

## The Hairstreak Butterfly Genus *Noreena* (Lycaenidae, Theclinae) and a New Species from Western Peru

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### Abstract

*Noreena fracta* is described from xeric habitat near Callao, Peru. Its divergent wing and genitalic characters further indicate high diversity in this seldom-collected thecline group.

### Introduction

Based on numerical cladistic analysis of ten Neotropical thecline groups (Johnson 1989a) I revised the Neotropical hairstreak butterfly genus *Noreena* and erected two sister genera (Johnson 1989a & in press). *Noreena* taxa are typified by localized distributions and are not often collected. Taxa are known from disparate samples-- one or two specimens (*N. luxuriosa* Johnson, *N. galactica* Johnson), somewhat larger numbers collected at various localities over many years (*N. guianivaga* Johnson), or very large samples from a single date or place (*N. pritzkeri* Johnson). Diversity in the genus is peculiar. Certain taxa have outstanding wing and morphological characters [*N. guianivaga*, *N. molena* (Jones), *N. lemona* (Hewitson)]; others look somewhat alike in wing markings but are structurally disparate [*N. comana* (Hewitson) & *N. cambes* (Godman & Salvin), *N. maria* Johnson, MacPherson & Ingraham, *N. luxuriosa* and *N. pritzkeri*]. These circumstances complicate alpha taxonomy but, relying primarily on structural characters and data differentiating local habitat usages, I treated all the above taxa as species. The opposing course, all *N. comana*-like taxa as an omnibus species, required lumping morphologically diverse and widely disjunct populations typifying habitats as different as Mexican desert, Argentine chaco and southern Brazilian coastal forest.

In 1989 I located a unique specimen of *Noreena* in the Hope Entomological Collection of Oxford

University (HEC). It further indicates the diversity of this group and the distinctions apparent in taxa of the *N. comana*-like group. The specimen is from an area noted for disjunctive occurrences in several xerophilic thecline groups (Johnson 1989b). Although the wing upper surfaces are most reminiscent of the *N. comana*-like group of *Noreena*, the under surface departs from any known congener. The description below follows terminology in Johnson (1989a).

### *Noreena fracta*, new species Figs 1,2

**DIAGNOSIS.** Under surface medial hindwing band *complete* (not split as in other congeners): straight from costa to base of discal cell, then displaced perpendicularly to a jagged pattern from cell M3 to anal margin (Fig. 1B1). This pattern minimizes prominence of the parallel cell-end streaks (Fig. 1B2) usually characterizing the genus (the "split-stripe" of Johnson, 1989a, p. 13, fig. 10). Male tergal morphology and genitalia distinctive as noted below.

**DESCRIPTION. Male.** Upper wing surface: both wings with ground color light iridescent blue from base to submargins; submargins and apices black. Hindwing with silvery iridescence from cell M3 to anal margin. Forewing with bipartite androconial band typical of genus, distal sector only slightly larger than basal sector. Under wing surface: ground color chocolate brown; forewing with thin white postmedian band; costa to cell CuA1. Hindwing with medial band complete and radically bent along base of discal cell as noted in Diagnosis. "Limbal spots" (Johnson 1988, p. 15, fig. 10) reduced. **Female.** Unknown. **Morphology.** Dorsum of male eighth tergite more laterally

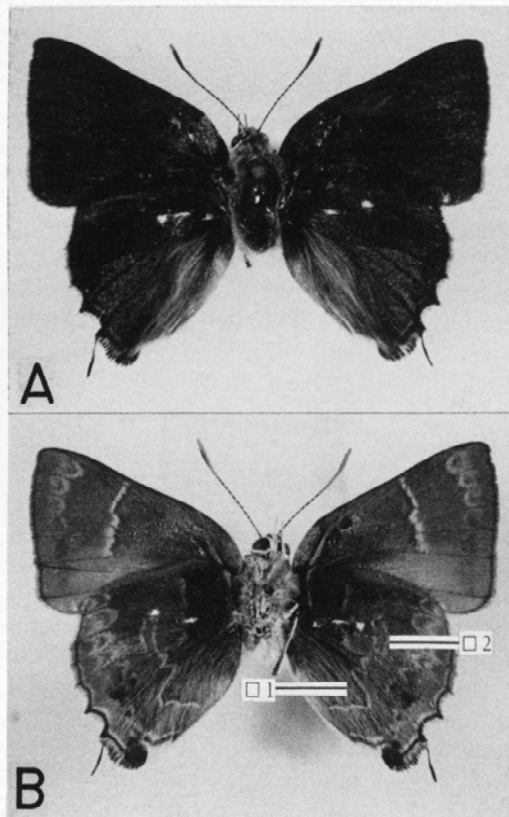
expansive than in congeners and only slightly bilobate along cephalic margin (Fig. 2A); male genitalia (Fig. 2B) with bilobed area of valvae laterally expansive and shouldered (caudal extension comparatively thin). Falces prominent and located more dorso-terminad the labides than in most congeners. Saccal brush organ (Fig. 2BV) longest of genus, extending to vincular spurs. Aedeagus distinctly undulate in the terminal one half (Fig. 2C).

**TYPE.** Holotype male (Fig. 1), Callao, PERU, March-August 1881, leg. J. J. Walker, deposited HEC.

**ETYMOLOGY.** From the Latin meaning "broken", referring to the radically angled medial hindwing band.

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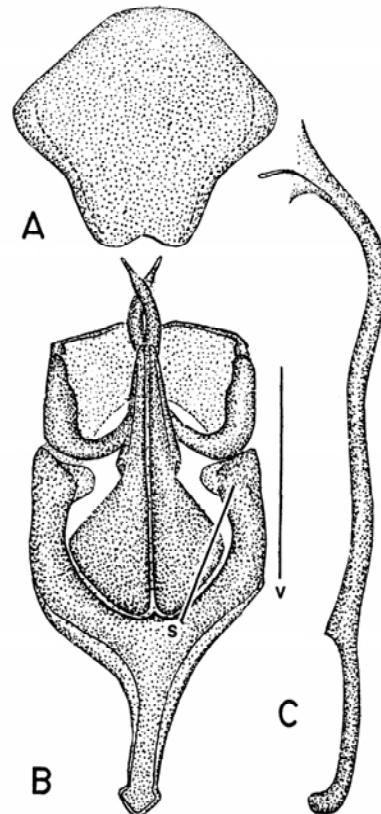


**Figure 1.** Holotype, *Noreena fracta*. A. upper surface, B. under surface. 1. distinctive medial pattern; 2. diminished cell-end streaks.

reviewing the description along with Eric Quinter (American Museum of Natural History) and David Matusik (Field Museum of Natural History).

### Literature Cited

- Johnson, K.** 1989a. A revisionary study of the neotropical hairstreak butterfly genus *Noreena* and its new sister genus *Contrafacia* (Lepidoptera: Lycaenidae). *J. New York Ent. Soc.* 97: 11-46.
- Johnson, K.** 1989b. Revision of *Chlorostrymon* Clench and description of two new austral Neotropical species (Lycaenidae). *J. Lepid. Soc.* 43: 120-146.
- Johnson, K.** (in press). The new hairstreak butterfly genus *Orcya*, a revision of the Neotropical "*Thecla*" *orcynia* assemblage (Lepidoptera: Lycaenidae). *J. New York Ent. Soc.* 98 (in press)



**Figure 2.** Morphology of *Noreena fracta*. A. Dorsal view of modified eighth tergite. B. Genitalia, ventral view: S, length and angle of saccal brush organ; V, same, vincular brush organ. C. Aedeagus, lateral view.