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TWO INTRODUCED ANTS NOT PREVIOUSLY KNOWN TO OCCUR IN THE UNITED STATES[1]

By M. R. SMITH, *A. & M. College, Mississippi*

During the past year or so I have noted two species of imported ants which, although now established in this country have not heretofore been recorded. One of the ants to which I refer is a *Myrmicine* ant, the other a *Dolichoderine* ant. The latter, *Iridomyrmex iniquus* Mayr., is of especial interest as it belongs to the same genus as that of the very destructive imported Argentine ant. I first noted this ant in the floral greenhouse at the University of Illinois in 1925. Here the workers were found crawling over the benches and such plants as orchids, palms, etc. They were particularly noted to attend the soft brown scale, *Coccus hesperidum* Linn. on citrus, the hemispherical scale, *Saissetia hemisphaericum* (Targ.) on palm, and the mealy bug, *Pseudococcus citri* (Risso) on citrus. A number of workers were seen assiduously attending the mealy bugs mentioned above, from which they had secured so much honey dew that their abdomens were greatly distended. Besides honey dew, the ants also feed on the flesh of organisms. In several instances, workers were noted carrying in their mouths small midges (Chironomids).

The nests of this ant were never conspicuous and were located only after considerable search. In every case observed they were found in either the soil of pots or in the soil on the floor of the greenhouse rooms. I would have expected this ant to be present in large numbers, but such was not the case. In my opinion the ants were not abundant enough to cause any special alarm.

A greenhouse attendant stated that he believed the ants had been present in the greenhouse since 1914, and were most probably introduced with orchids from Brazil. If he is right in this assumption, then

[1]Contribution from the Mississippi Agricultural Experiment Station.

this ant cannot develop rapidly enough under greenhouse conditions to be considered a serious pest.

Iridomyrmex iniquus was described by Mayr in 1870 from specimens taken at Colombia, South America. The synonymy of the species is as follows:

I. iniquus Mayr. Sitz. Akad. Wiss. Wien, Vol. 71, p. 392 (1870), worker (*Hypoclinea iniqua*).

Hypoclinea (*I.*) *iniqua* Mayr. Verh. Zool.-bot. Ges. Wien, Vol. 20, p. 958 (1870) worker.

Iridomyrmex iniquus Forel, *ibidem*, Vol. 58 p. 395, (1908) male.

At the present time there are four distinct forms of *Iridomyrmex* known to occur in the United States. Beside the two imported forms here mentioned, there are the two native ants, *I. pruinosus* (Roger), and its variety *analis* André. It is hoped that the following key will suffice for the determination of the workers of the typical forms of these species:

1. Head distinctly sub-triangular.....2
   Head not sub-triangular, but sub-rectangular; workers when crushed give off a perceptible nauseating or sweetish "Tapinoma" odor.....3
2. Mesonotum with a transverse impression; a deep constriction or suture before the epinotum, thus causing the latter to appear very gibbose; a small (2.2 mm.) shining, imported species.....*I. iniquus* Mayr.
   Mesonotum without a transverse impression; epinotum not gibbose; larger (2.2–2.6 mm.) more pubescent or subopaque imported species; workers when crushed give off a perceptible greasy or musty odor.....*I. humilis* Mayr.
3. Head, thorax and abdomen almost a uniform brown, pubescence of such a nature as to give the body in some lights a pruinose or frosty appearance.....*I. pruinosus* (Roger).
   Head and thorax brown, abdomen pale yellowish, thus giving the body a bi-colored appearance.....*I. pruinosus* var. *analis* André.

The second species of ant, *Wasmannia auropunctata* (Roger) was received from a correspondent, Mr. R. H. Hickman, who stated that the ants were taken on the property of a wealthy man living in the vicinity of Miami, Fla. He also mentioned the fact that the ants would sting viciously, but did not remark whether they were noted to infest houses or not.

At a superficial glance at the worker of this species under the binoculars, one would be inclined to regard this minute species as a form of *Tetramorium*, and in fact it has been placed by some of the older systematists in this group. From *Tetramorium* the genus *Wasmannia* can be separated by the worker and female possessing an antennal scrobe which is bordered laterally by a more or less distinct carina of the cheeks.

The following is the synonymy of the species:

W. auropunctata (Roger), Berl. Ent. Zeitschr. Vol. 7, p. 182 (1863) male, female, worker (*Tetramorium?*).

Tetramorium auropunctatum Forel, Bull. Soc. Vaud. Sc. Nat. Vol. 20, p. 375 (1884); Mayr, Verh. Zool.-bot. Ges. Wien, Vol. 37, p. 623 (1887).

Ochetomyrmex auropunctatus Forel, Ann. Soc. Ent. Belg. Vol. 30, C. R. p. 49 (1886).

Tetramorium (Xiphomyrmex) auropunctatum Forel, Mitt. Schweiz. Ent. Ges. Vol. 7, p. 385 (1887).

Wasmannia auropunctata Forel, Trans. Ent. Soc. Lond. p. 383 (1893) worker, male, female; Wheeler, Bull. Amer. Mus. Nat. Hist. Vol. 24, p. 143, pl. 12, f. 18 (1908) worker.

LEAFHOPPERS (*HOMOPTERA, CICADELLIDAE*) FOUND ON THE SUGAR BEET IN IOWA[1]

By R. M. JONES

During the summer of 1928, beginning August 1, a survey was made of the insect pests feeding on the sugar beet in Iowa. The main object of this survey was to determine if the Sugar Beet Leafhopper (*Eutettix tenella* Baker) and "curly-top," the disease which it transmits, occurred in this state. Although six weeks were spent scouting in the fields neither the leafhopper or the disease was found.

During this work the author became interested in collecting all species of leafhoppers present in the fields, and a special effort was made to do this in all cases. The collections were made in fields under contract to the American Beet Sugar Company, Mason City, Iowa. Six counties were scouted in the northern part of the state, namely: Cerro Gordo, Worth, Mitchel, Hancock, Winnebago and Kossuth.

The writer greatly appreciates the help of Dr. C. J. Drake, Iowa State College, for it was due to his efforts that this survey was possible; also the assistance of Dr. D. M. DeLong, Ohio State University, who determined the species. Thanks are also due Dr. H. H. Knight, Iowa State College, for suggestions; and to Mr. Baird, the manager of the American Beet Sugar Company, who kindly supplied a complete list of all their growers.

A review of the literature indicates that nine species of leafhoppers have been reported on the sugar beet. Osborn and Gossard (1891) reported *Agallia sanguinolenta* Prov. on sugar beets at Ames, Iowa, on the Experiment Station plots. Forbes and Hart (1900) also found this species on beets on the University farm, Urbana, Illinois. Ball (1909),

[1]Contribution from the Department of Zoology and Entomology, Iowa State College, Ames, Iowa.