

# A NEW SPECIES OF *DALLA* FROM MEXICO (LEPIDOPTERA: HESPERIIDAE)

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**ABSTRACT.**—*Dalla steinhauseri*, new species, is described from three males collected by John Kemner in Oaxaca, Mexico, during May 1990, the elevation varying from 1860-2700m. The closest related species to *D. steinhauseri* is *D. bubobon* (Dyar, 1921), known from two males: the holotype from Guerrero, Mexico (Muller Collection, USNM), and a male labelled southern Mexico, Townsend (Carnegie Museum, Pittsburgh). This species differs from *D. steinhauseri* in color pattern, maculation, size and morphology of the male genitalia.

**KEY WORDS:** *Amblyscirtes*, *Bolla*, Central America, *Cypselus*, *Dalla steinhauseri* n. sp., *Enosis*, *Mylon*, *Niconiades*, *Papias*, *Pyrrhopyge*, *Remella*, South America.

Following a previous report on new skippers from Mexico (Freeman, 1969), a new species of *Dalla* is described below.

The genus *Dalla* Mabilie, 1904, is a very interesting group of species that Evans (1955) subdivided into seven somewhat artificial species groups: *agathocles*, *polycrates*, *cypselus*, *caenides*, *ibhara*, *quadristriga*, and *semiargentea*. There is a very large number of species in this genus, with most being found in Central and South America. To date there have been nine species collected in Mexico. Three species are in Evans' (1955) *polycrates*-group: *D. bubobon* (Dyar, 1921), Guerrero and southern Mexico; *D. ligilla* (Hewitson, 1877), Chiapas (Ocozingo, Jul; Santa Rosa Comitán, May, Aug), and Veracruz (Catemaco, Jun); and *D. dividuum* (Dyar, 1913), Colima (Salada, May and Sep), Chiapas (Bombana, Jul; La Tigera, Oct), and Sonora (Jul). One is in Evans' *cypselus*-group: *D. mentor* Evans, 1955, Oaxaca (Sierra Madre del Sur, La Soledad-Buena Vista, Apr 1990, ca. 1500m). Four are in Evans' *caenides*-group: *D. lalage* (Godman, 1900), Guerrero (Sierra Madre del Sur), Oaxaca (Candelaria Loxicha, Aug-Sep, 550m); *D. lethaea* (Schaus, 1913), Oaxaca (Pluma Hidalgo, Jan, Apr, Aug, ca. 1500m; La Soledad-Buena Vista, Apr, Aug, Nov, ca. 1500m); *D. faula* (Godman, 1900), Colima (Salada, Aug) and Guerrero (Sierra Madre del Sur, Jul); and *D. ramirezi* Freeman, 1969, Veracruz (Catemaco, Aug), Puebla (Hwy 130, Tuxpan, Km 111, Jul, ca. 360m), and Oaxaca (Hwy 125, Punta-Tlaxiaco, Jul, ca. 1500m). One species is in Evans' aberrant female listing at the end of the *semiargentea*-group: *D. curiosa* Evans, 1955, Mexico.

In Mexico most species of *Dalla* are found at elevations from 1500 to 2700m. I am not aware of the life history of any species having been worked out. Most of the species have a nudum count of 10 to 16. According to Evans (1955), with a few exceptions, there is a remarkable similarity in genitalia throughout the genus.

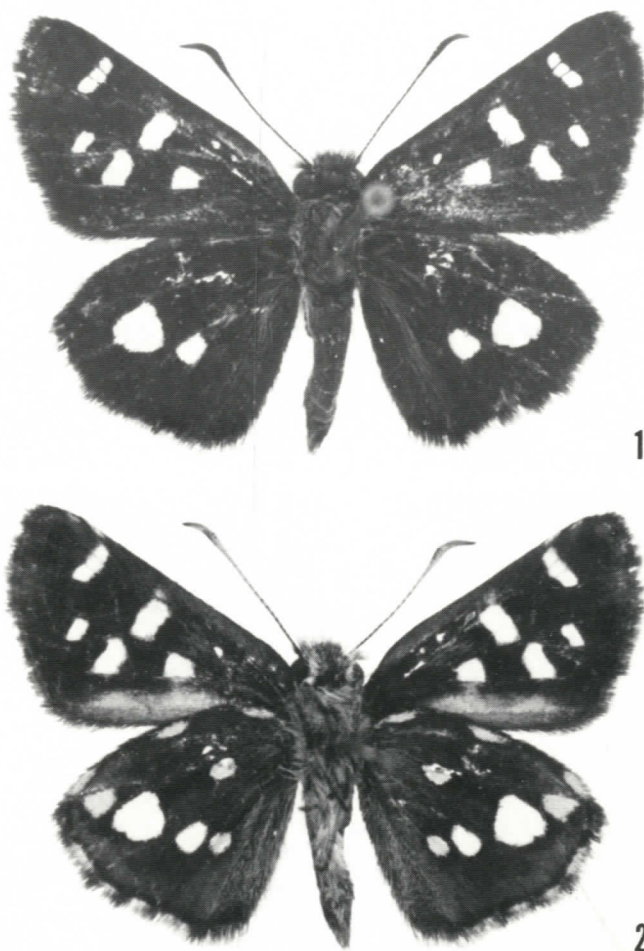


Fig. 1-2. *Dalla steinhauseri*, new sp. (forewing length = 14mm): 1. Holotype ♂, dorsal surface (Sierra Juarez, Km 95, La Esperanza, ca 2100m, 28 May 1990, Oaxaca, Mexico, J. Kemner coll., AME); 2. Same, ventral surface.

***Dalla steinhauseri* Freeman, new sp.**

**Diagnosis.**— *Dalla steinhauseri* most closely resembles *D. bubobon* in the arrangement of the maculation pattern on the upper side of the wings.

**Description.**— Female.— Unknown.

Male.— Body and head dark brownish-black. *Head*: eyes black; antennal shaft dark brown above, light yellow below; apiculus long and slender with a pointed terminal segment; nudum-13; palpi long, brownish-black above, lighter ventrally due to the presence of some yellow, hair-like scales.

*Forewing* (Fig. 1, dorsum) 14mm long: dark brownish-black, with seven pale-yellow hyaline spots present (a slightly triangular spot in

space 2, a smaller basal spot in space 2, a small linear spot in space 3, the three apical spots in spaces 6, 7, and 8, are in a straight line and of about the same size, and the cell spot is large and somewhat triangular); fringe dark brown. *Venter of forewings* (Fig. 2) light brown, all spots are present and well defined; space 1 is lighter than the rest of the wing due to some yellowish overscaling.

*Hindwing* (Fig. 1, dorsum): dark brownish-black, with two pale yellow, hyaline spots present (one at the end of the cell is large and somewhat rounded, and the other in space 2 is much smaller and somewhat oval); fringe brown. *Venter of hindwings* (Fig. 2) chocolate brown, with four dull yellow discal spots forming a straight line from space 1 to space 4 (one in space 1 is small and round, the one in space 2 is oval and about 2x larger than the one in space 1, a large oval spot at the end of the cell, and a smaller, somewhat triangular spot in space

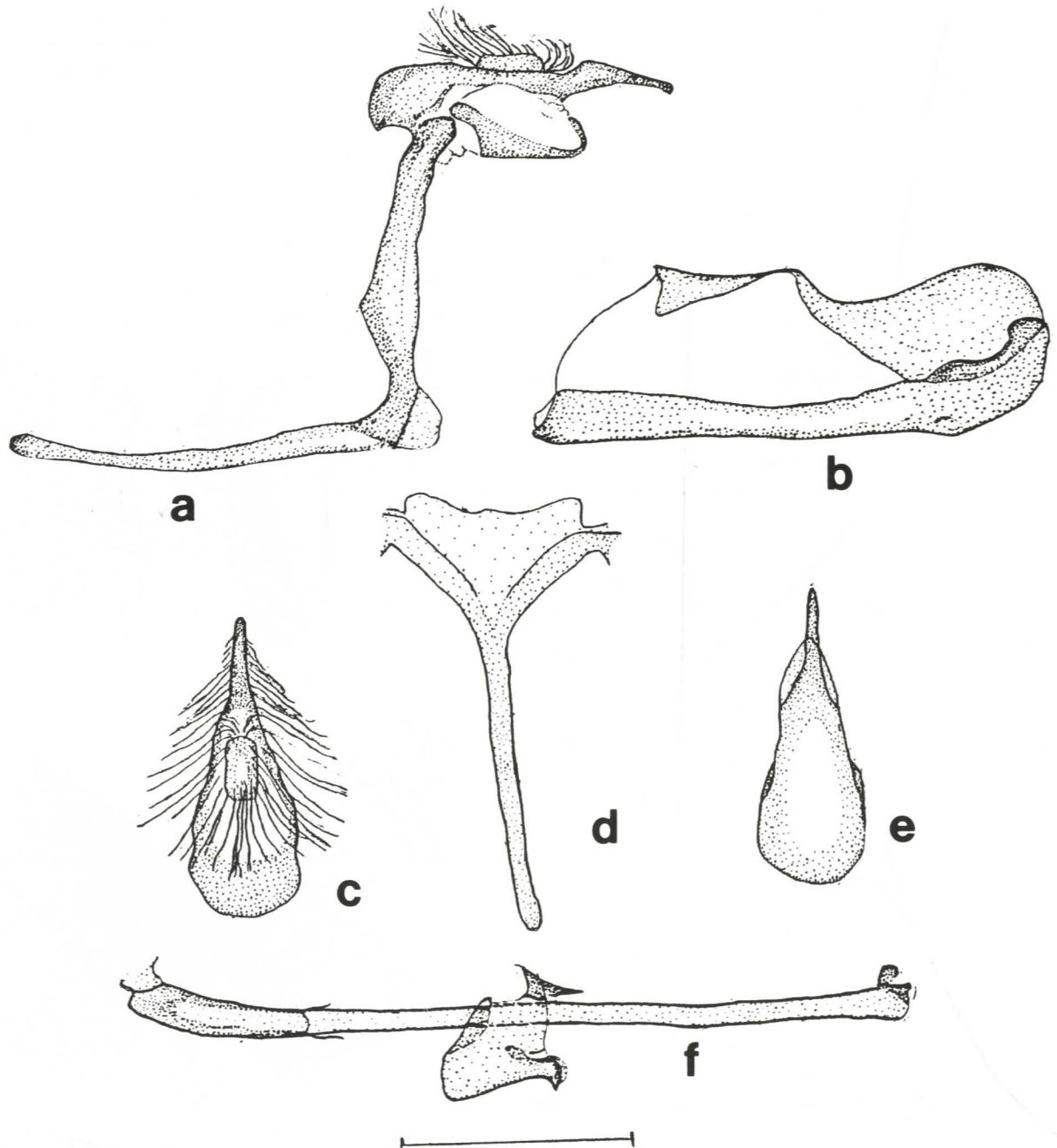


Fig. 3. Male genitalia of *Dalla steinhauseri*, new sp., holotype (genitalia vial SRS-3737): a) uncus, gnathos, tegumen, vinculum, and saccus in lateral view; b) right valva, mesal view; c) uncus, gnathos, and tegumen in dorsal view; d) saccus, ventral view; e) uncus, gnathos, and tegumen in ventral view; f) aedeagus and juxta in lateral view (scale line = 1mm). [drawings by S. Steinhauser]

4), and three yellow costal streaks (one basal, one about mid-wing and the other at the apex); fringe checkered dark brown and dull yellow. *Legs*: brown, with a large foretibial epiphysis which overlaps the tarsus; hind tibia with two pairs of spurs.

*Male genitalia* (Fig. 3): genitalia as illustrated for the holotype from Oaxaca.

Female.— Unknown.

**Holotype.**— MEXICO.— Oaxaca: Sierra Juarez, Km 95, La Esperanza, Cerro Pelon, ca 2100m, 28 May 1990, J. Kemner. The holotype is in the Allyn Museum of Entomology (AME, Florida Museum of Natural History), Sarasota, Florida.

**Paratypes.**— MEXICO.— Oaxaca: 8Km S. Tala de Castro, ca 1900m, 19 May 1990, 1♂, J. Kemner; Km 104-105, Cerro Pelon, 2700m, 12 May 1990, 1♂, J. Kemner (both specimens are in my collection, HAF).

**Etymology.**— *Dalla steinhauseri* is named for my good friend Stephen R. Steinhauser, Research Associate of the Allyn Museum of Entomology, and for his outstanding research on the tropical American HesperIIDae.

**Remarks.**— *Dalla steinhauseri* does not have the basal spot in space 2 extending downward into space 1b on the forewings, and on the hindwings does not have a small discal spot in space 1b below the spot in space 2, which are present in *D. bubobon*. The spots in *D. bubobon* are yellowish-orange, whereas in *D. steinhauseri* they are yellowish-white. *D. bubobon* is smaller as the measurement of the forewings from the base to apex is 12mm in both known specimens, whereas the same measurement in the three known specimens of *D. steinhauseri* average 14mm. The ground color is darker in *D. steinhauseri*, being brownish-black, whereas *D. bubobon* is brown, although this could also be caused by the age of the specimens. On the ventral side of the forewings, *D. bubobon* has a row of five orange submarginal spots extending from space 3 to space 7; a streak over the cell spot; a spot in space 1 below the spot in space 2; and a large spot in space 1 below the basal spot in space 2, none of which are found in *D. steinhauseri*. On the ventral side of the hindwings *D. steinhauseri* has a discal row of light yellow spots: one in space 1b, one in space 2, a large one at the end of the cell, a smaller one in space 4, a distinct cell spot, and three narrow, elongated streaks on the costal margin. *D. bubobon* has the same general spot arrangements except that the costal streaks are absent and in addition there is a row of nine, orange, submarginal spots extending from space 1 to directly over the cell spot. The nudum count is the same in both species: 13. The genitalia differ in that the uncus is somewhat broader from a dorsal view in *D. bubobon* than it is in *D. steinhauseri* and the harpe of the valvae terminates in a more slender apex, being as tall as the ampulla and extending away from it, while this does not occur in *D. steinhauseri* (see Fig. 3).

The species of *Dalla* found in Mexico seem to prefer rocky areas where the vegetation is scrub-like, near creeks or canyons with fairly high elevation (1500-2700m). Usually the males are "puddling" or found near moist spots, whereas the females are usually "nectaring" on any available small flower, with early AM and late PM the best time to collect them. Two of the *D. steinhauseri* were caught near moist ground and the other was feeding on dung.

As far as I know, there has been no life history work on any species in this genus; however, in most places where they have been collected, a lot of bunchgrass has been present.

At the same places where John Kemner collected the three specimens of *D. steinhauseri*, he also collected some other HesperIIDae such as: *Pyrrhopyge jonas* Felder, *Bolla sonda* Evans, *Bolla cupreiceps* (Mabille), *Mylon lassia* (Hewitson), *Enosis immaculata* (Hewitson), *Remella rita* (Evans), *Amblyscirtes anubis* (Godman), *Papias dictys* Godman, and *Niconiades vista* Evans; the last has not previously been recorded from Mexico (2♂: Oaxaca, road to Telea de Castro, 2250m, 19 May 1990).

#### ACKNOWLEDGMENTS

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