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A New Thecline from Sulawesi (Lepidoptera: Lycaenidae: Theclinae)

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A number of years ago we received a large lot of material collected by Robert G. and Clo M. Wind during their 1939-1940 expedition to the "East Indies" and published on the Danaidae and Satyridae of that trip (L. and J. Miller, 1978). One of the insects that the Winds considered to be of special significance was a male of a thecline that Bob Wind had intended to describe for his then wife. Both Bob and Clo asked us to describe the butterfly, but before we had an opportunity to describe the insect both Bob and Clo died. We now dedicate the description of this magnificent insect to their memories.

Eliot (1973, 1978) respectively characterizes the Deudorigini and the genera within that tribe, the latter for the Indonesian and Malayan regions. The present insect fits the description well for the tribe, but not so well for any extant genus. Eliot (1978: 337) states that *Deudorix* is comprised in the Indo-Malayan region of butterflies that are orange to red dorsally and lack male secondary sexual characters, while members of *Virachola* have these characters, and forewing veins 6 and 7 (M_1 and R_5) are nearly connate at their origins. However, most members of that genus are smaller insects than the present one, and Eliot (1978: 339) states that *Virachola* is "Doubtfully separable from *Deudorix*". Too much emphasis on secondary sexual characteristics (see Moore, 1890-1893) may result in unnecessary splitting.

All Deudorigini are characterized by lacking a juxta in the male genitalia and a partial proximal fusion of the valvae, a condition shared with the Hypolycaenini (Eliot, 1973: 336). The shape of the genital armature is much more like that of *Deudorix* than that of *Hypolycaena*.

Deudorix cleora L. & J. Miller, new species

Figures 1-2 (male), 3-6 (male genitalia)

Male: Head with grayish fuscous dorsal hairs with a conspicuous, narrow white eye ring. Eyes hirsute: blackish-brown densely covered with reddish-brown hairs. Palpi with dark brown dorsal hairs and white ones admixed with black ventrally; distal segment black. Antennae blackish-brown narrowly ringed with white between the segments; club reddish-brown. Thorax with grayish fuscous dorsal and pale gray ventral hairs. Legs white narrowly ringed with black. Abdomen with grayish fuscous (slightly bluish) dorsal, shading through pale gray to buff ventral hairs with steel-

gray between the segments; anal tuft buff ventrally.

Upper surface of wings iridescent shining blue, greenish in some lights and purer lighter blue in others; forewing with a broad fuscous apical margin (6.8 mm) narrowing toward anal angle (2.0 mm) and produced basad along the veins; hindwing with fuscous costa and fuscous margin narrow throughout, anal angle produced and bluish-white with a black tip. Inner margin of hindwing broadly grayish fuscous past cell; diffuse grayish fuscous scent patch in base of cell $Sc+R_1-Rs$. Tail long (4.8 mm) and black throughout length. Fringes fuscous on forewing, white on hindwing.

Under forewing pale gray, darker along costa and margin, with a broad cell-end fuscous spot, a series of postdiscal spots from costa to Cu_2-2A and dark gray-brown submarginal spots from R_5-M_1 to 2A. Red-brown hairtuft on inner margin halfway to anal angle. Hindwing pale gray with pale blue-green iridescence from cell to outer and inner margin posteriad of M_2 ; large black spots at base of $Sc+R_1$ and entire tornal lobe; "Thecla"-spot in Cu_1-Cu_2 black capped with orange basad narrowly edged with black; cell-end bar dark fuscous and prominent, post-discal band rather obscure and fuscous from Rs to 3A roughly following outer margin until 2A where it is diverted slightly basad. Fringes fuscous on forewing, fuscous apically going to white toward inner angle of hindwing.

Length of forewing of Holotype male 22.4 mm.

Male genitalia (Figs. 3-6) reminiscent of most *Deudorix*, s. l., especially as regards the valvae which are fused ventrally and proximally for part of their length. The valvae are rather finely drawn, but the tips are blunt. The saccus is rather more developed than is that of most *Deudorix*, s. s., resembling more the configuration of *Virachola* Moore, figured by Stempffer (1967: 108, fig. 99), here treated as a possible subgenus of *Deudorix*. The expanded tip of the penis that is prominent in *D. cleora* is shown weakly in *D. elioti* Corbet (Eliot, 1978: fig. 323), but not in most other deudorigines.

Female: unknown.

Described from a single male specimen from northern Sulawesi (Celebes), Indonesia.

HOLOTYPE male bears a label stating, "Deudorix cleora/ Lake Dano, Celebes/ 6-15-1940"; male genitalia preparation M-6795-V (Jacqueline Y. Miller). This specimen is

in the collection of the Allyn Museum of Entomology/Florida State Museum.

Etymology: The specific name, a manuscript name suggested by Robert Wind many years ago, is a patronymial for his former wife, the late Cleora (Clo) Wind, later Mrs. Morrie J. Carroll.

The type locality as given is tautonymous, "Dano" being Malay for "Lake". In this regard, the name is similar in origin to the South American "Laguna la Cocha", but unlike that name, "Lake Dano" has achieved no acceptance. Similar situations are familiar in the literature -- Godman and Salvin (1879-1901) listed several butterflies as having been taken at "Ciudad", Spanish for "city" or "town". Although the precise locality that the Winds collected in is not known, their field notes show that the locality was within a day's trek from the town of Tondano in northern Sulawesi.

Deudorix cleora is not closely related to any other *Deudorix* from west of Weber's Line, though it resembles slightly some Moluccan *Virachola*. The genitalic differences are rather great, even for so diverse a group, and the specimen superficially resembles a *Pratapa*, which genus has a juxta, but we hesitate to erect a new genus on such scanty data; we would prefer having both sexes before taking such a step. Eliot (1978: 337) gives a key to *Deudorix* of the Malay Peninsula through Sundaland and including Sulawesi. This key may be modified in the final couplet, as follows:

8 (9). Underside silvery white, with apical area of forewing tinged ochreous; unmarked except for some post-discal black striae and marginal spots in the tornal area of the hindwing; upperside red.

D. hypargyria

9. Underside pale gray, with tornus of hindwing with blue-green iridescence and costa and margin of forewing shaded fuscous; large black postdiscal markings on both wings and at tornus of hindwing; "thecla spot" black capped with orange; upperside shining blue.

D. cleora

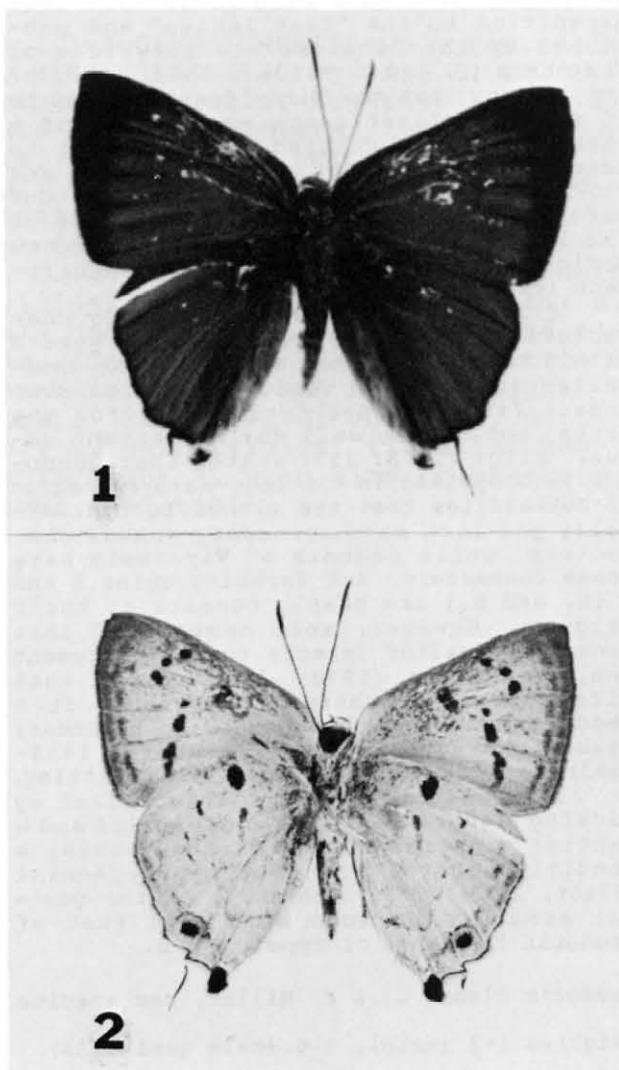
Acknowledgments: We thank Lt. Col. John N. Eliot and Stephen R. Steinhauser for critically reading and commenting on this manuscript.

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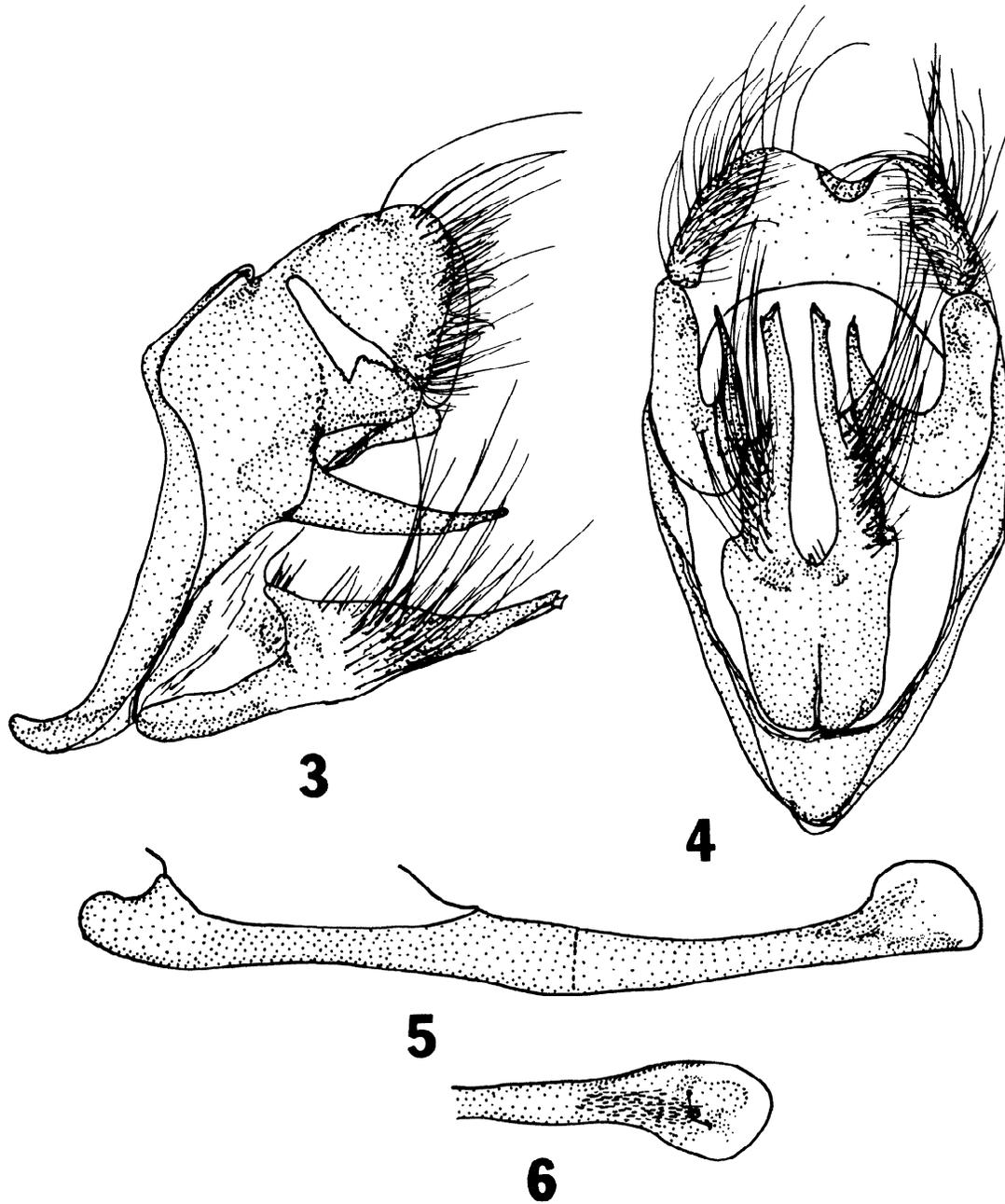
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Figures 1-2: *Deudorix cleora* L. and J. Miller, new species, Holotype male upper (1) and under (2) surfaces; "Lake Dano", Celebes [Sulawesi], 6-15-1940, R. and C. Wind. Specimen in Allyn Museum of Entomology/Florida State Museum collection (Allyn Museum photo nos. 850228-19/20).



Figures 3-6: male genitalia of *Deudorix cleora* L. and J. Miller, new species, Holotype. Left lateral view of genitalia with penis removed (3); posterior view of genitalia with penis removed (4); left lateral view of penis (5); dorsal view of tip of penis (6); male genitalia dissection M-6795-V (Jacqueline Y. Miller).