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## STUDIES ON IDIOCERINE LEAFHOPPERS XII. *IDIOSCOPUS CLAVOSIGNATUS* SPEC. NOV. (HOMOPTERA, CICADELLIDAE)

by

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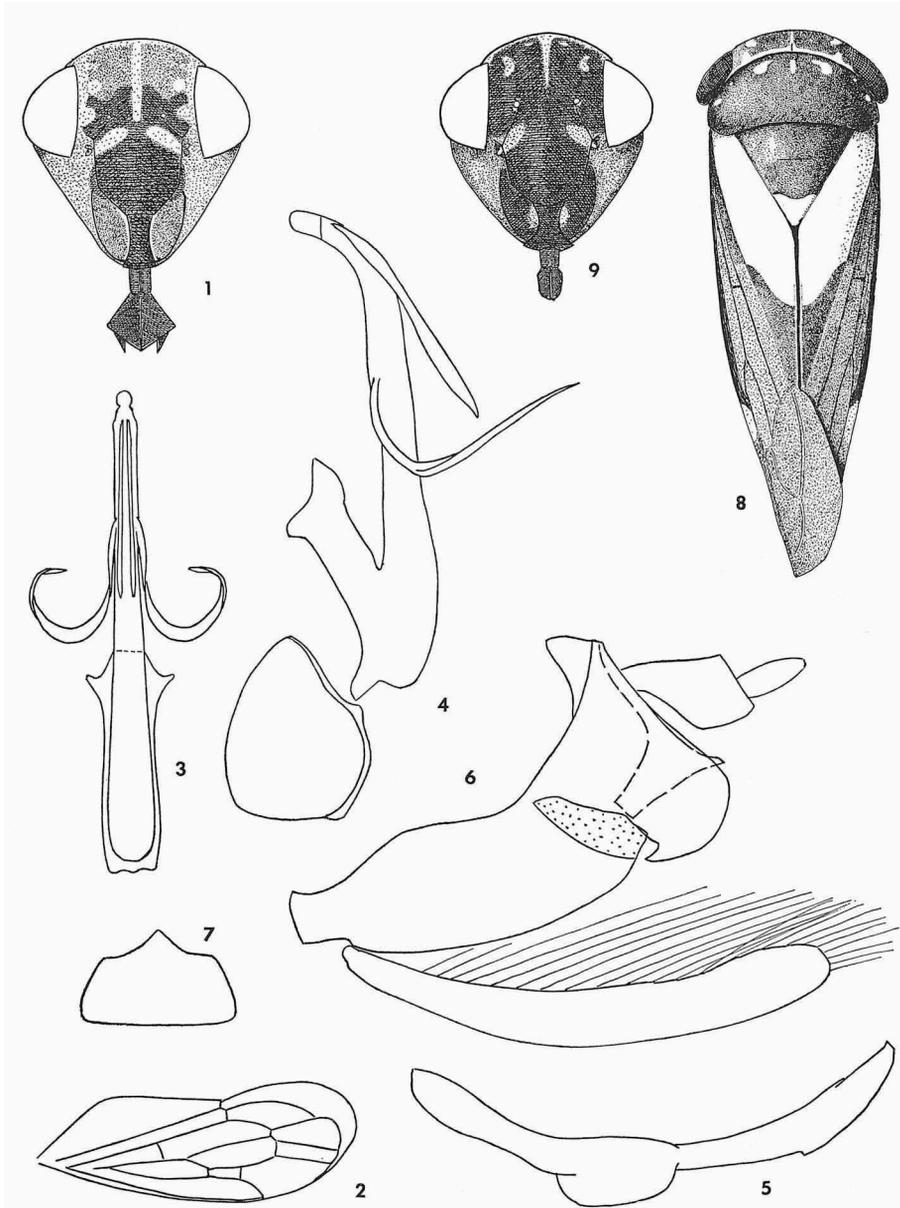
With 9 figures

Among material from the Leiden Museum loaned to me for study a new species of *Idioscopus* was found that is described here. A summary of the species in the genus is added in two tables.

In the descriptions below 30 micrometer units are equivalent to 1.0 mm. The types are deposited in the Leiden Museum, The Netherlands, in my own collection, and in the United States National Museum, Washington.

### ***Idioscopus clavosignatus* spec. nov.**

Male. — Overall coloration brown or blackish-brown, forewing with a conspicuous greenish-yellow area on basal half of clavus. Vertex brown; medially, along basal margin, and eyes lined with light-brown. Face with anteclypeus, most of postclypeus, and areas around ocelli blackish-brown; genae, lorae, and remaining areas of frons brownish. Beak blackish-brown. Pronotum brown, with four ivory spots along anterior margin. Scutellum brown, a small triangular blackish area near each basal angle, apex greenish-yellow. Thorax laterally brown, mesopleura blackish-brown. Fore and mid legs light-brown; hind leg with costa posteriorly, femur, and tibia entirely brown; other areas of coxa light-brown; outer edge of metatibia with light-brown spines; hind tarsus with first segment ivory. Forewing mostly transparent, with a brownish tinge, with well-defined brown veins (fig. 2); clavus as described above; costal cell and apices of second to fourth apical cells and part of appendix darker brown; costal margin brown, small area at apex of costal cell and base of outermost apical cell hyaline or grayish. Abdominal sterna brown with cream-coloured apical margin.



Figs. 1-9. *Idioscopus clavosignatus* spec. nov. 1-7, male; 1, head, front view; 2, forewing venation; 3, aedeagus, caudal view; 4, aedeagus and connective, lateral view; 5, style, lateral view; 6, genital capsule, lateral view; 7, valve, ventral view. 8-9, female; 8, habitus; 9, head, frontal view.

Vertex five times as wide as long (25 : 5), margins parallel, finely transversely striate. Face as long as wide across eyes (48 : 48), ocelli closer to eyes than to each other (8 : 11). Lateral margins of postclypeus angled at about midlength. Last segment of beak expanded (fig. 1). Pronotum with hind margin shallowly concave, 2.3 times as wide as long (40 : 15). Scutellum slightly wider than long (28 : 25). Forewing venation as in figure 2. Length 4.9 mm.

Genitalia as in figures 3 to 7.

Female. — Overall coloration brown, head and thorax blackish-brown; forewing brown with conspicuous greenish-yellow area on basal half of clavus and a hyaline area on costal margin near apex of costal cell (fig. 8). Vertex blackish-brown, ornamented as in male; face blackish-brown, high on face with a small bracket-shaped yellowish spot near each eye and a median elongated cream-coloured stripe; postclypeus with a brown area below ocelli; lora with a small brownish spot on inner margin (fig. 9). Pronotum blackish-brown with four yellowish spots near anterior margin. Scutellum blackish-brown, apex with a V-shaped greenish-yellow spot. Forewing much darker than in male; conspicuous greenish-yellow area on basal half of clavus; veins brown; costal hyaline area as in male. Femur dark-brown; fore tibia light-brown, mid tibia dark-brown on basal and light-brown on apical half. Tarsus dark-brown and rapidly fading to light-brown apically. Hind tibia as in male. Femur with 1 + 2 apical spines. Abdominal sterna and genital segments dark-brown.

Vertex five times as wide as long (26 : 5); face slightly broader than long across the eyes (45 : 44). Apical segment of beak not expanded. Anteclypeus much wider apically than basally (fig. 9). Pronotum 2.3 times as broad as long (40 : 15), hind margin shallowly angularly concave. Length 4.9-5.0 mm.

Genitalia. — Seventh sternum quadrangular, hind margin slightly produced medially, ovipositor slightly surpassing pygofer; pygofer with two small subapical inconspicuous spines on inner margin.

Holotype. — ♂, Java ouest, Aug. 1871, C. Mulié collector; allotype, ♀, W. Java, Buitenzorg, Tjiomas, dari pohon Cassave [from Cassave plants], 9.viii.1936, J. van der Vecht collector, in the Rijksmuseum van Natuurlijke Historie, Leiden. Paratypes, one ♂ same data as holotype, in my collection; one ♀, from W. Java, Batavia, in the Leiden Museum; two ♀ from Palaboeanratoe (W. Java), and one ♀ from Pekalongan (M. Java), in the United States National Museum, Washington.

*Idioscopus clavosignatus* spec. nov. is the darkest species in the genus; the outstanding greenish-yellow area on the clavus and the expanded apical

segment of the beak of the male is a distinctive combination. The internal genitalia of the male are different from those of the other species.

The transverse hyaline area and the shape of the upper apodeme of the pygofer, the shape of the style, the laterally flattened connective, and the forewing venation, indicate that this species is an *Idioscopus*. However, the two pairs of appendages on the aedeagus do not arise close together as in the Indian and Philippine species of *Idioscopus*. After studying more idiocerine genera and species, thus having a better perspective of the subfamily, I am inclined to narrow the description of this genus instead of expanding it as I did in my paper of 1965 in order to include *I. bimaculatus* (Sing-Pruthi) and *I. confuscus* (Sing-Pruthi). Considering the two pairs of appendages of the aedeagus, *I. clavosignatus* is allied to *I. confuscus* but their pygofers differ in important details. *I. bimaculatus* has but one pair of appendages on the aedeagus and its pygofer differs from that of *clavosignatus*. These three species, especially *I. bimaculatus*, could well belong to one or two separate new genera or, at least, new subgenera of *Idioscopus*. I hold the same opinion as to the species from Madagascar described by Freytag & Knight.

A list of the species in *Idioscopus* and another of species recently removed from this genus is given here. The numbers in parentheses refer to the bibliography. For the sake of simplicity and because I do not have all this material at hand I consider these species to belong to *Idioscopus sensu lato*.

#### List of species in *Idioscopus*

1. *I. bimaculatus* (Sing-Pruthi) (4)
2. *I. clavosignatus* spec. nov.
3. *I. confuscus* (Sing-Pruthi) (4)
4. *I. elongatus* Freytag & Knight (2)
5. *I. expandus* Freytag & Knight (2)
6. *I. fasciolatus* (Distant) (3)
7. *I. grossus* Freytag & Knight (2)
8. *I. hyalinus* Freytag & Knight (2)
9. *I. incertus* (Baker) (3)
10. *I. inornatus* Freytag & Knight (2)
11. *I. nitidulus* (Walker) (5)
12. *I. niveosparsus* (Lethierry) (3)
13. *I. oriani* Freytag & Knight (2)
14. *I. scutellatus* (Distant) (3)
15. *I. vulneratus* Freytag & Knight (2)

List of species removed from *Idioscopus*

1. *Amritodus atkinsoni* (Lethierry) (1)
2. *Paraidioscopus palawensis* (Baker) (3)
3. *Paraidioscopus tagalicus* (Baker) (3)

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