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**Two new species of *Esthemopsis* C. Felder & R. Felder, 1865 (Lepidoptera: Riodinidae: Symmachiini) from southeastern and northeastern Brazil, with taxonomic comments on *Esthemopsis teras* (Stichel, 1910) stat. rev. and *Esthemopsis pallida* Lathy, 1932 stat. nov.**

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**Abstract**

Two new species of *Esthemopsis* C. Felder & R. Felder, 1865 from southeastern and northeastern Brazil are described, *Esthemopsis sateri* sp. nov. and *Esthemopsis diamantina* sp. nov., and revised and new combinations are proposed for *Esthemopsis teras* (Stichel, 1910) stat. rev. and *Esthemopsis pallida* Lathy, 1932 stat. nov., respectively. Lectotypes are designated for *Lepricornis teras* Stichel, 1910 and *Esthemopsis caerulea pallida* Lathy, 1932. The habitus of male and female specimens of the species discussed are illustrated; male head and labial palpus pictures, male and female genitalia illustrations are provided.

**Key words:** *Esthemopsis pherephatte*, *Esthemopsis caeruleata*, Malvaceae, Concealed Androconial Scales, morphology

**Introduction**

*Esthemopsis* C. Felder & R. Felder, 1865 is a Neotropical Riodinidae genus with 12 recognized species (Callaghan & Lamas 2004; Hall & Harvey 2007; Rodriguez, Salazar & Constantino 2011). The presence of concealed androconial scales (CAS) on the anterior margins of the abdominal segments four and five, as one or, as in most of the species, two patches, includes the genus in the Symmachiini (Hall & Harvey 2002). The species of the genus are grouped together chiefly on the basis of the CAS pattern, similarities on the wing pattern and the male genitalia (Hall & Harvey 2002). Both wings surfaces of most of the species of the genus are either dark brown or almost black, with greenish or bluish iridescent lines radiating from the base of the wings between the veins, with a creamy white, yellowish or orange subapical band; or mostly translucent, dark brown at the wings margins and on the veins, with an oblique creamy white or translucent orange subapical band. These patterns are associated with mimetic rings, in which other species of Riodinidae are involved, both from Symmachiini, such as species of *Chimastrum* Godman & Salvin, 1886 and *Xynias* Hewitson, 1874, and Riodinini, such as species of *Nahida* Kirby, 1871, *Brachyglenis* C. Felder & R. Felder, 1862, and especially *Pheles* Herrich-Schäffer, [1853]. Species of *Pheles* are included in both mimetic rings and are superficially similar to various species of *Esthemopsis*. The same patterns are also observable in various lineages of butterflies and diurnal moths (Harvey 1987; D'Abrera 1994). Mainly due to this particularity, the taxonomy of the genus has a troubled history. Species currently in *Esthemopsis* were previously described and transferred back and forth between a number of Symmachiini and Riodinini genera until the taxonomy was stabilized, after the comparative study of the androconial organs of the Riodinidae, and morphologic and taxonomic contributions by Harvey (1987), Hall and Willmott (1996), Brévignon and Gallard (1998), and Hall and Harvey (2002). Very little is known about the biology of species of *Esthemopsis*, however, according to Brévignon and Gallard (1992, 1998), some species fly slowly in the undergrowth in the afternoon, in a

uncus; gnathos acutely angled, “c” shaped, flattened at the tip of the ventral projection; valvae membranous dorsally, distally strongly indented between the ampulla and the harpe; ampulla developed internally, triangular, broad and pointed (Fig. 37); harpe rounded and thin, projecting internally and anteriorly; aedeagus thick and slightly curved, anterior opening on the left side; vesica with two sets of cornuti; dorsal set larger, with many tiny aligned spines on a sclerotized base and the ventral set rounded with a very small patch of smaller spines (Fig. 37).

*Female*: unknown.

**Taxonomic Comments.** The most similar species is *E. teras*. The male genitalia between these two species are quite alike, however, the male genitalia seems to be quite homogeneous in *Esthemopsis*. The female is not yet known, but greater differences in the female genitalia are expected, as the female genitalia appears to be much more plastic than that of the male in the genus.

**Distribution.** All known specimens are from Lençóis, Bahia, Brazil, in the center of the Chapada Diamantina, an erosional landform of the Espinhaço Range formed mostly by sandstone, pelites and diamond bearing conglomerates.

**Etymology.** The species is named after the location of the holotype and paratypes, Chapada Diamantina, as a noun in apposition.

**Type material.** Holotype with the following labels: /HOLOTYPUS/ 3-7-XII-1997 LENÇÓIS, BAHIA, [BRASIL] 600m, MIELKE & CASAGRANDE leg./ OM 47.768/ HOLOTYPUS *Esthemopsis diamantina* Dias, Dolibaina, Mielke & Casagrande det. 2013/ (DZUP).

**Paratypes**—2 males. BRAZIL—*Bahia*: **Lençóis**, 600 m, 3-7-XII-1997, 1 male, Mielke & Casagrande leg., OM 47.760\* (OM), 15 Km L, 500 m, 6-XII-1997, 1 male, Mielke & Casagrande leg., OM 47.995 (OM).

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