

1951

## A Lead Destroying Ant from Panama

E. V. Enzmann

*Still College of Osteopathy and Surgery*

Copyright © Copyright 1951 by the Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

---

### Recommended Citation

Enzmann, E. V. (1951) "A Lead Destroying Ant from Panama," *Proceedings of the Iowa Academy of Science*: Vol. 58: No. 1 , Article 57.

Available at: <https://scholarworks.uni.edu/pias/vol58/iss1/57>

This Research is brought to you for free and open access by UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

## A Lead Destroying Ant from Panama\*

By E. V. ENZMANN

During the winter of 1947 the telephone line of a police station in the city of Balboa, Canal Zone, suddenly went dead. The station was serviced by an underground cable encased in a lead pipe of three quarters of an inch in diameter. Workmen began to dig up the cable and after a prolonged search found the cause of the disturbance. A colony of ants had attacked the lead shell of the cable, had severed it effectively in one place and had cut deep notches in several other places. In addition large areas of the lead sheathing had been peeled off by the insects and the cable had been scored deeply in other places.

The police authorities ordered a yard long section of the cable removed and sent to Mr. J. Zetek, Research Manager of the Canal Zone Biological Area, for further study. Mr. Zetek prepared a photograph which he showed the author, together with the damaged section of the lead cable. Several specimens of the ants were given to the writer for identification.

Examination of the lead cable showed that several ants had their mandibles deeply imbedded in the metal, holding on with a firm grip, even in death. We succeeded in removing only one ant intact; in all the others the heads broke off when an attempt was made to extricate the mandibles from the lead. Altogether nine specimens were removed from the cable; one undamaged worker major, the thorax of a media worker and seven heads of workers of various sizes. Some of the heads still held particles of lead between their mandibles.

These lead destroying ants were found to be a melanotic variety of *Eciton* (*Labidus*) *coecum*, a species of army ants which is rather common in all warmer parts of the Western Hemisphere. Numerous subspecies and varieties of this species have been described. Other dark colored forms of *Eciton coecum* include the variety *grassator* Forel and *opacifrons* Wheeler, both from Brazil. Another melanotic variety, as yet unnamed, occurs in the High Andes of Colombia and of Peru. (Specimens in the authors collection).

The workmen who first encountered the lead carving ants mistook them for leaf-cutting ants. The error is understandable: there

---

\*The author wishes to express his gratitude to Mr. J. Zetek for permission to publish on this material.

is a common species of *Atta* which is rather abundant in the clearings of the jungles of Panama and is also often seen in the gardens and on the sidewalks of the cities. This form resembles *Eciton coecum* in coloration, general size, extreme polymorphism and the habit of marching in files. The two species can readily be told apart, even by an untrained observer: the leaf-cutters often carry sections of leaves in their mandibles, holding them over their heads like parasols.

STILL COLLEGE OF OSTEOPATHY AND SURGERY  
DES MOINES, IOWA