

*RHINAPHE ENDONEPHELE* AND *R. IGNETINCTA*  
REDESCRIBED AND REASSIGNED TO *DIVITIACA*  
BARNES & MCDUNNOUGH (PYRALIDAE: PHYCITINAE)

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**ABSTRACT.** *Rhinaphe endonephele* and *R. ignetincta* described from Brazil and Argentina respectively by Hampson, 1918 in the Hypsotropinae are transferred to *Divitiaca* in the Phycitinae and redescribed with adult moths and genitalia illustrated. Lectotypes are designated.

**Additional key words:** Neotropical moths, Brazil, Argentina, taxonomy.

In his world revision of the Hypsotropinae, Hampson (1918) placed 37 species in *Rhinaphe* Berg, including his newly described *endonephele* and *ignetincta*. As so defined the genus consisted of numerous disparate elements most or all of which properly belong either to the Peoriinae (a taxon predating and largely overlapping Hampson's Hypsotropinae) or the Phycitinae. Seven of the 9 New World species that Hampson placed in *Rhinaphe* have already been dealt with (Shaffer 1968, 1976, 1984, 1991) and through the kindness of Mr. Michael Shaffer, Department of Entomology, the Natural History Museum, London [BMNH], I have recently examined the lectotypes (designated below) of *endonephele* and *ignetincta*.

Both the male lectotype of *endonephele* and the female lectotype of *ignetincta* key out in Heinrich (1956) to *Divitiaca* Barnes & McDunnough, 1913 and fit well within the confines of that genus. It should be noted that *Macrorrhinia* Ragonot, 1887 differs significantly from *Divitiaca* only in that forewing veins  $M_{2+3}$  are stalked in the former genus and fused into a single vein in the latter. Heinrich maintained the generic distinction based on the constancy of that venation character. Although the question of whether or not this distinction should be sustained needs to be reexamined, its resolution is beyond the scope of this paper and must await a thorough review of *Divitiaca*, *Macrorrhinia*, and related genera.

Color names used herein largely follow the ISCC-NBS Color-Name Charts (Kelly 1965), though for very small structures only more general designations have been given.

*DIVITIACA* BARNES & MCDUNNOUGH

*Divitiaca* Barnes & McDunnough, 1913:183; Heinrich, 1956:189-190; Whalley, 1970:43; Hodges et al., 1983:83. Type species: *Divitiaca ochrella* Barnes & McDunnough; Everglade, Florida, USA.

***Divitiaca endonephele* (Hampson), new combination**

(Figs. 1, 3, 5-7)

*Rhinaphe endonephele* Hampson, 1918:87 [in *Hypsotropinae*].**Female.** Unknown.

**Male. Head:** Frons conical (Fig. 3), pale orange yellow with a few grayish yellowish brown scales. Labial palpus porrect, 2.9 times as long as eye diameter, pale orange yellow with scattered grayish yellowish brown scales. Maxillary palpus not visible. Proboscis well developed. Antenna shaft filiform, cilia about as long as shaft width toward base; basal portion of shaft with shallow sinus partly enclosed by pair of parallel scale tufts. Eye diameter 0.8 mm. Ocellus well developed, black with clear lens, separated from eye by arc of whitish scales. Vertex pale orange yellow. Occiput pale orange yellow, behind eye mixed with grayish yellowish brown scales. **Thorax:** Patagium and tegula pale orange yellow with scattered grayish yellowish brown scales.

**Forewing:** (Fig. 1) Radius 10.0 mm, venation as described for the genus (see Heinrich p. 189). Ground pale orange yellow; scattered grayish yellowish brown scales, most abundantly on anterior half of wing. Markings of grayish yellowish brown as follows: on costa near wing base, large round spot centered on 2nd anal vein on basal third of wing, small diffuse spots at upper and lower outer angles of cell, poorly developed postmedial band extending diagonally inward from costa before apex to 2nd anal about half distance from cell to outer wing margin, terminal line of well developed spots in folds between veins along outer wing margin.

**Male genitalia:** (Figs. 5-6) With uncus triangular, apically acute, anteriorly broadly rounded and centrally truncate; dorsal and lateral surfaces with moderately densely set fine setae, setae absent from small semilunar anteromedial area. Gnathos with medial process very narrowly and unevenly triangular, apex hooked; lateral arm rather robust, curved, anterior half broadly flanged. Juxta (Fig. 6) shield shaped, anterior margin well sclerotized, posterior with lateral pair of setaceous tubercles. Transtilla (Fig. 6) with central element weakly sclerotized, short, broad, triangular; lateral elements each well sclerotized, small, saddle shaped. Valve broadly rounded, transverse ridge extending from near base of costa to basal region of valvula, its basal end projecting, setose. Vinculum broadly rounded, anterior margin with short medial protuberance. Aedeagus extremely slender, very gradually broadened toward basal end.

**Lectotype.** ♂, hereby designated. Labelled: "Lectotype" [round purple bordered label]; "Rio"; "Type" [round red bordered label]; "Rio Janeiro Saunders' Coll. 94-68."; "Rhinaphe endonephele type ♂. Hmpsn."; "Pyralidae Brit. Mus. Slide. No. 10910" [BMNH].

**Paralectotype.** ♂, labelled: "Paralectotype" [round blue bordered label]; "Rio"; "Rio Saunders' Coll. 94-68"; "Pyralidae Brit. Mus. Slide No. 14358 ♂"; "♂ genitalia on slide 889 J.C. Shaffer"; "Paralectotype *Rhinaphe endonephele* Hampson det. M. Shaffer, 1967" [BMNH].

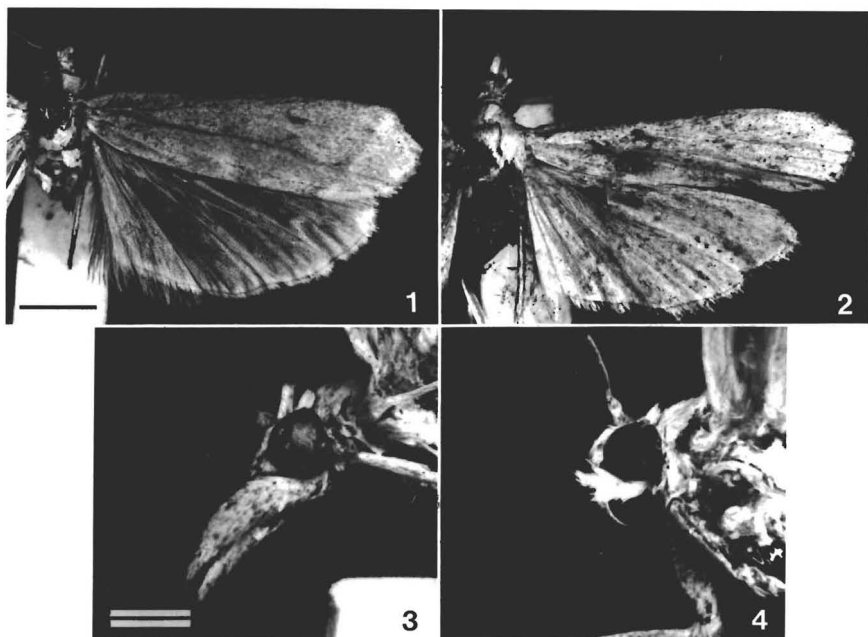
**Discussion.** The maxillary palpi are not visible in the type. They are probably minute and hidden by the labial palpi and as the latter are intact it is unlikely that the maxillary palpi have been lost from the specimen. The 8th abdominal segment (Fig. 7) bears a pair of slender hair tufts, apparently of the eversible type described by Heinrich for *Divitiaca*, but the pair of short hair tufts that he mentions are either absent, or more likely deciduous and not preserved in the dissection.

***Divitiaca ignetincta* (Hampson), new combination**

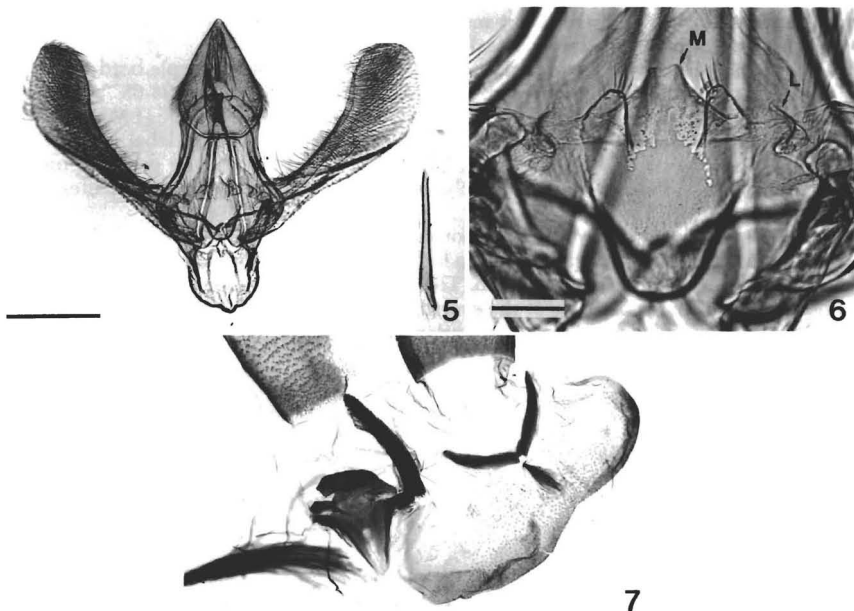
(Figs. 2, 4, 8-11)

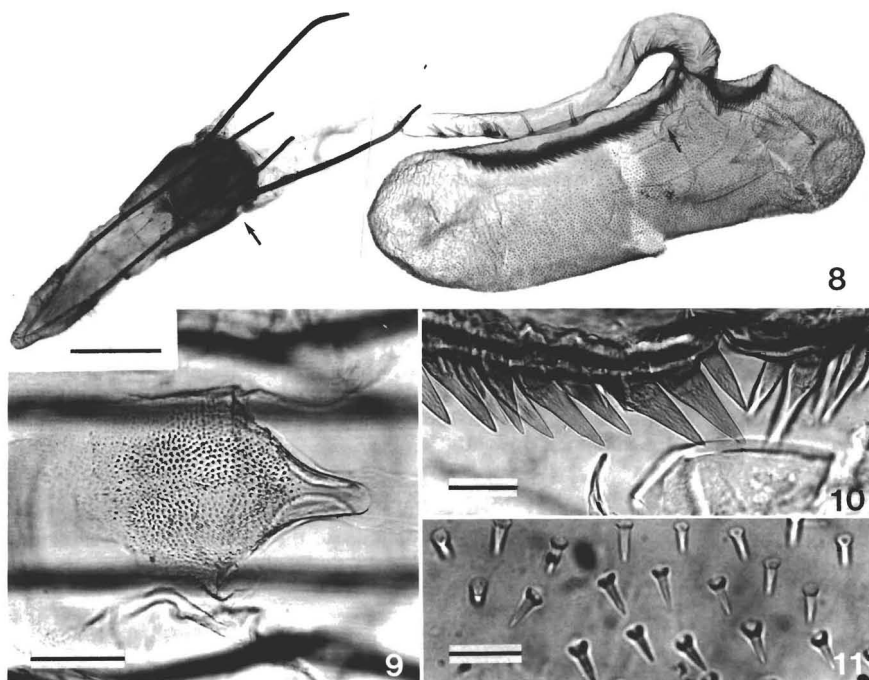
*Rhinaphe ignetincta* Hampson, 1918:87 [in *Hypsotropinae*].**Male.** Unknown.

**Female. Head:** [Frons (Fig. 4) denuded in lectotype]. Labial palpus porrect. Maxillary palpus minute, filiform. Proboscis well developed. Antenna filiform, shaft very finely



FIGS. 1-4. Adult moths and head profiles. 1, 3, *Divitiaca endonephele*, male lectotype. 2, 4, *D. ignetincta*, female lectotype. Scale bar = 2.0 mm (1, 2), 1.0 mm (3, 4).





FIGS. 8-11. *Divitiaca ignetincta*, female lectotype. 8, genitalia (left arrow at level of out of focus ostium, right arrow indicating area enlarged in 10). 9, ostium. 10, large bursa spines. 11, minute bursa spines (seen as granulation in 8). Scale bar = 0.5 mm (8), 0.1 mm (9), 50  $\mu$ m (10), 20  $\mu$ m (11).

ciliate. Eye diameter 0.75 mm. Ocellus well developed, black with clear lens; separated from eye by arc of whitish scales. **Thorax:** Patagium and tegula dark orange yellow.

**Forewing:** (Fig. 2) Radius 10 mm; ground light yellow brown anterior to cell, dark orange yellow posterior to cell, cell intermediate in coloration. Medial line straight, sharply delimited, but of very low contrast and indistinct, extending through cell and diagonally outward from anterior to posterior wing margins. Postmedial line similar, somewhat more prominent, straight, extending diagonally inward from before apex on anterior wing margin to posterior wing margin.

**Female genitalia:** (Figs. 8-11) With ovipositor tapering dorsocaudally, apex bluntly rounded. Posterior apophysis slightly curved, about 1.3 times as long as anterior. Anterior apophysis angled mediad on anterior  $\frac{1}{2}$ . Eighth segment with row of long setae dorsally and laterally along posterior margin, scattered very short setae laterally and laterodorsally throughout; posterior  $\frac{1}{2}$  very weakly sclerotized. Ostium (Fig. 9) small, midventrally with small patch of densely set minute (about 6-8  $\mu$ m long) acuminate spines (resolvable in dissecting microscope at 50 $\times$  as a granular patch); small,  $\frac{1}{2}$  as long as wide, well sclerotized triangular plate at anterior of patch joins ductus bursae. Ductus bursae very slender on posterior  $\frac{1}{2}$ , then abruptly wider on anterior  $\frac{1}{2}$  and hooked toward junction with corpus

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FIGS. 5-7. *Divitiaca endonephele*, male lectotype. 5, male genitalia, aedeagus separated. 6, transtilla (M = medial element, L = lateral element) and juxta. 7, eighth abdominal segment. Scale bar = 0.5 mm (5, 7), 0.1 mm (6).

bursae; widened portion internally with scattered bladelike spines, these most numerous near corpus bursae and continuing onto inner surface of the latter (Fig. 10); joining corpus bursae at its anterior  $\frac{1}{2}$ . Corpus bursae elongate, its inner surface of granular appearance resolvable as numerous minute acuminate spines (Fig. 11) each about 10  $\mu$ m long, these absent on extreme posterior end and on inner (toward ductus bursae) half of posterior half. Ductus seminalis from anterior  $\frac{1}{4}$  of slender posterior portion of ductus bursae.

**Lectotype.** ♀, hereby designated. Labelled: "Argentina. Santa Fe. Ocampo. Aug 1902. S. R. Wagner. 1903.-180."; "Rhinaphe ignetincta type ♀. Hmps. n. "; "Type"; "Pyralidae Brit. Mus. Slide No. 10915" [BMNH].

**Paralectotypes.** 2♀, labelled: "Paralectotype" [round blue bordered label]; "Argentina, Santa Fe, Ocampo. Aug. 1902, S. R. Wagner, 1903-180"; "Paralectotype Rhinaphe ignetincta Hampson det. M. Shaffer, 1990" [BMNH].

"Paralectotype" [round blue bordered label]; "Argentina, Buenos Ayres. H. Wilkinson. 1907-239"; "Paralectotype Rhinaphe ignetincta Hampson det. M. Shaffer, 1990" [BMNH].

**Discussion.** The lectotype is worn, the discoidal and terminal line spots mentioned by Hampson are difficult to discern, the frons nearly bare and the labial palpi mostly lost, only the basal segment of the right palpus and the basal and part of the second segment of the left palpus remain. My notes from 1967 state the labial palpi to be porrect. Both paralectotypes have the abdomen present.

#### ACKNOWLEDGMENTS

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