an elevation of 1,000 feet in prodigious numbers, especially in hot, sunny places, where it is to be found under eight out of every ten stones that may be overturned. In the city of Funchal there is probably not a single house that is not infested with millions of these insects. They climb to the top stories, issue in swarms from the cracks in walls and floors and keep traversing the rooms in all directions in regular files. They creep up the legs of the tables, along their edges and into the cupboards, chests, etc. On account of their extremely diminutive size they are able to enter the smallest holes and crevices. Even when thousands and thousands of them are killed, there is no reduction in their numbers, as fresh armies are continually arriving." The recent displacement of this pest by another, *Iridomyrmex humilis*, bears a close and interesting analogy to the well-known displacement in Europe and America of the black house-rat (*Mus rattus*) by the brown species (*M. decumanus*). In a similar manner, according to Stoll, another ant, *Plagiolepis longipes* Jerdon, introduced into the island of Reunion from its original home in Cochin China, has driven out some of the primitive autochthonous species. We may also look forward to the appearance of this same ant within the warmer portions of the United States, since it has already been recorded by Pergande from Todos Santos in Lower California.\*

Still another foreign ant which has acquired a footing in tropical Florida and probably also in other localities in the Gulf States, is *Prenolepis longicornis* Latreille. It has also become a common species in the green houses of temperate Europe and America. In some of these, as in the Jardin des Plantes in Paris, it has been a permanent resident for more than forty years. It may sometimes be found even on the top floors of the great apartment buildings in New York City. Wasman† has just given good reasons for believing that the

\* Formicidae of Lower California, Mexico. Proc. Cal. Acad. Sc. (2) iv, 1894, p. 163.

† Zur Lebensweise einiger in- und ausländischen Ameisengäste 3. Wanderungen von *Collocera maderæ* Woll. (oculata Bel.) mit *Prenolepis longicornis* Latr. Zeitschr. f. wiss. Insect.-biol. Bd. I, Heft 9. Sept. 17, 1905, pp. 384-390.

original home of this ant is India and that it has been carried to all parts of the tropics in ships. He shows that it has been accompanied in these wanderings by two myrmecophiles, a Lathridiid beetle (*Coluocera maderæ*) and a small cricket (*Myrmecophila acervorum* var. *flavocincta*.)