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FROM THE GALAPAGOS ISLANDS  
(Homoptera: Cicadellidae)

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A NEW SPECIES OF *AUSTROAGALLIA* EVANS  
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By

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ABSTRACT: A new species, *Austroagallia arrhenonigra*, is described from the Galápagos Islands. *Agallia mera* Van Duzee is assigned to *Austroagallia*. The relationships of *A. arrhenonigra*, *A. caboverdensis*, and *A. mera* are discussed.

Three species of Agalliinae, *Agallia plana* (Butler), *A. striolaris* (Butler), and *A. mera* Van Duzee, are known from the Galápagos Islands. I had the opportunity of studying *A. plana* and *A. mera*. While *A. plana* is properly placed in the genus *Agallia* Curtis, *A. mera* is not. Linsley and Usinger (1966) erroneously assigned *A. mera* to the New World genus *Agalliopsis* Kirkaldy. The genera *Agalliopsis* and *Austroagallia* are differentiated from *Agallia* by their hind margin of vertex, which is sinuately curved behind the eyes. *Austroagallia* has the ocelli closer to each other than to the adjacent eye, the genae comparatively narrower, and the aedeagus asymmetrical. *Agalliopsis* has the ocelli closer to the adjacent eye than to each other, the genae comparatively broad, and the aedeagus symmetrical. Thus the position of ocelli and structure of genae show that *A. mera* belongs to the Old World genus *Austroagallia* Evans.

Austroagallia arrhenonigra, new species, the fourth species of Agalliinae from the Galápagos, was found among the unsorted insects in the collection of the California Academy of Sciences, San Francisco, while searching for agallian leafhoppers to be treated in a revision of the Old World Agalliinae now in progress.

Measurements of specimens given in the description of A. arrhenonigra were made with a filar micrometer, converted to millimeters and rounded to the nearest one-hundredth of a millimeter. 'Length' is the distance from the apex of the head to the apex of the folded forewings; 'width' is the distance across the eyes.

I am grateful to Paul Oman, Department of Entomology, Oregon State University, Corvallis, for his guidance and continued encouragement, to Paul H. Arnaud, Jr., Curator, Department of Entomology, California Academy of Sciences, San Francisco, for giving me an opportunity to study the types and the insect collection, to R. Linnavuori, Raisio, Somersoja, Finland, for loaning me identified agallian leafhoppers, and to W. J. Knight, British Museum, London, for loaning the type specimens for the study.

Austroagallia arrhenonigra Viraktamath, new species.

This species is closely related to Austroagallia caboverdensis (Lindberg). The general coloration, absence of a black spot ventrad of antennal socket, the slender clypellus, and nonoverlapping caudal denticles of anal collar, distinguish it from A. caboverdensis.

Color varies from greenish yellow to dark brown. Two round spots on vertex and two on posterior half of pronotum are black. Males tend to be darker than females. In males the following are dark brown in color: a central stripe on vertex, a broad stripe with irregular lateral margins on disc of pronotum between the round spots, two lateral elongate spots on anterior half of scutellum, the median impressed line of scutellum (fig. 1), claws and forewings excepting the costal margin which is hyaline, inner margin, claval suture, and outer claval vein. Outer surface of labium is reddish. In females the darker shades on vertex, pronotum, scutellum, and forewings are reduced in varying degree or may be completely absent, in which case the round black spots on vertex and pronotum tend to be smaller. In one female the vertex is fuscous whereas all other dark shades are absent.

Males are smaller than females. The two males measured 1.03 and 1.01 mm. wide and 3.3 and 3.25 mm. long. Females measured on an average (of four specimens) 1.1 mm. wide and 3.75 mm. long. Face wider than long, clypellus slender, slightly broader apically. Posterior margin of pronotum slightly angulate in middle. Forewing venation obsolete.

Male pygofer produced posteriorly as a membranous lobe (fig. 2). Male plates short, triangular, and strongly articulated with connective. Anal collar well developed,

posteriorly rounded, and terminating in two toothlike ventrally directed nonoverlapping processes on each side (fig. 4). Connective and styles as in A. caboverdensis but smaller. Aedeagus much narrower than in A. caboverdensis, dorsal apodeme much more strongly developed (fig. 5), the ratio of dorsal apodeme to the aedeagal shaft is 1 : 1.25 (1 : 1.5 in A. caboverdensis). Aedeagal shaft asymmetrical (fig. 6), gonopore terminal. Seventh sternite of female slightly concave (fig. 7).

Types. Holotype male labelled "Galapagos Arch., Isla Santa Cruz, Horneman Farm, 220M IV-18-1964, D. Q. Cavagnaro Collector" and seven paratypes (one male and six females) collected at the same locality by the same collector but on different dates (one male and two females on IV-18-1964, two females on III-10-1964, and the other two on V-3-1964), deposited in the California Academy of Sciences, San Francisco.

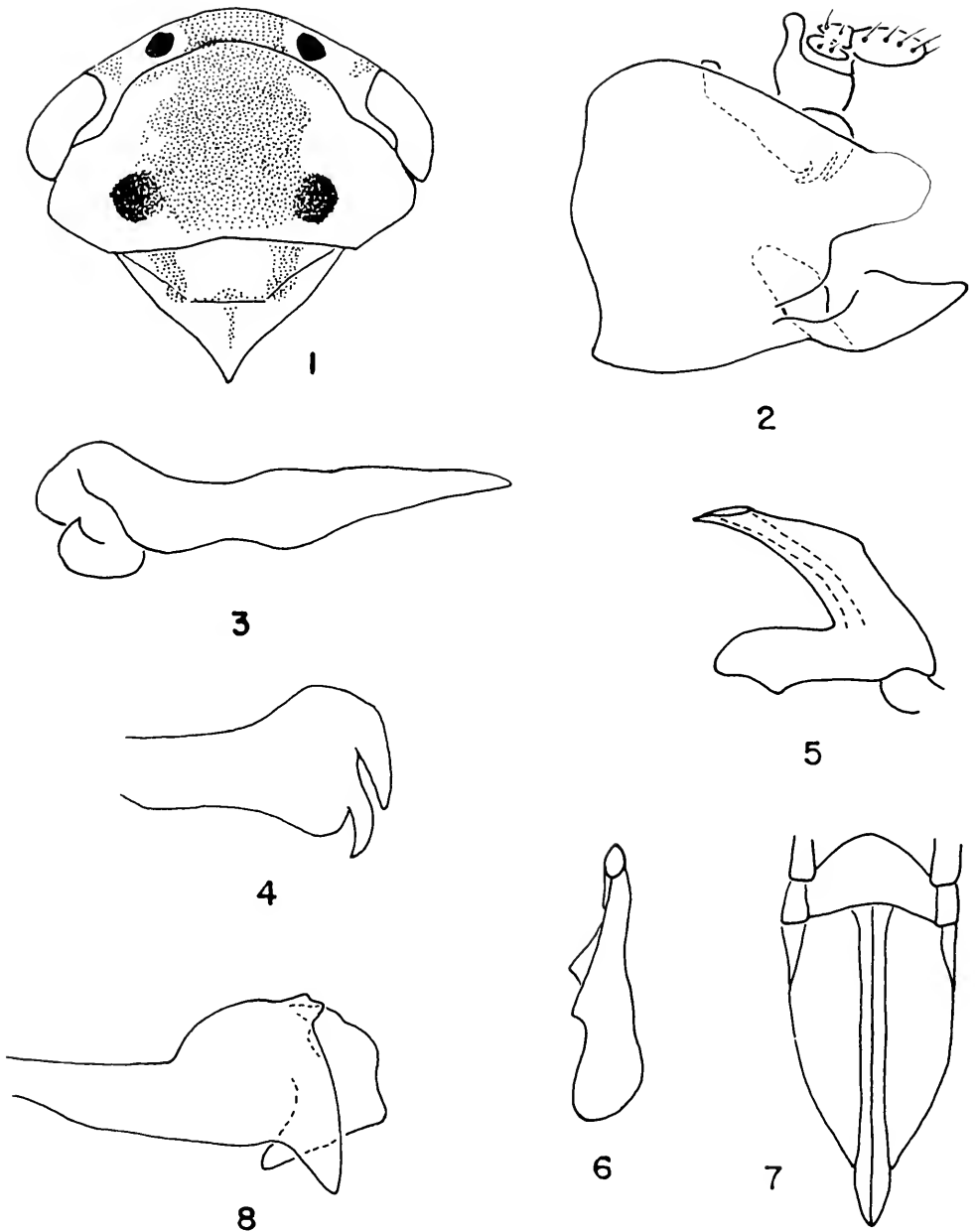
Illustrations are from a paratype male (fig. 1), holotype (fig. 2-6), and from a female paratype (fig. 7). Illustration of anal collar of A. caboverdensis (fig. 8) is from a male specimen labelled "Ins. Cabo Verde, Nicolau Rib. Braya, 6-19.12.1953, Lindberg (Collector)" identified by R. Linnavuori. All these specimens are labelled "Illustrated Viraktamath" on a yellow label attached to the pin carrying the respective specimen.

The characters of face being wider than long and comparatively less excavated seventh sternite of female distinguish this species from Austroagallia mera (Van Duzee), new combination, which has a long narrow face and a comparatively deeply excavated female seventh sternite.

So far Austroagallia is known only from the Old World. There are no records of Austroagallia from the New World. Thus it is possible that the members of this genus might have been introduced from the Old World on to the oceanic islands of the Galápagos in the past.

#### LITERATURE CITED

- Linsley, E. G., and R. L. Usinger  
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FIGURES 1-7. *Austroagallia arrhenonigra* Viraktamath, new species. Figure 1. Head and thorax, dorsal view. Figure 2. Genital capsule, lateral view. Figure 3. Style, dorsal view. Figure 4. Anal collar, lateral view. Figure 5. Aedeagus, lateral view. Figure 6. Aedeagus, caudal view. Figure 7. Female seventh sternite and ovipositor. Figure 8. *Austroagallia caboverdensis* (Lindberg), anal collar, lateral view.





