

A RE-EXAMINATION OF *ENTEUCHA CYANOCHLORA* MEYRICK AND
ITS SUBSEQUENT TRANSFER TO THE NEPTICULIDAE
(LEPIDOPTERA: NEPTICULOIDEA)

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Abstract.—The unique holotype of *Enteucha cyanochlora* Meyrick is re-examined and illustrated. On the basis of head structure and male genitalia, it is concluded that the genus and species are members of the family Nepticulidae and are not closely allied to *Opostega*, as originally inferred by Meyrick.

One of the oddities of the rather aberrant family Opostegidae is that only one generic name, *Opostega*, has ever been attributed to this group, in spite of its widespread, largely cosmopolitan distribution. Consequently, the precise family relationships of the genus *Enteucha*, described by Edward Meyrick (1915) from a unique male from Guyana and supposedly "intermediate in character between *Opogona* and *Opostega*," is of some interest.

Enteucha was first proposed in the ditrysian family Lyonetiidae along with several new species of *Opostega* and *Phyllocnistis* (the latter now placed in the Gracillariidae). Its "intermediacy" between the ditrysian *Opogona* and the monotrysian *Opostega* was a typical generalization by Meyrick due to his unfamiliarity with the basic morphology of Microlepidoptera. Subsequent to the original description, I know of only one other reference to *Enteucha*, that being by Fletcher (1929), wherein the genus is retained in the Lyonetiidae.

During the course of my studies on the Opostegidae, I have examined the holotype of *Enteucha cyanochlora* Meyrick. Dissection has shown the taxon to be a member of the Nepticulidae, the closest ally of the Opostegidae. Within the Nepticulidae, *Euteucha* appears most akin to *Artaversala* Davis, described mining the leaves of *Coccoloba uvifera* (L.) in southern Florida, USA (Davis, 1979). The two genera are similar in their male genital structure, particularly by the absence of an uncus; a rounded, largely membranous tegumen; deeply furcate valvae; and triangular vinculum-saccus. *Enteucha* differs from *Artaversala* in having the gnathos of the male genitalia even less developed and by the presence of a slender, spikate juxta. Because of the uniqueness of the holotype, it was not possible to remove the wings for venational analysis.

A description of the holotype may be summarized as follows:



Fig. 1. *Enteucha cyanochlora*; ♂ holotype. Length of forewing 2.8 mm; Bartica, Guyana.

***Enteucha cyanochlora* Meyrick**

Figs. 1–4

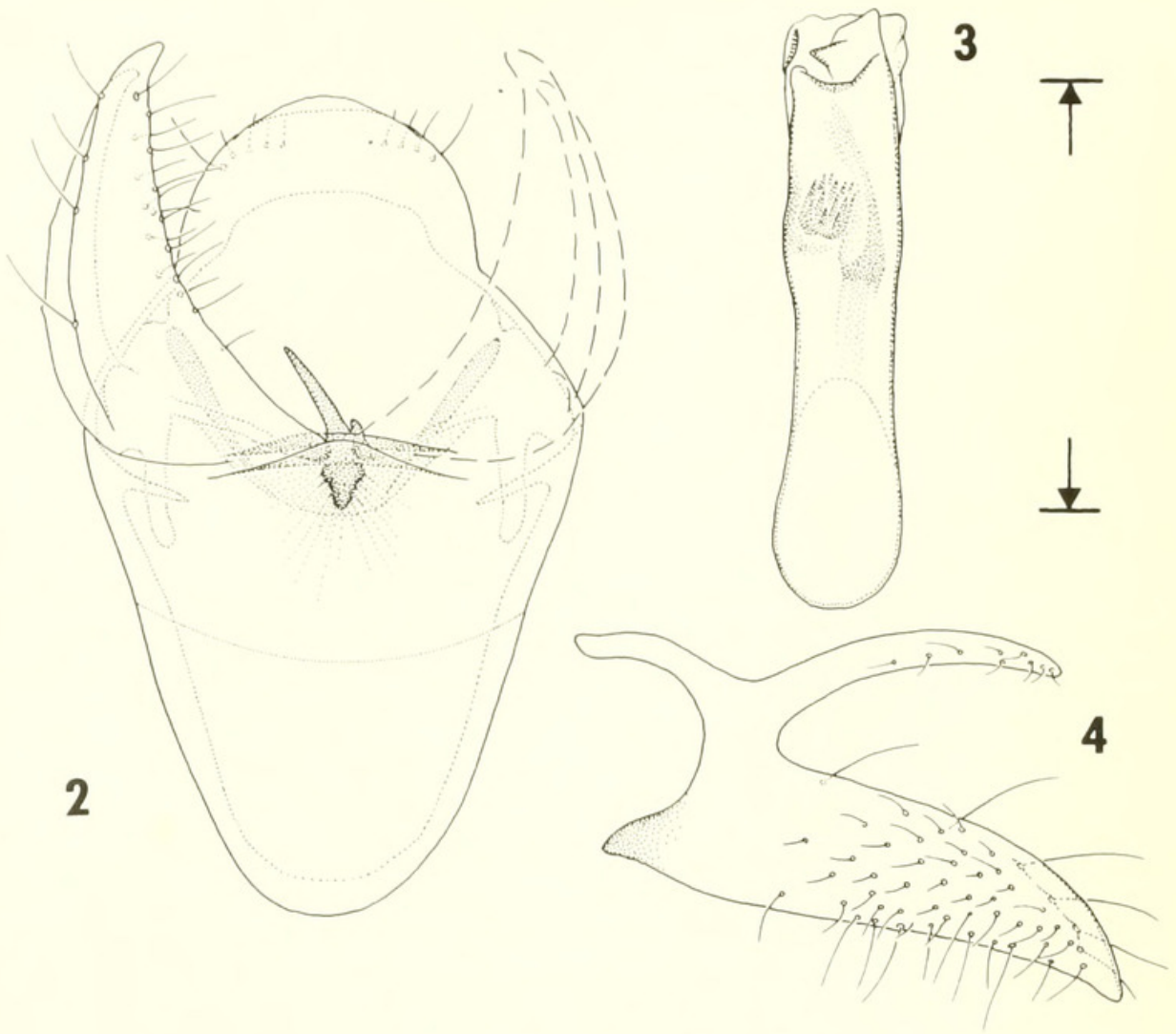
Enteucha cyanochlora Meyrick, 1915: 241.—Fletcher, 1929: 78.—Davis, 1984: 18.

Adult (Figure 1).—Length of forewing: ♂, 2.8 mm.

Head: Vestiture of vertex rough, pale yellowish buff; occiput smooth, brownish fuscous with purple iridescence. Eyes round, interocular index approximately 1.0. Ocelli absent. Antennae approximately 0.6 the length of forewing, 36 segmented; scape flattened into a broad, oblong eyecap approximately $\times 3$ the eye diameter in length; uniformly pale yellowish buff; pecten absent; flagellum same color as scape. Maxillary palpi pale yellowish buff, elongate, apparently 5-segmented with fourth and fifth segments approximately equal. Labial palpi reduced, considerably shorter than maxillary palpi; pale yellowish buff with a few scattered brownish scales near apex.

Thorax: Pronotum brownish fuscous with purple iridescence. Venter pale buff. Forewings uniformly dark brownish fuscous with purple iridescence except for a slightly oblique, triangular pale yellowish buff spot on distal third of costa and an apical fringe spot of the same color. Hindwings approximately same color as forewings; uniformly brownish fuscous with a slight purple iridescence. Forelegs shiny buff ventrally, dark brownish fuscous dorsally. Midlegs uniformly buff. Hindlegs buff with dorsal vestiture of tibial and tarsal segments brownish fuscous.

Abdomen: Dark brownish fuscous dorsally, pale yellow buff ventrally.



Figs. 2-4. *Enteucha cyanochlora*. 2, Male genitalia, ventral view. 3, Aedeagus, ventral view. 4, Right valva, mesal view. Scale = 0.2 mm.

Male genitalia: As shown in figures 2-4. Uncus absent. Tegumen broadly rounded, mostly membranous. Gnathos indistinct, mostly membranous. Vinculum-saccus well developed, nearly equalling length of valva, triangular, tapering to a broadly rounded anterior end. Valvae deeply furcate; dorsal (costal) branch much smaller and shorter than ventral branch. Aedeagus moderately slender, 0.65 the length of genital capsule; a small cluster of approximately 12 cornuti positioned centrally.

Female and immature stages unknown.

Type.—Holotype, ♂ (BMNH).

Type locality.—GUYANA: Bartica.

Host.—Unknown

Flight period.—February.

Distribution.—Known only from the type locality, which is located in the Guiana coastal plain near the junction of the Essequibo and Mazaruni Rivers.

Material examined.—GUYANA: Bartica: 1 ♂, 2.13, Parish (BMNH).

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