

A Review of the genus *Ebusus* Evans (Lepidoptera: HesperIIDae), with the description of a new subspecies from Mexico

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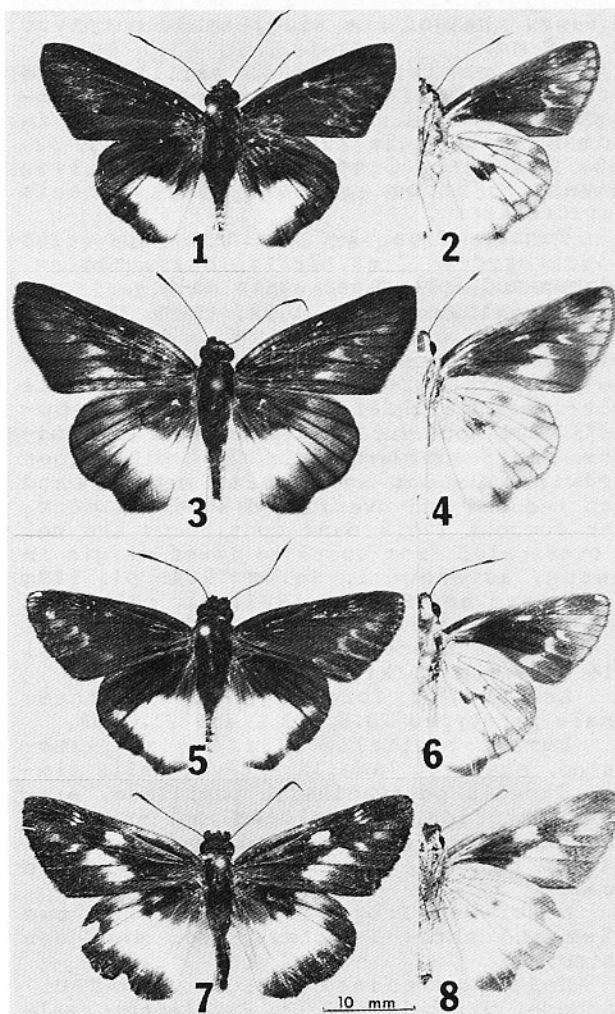
Evans (1955: 205, 219) established the genus *Ebusus* on the basis of characters defined on page 219 to accommodate a single species, *Papilio ebusus* Stoll ([1780], in Cramer 1775-[1790]: 20; pl. 300, figs. C, D). Stoll described this insect from a female from Surinam, and later in the same volume he (Stoll [1781], in Cramer 1775-[1790]: 101; pl. 342, figs. F, G) redescribed *ebusus* from a Surinam male as *Papilio psecas*. Still later, the insect was described from a male from Para, Brasil as *Hesperia belistida* by Hewitson ([1866]: 491) and by Plötz (1882: 339) as *Hesperia aurora*. The plethora of names gives some indication of the sexual dimorphism and individual variation involved in this species. The species generally was carried in *Carystus* Hübner prior to Evans' erection of *Ebusus*.

Specimens have been recorded previously from Panama, Venezuela, the Guianas, Brasil, Peru and Bolivia (Evans 1955: 220; Godman 1900, [in Godman and Salvin 1879-1901]: 485; Draudt 1924 [in Seitz 1907-1925]: 979). It was a not totally unexpected surprise to obtain specimens of *E. ebusus* from Veracruz and Chiapas, Mexico. Many species that are southern Central American and northern South American have been found on both the Atlantic and Pacific sides of southern Mexico without intervening records. This disjunction either may be real or an artifact of the lack of collecting in most parts of Central America: because such a distribution is so common in conspicuous, as well as drab, butterflies, I am inclined to accept the former alternative. The Mexican series is sufficiently distinct to warrant its description as a new subspecies.

Ebusus ebusus nigrior, new subspecies

Male (Figs. 1-2, nominate subspecies illustrated in Figs. 5-6): Head, thorax and abdomen clothed with fuscous hairs dorsad and white ones ventrad and laterad (the fuscous dorsal portion on abdomen reduced to a longitudinal stripe). Eyes brown. Antennae fuscous above and below, slightly gray overscaled on nudum. Palpi clothed with fuscous dorsal and white lateral and ventral hairs. Legs clothed with white scales.

Upper surface of forewing nearly uniform dull fuscous (the spots from M_1 - M_2 through Cu_2 -2A that are more or less prominent in nominate *ebusus* either absent or only very faintly indicated in present subspecies). Upper surface of hindwing



Figs. 1-8: *Ebusus ebusus* subspecies. 1-2, *E. e. nigrior*, new subspecies, holotype male, upper (1) and under (2) surfaces (Allyn Museum photos 052576-5/6); MEXICO: VERACRUZ: Catemaco, viii. [19]47 (T. Escalante). 3-4 *E. e. nigrior*, new subspecies, paratype female, upper (3) and under (4) surfaces (Allyn Museum photos 052576-7/8); MEXICO: VERACRUZ: Catemaco, ix. [19]57 (T. Escalante). 5-6, *E. e. ebusus* (Stoll), male, upper (5) and under (6) surfaces (Allyn Museum photos 052576-9/10); TRINIDAD: Rio Claro, Jan. Feb., 1926 (W. J. Kaye). 7-8, *E. e. ebusus* (Stoll), female, upper (7) and under (8) surfaces (Allyn Museum photos 052576-11/12); TRINIDAD: N. Hills (A. Hall). All specimens in Allyn Museum of Entomology collection.

fuscous with a much reduced ternal white patch extending antieriad only as far as M_3 (this patch extends at least into M_2-M_3 in *e. ebusus*, as well as much further proximad along inner margin of wing and intrudes into hindwing cell).

Under surface of forewing much as in nominate subspecies, but discal and subapical spots much smaller and less clearly defined. Ventral hindwing marked much as in *e. ebusus* except ternal whitening less extensive in present subspecies.

Length of forewing of male holotype 19.6 mm, that of the single male paratype is 19.9 mm.

Male genitalia (Fig. 9) as illustrated and identical with those on nominate subspecies examined (also the illustration in Godman and Salvin 1901 [1879-1901]: pl. 102, fig. 9). Configuration of valva, convergent uncus arms and massive penis characteristic.

Female (Figs. 3-4 nominate subspecies illustrated in Figs. 7-8): Head, thorax, abdomen and appendages as in male.

Dorsal forewing dull, dark fuscous with discal and subapical white markings reduced and overscaled with brown; only the two spots in Cu_1-Cu_2 at all prominent (all spots very well defined in nominate *ebusus*); cell spot (usually prominent in nominate subspecies) not indicated. Upper hindwing fuscous with white median band much reduced and overscaled antieriad of M_3 with fuscous (this band continuous and not so overscaled from costa to inner margin in *ebusus*, as shown in Seitz 1924: pl. 188g and Godman and Salvin 1901: pl. 102 [dark southern morph]).

Under surface as in *e. ebusus*, but all pale forewing markings reduced.

Lengths of forewings of the three female paratypes 23.1, 23.1 and 21.8 mm.

Female genitalia (Fig. 10) as illustrated, massive, lamella antevaginalis simple, lamella postvaginalis papillose, area around sterigma convoluted and somewhat complex; ductus bursae broad leading into a corpus bursae that is not very much broader.

Described from five specimens, two males and three females, from southern Mexico.

Holotype male: MEXICO: VERACRUZ: Catemaco, viii. [19]47 (T. Escalante); male genitalia preparation M4009v (Lee D. Miller).

Paratypes: same locality as holotype; iv.1952 (one female), vi.1957 (one male); ix.1959 (one female); MEXICO: CHIAPAS: Santa Rosa Comitan (actually, Sta. Rosa de las Margaritas), iv.1967 (one female); all collected by T. Escalante.

Disposition of types: entire type-series in the collection of the Allyn Museum of Entomology.

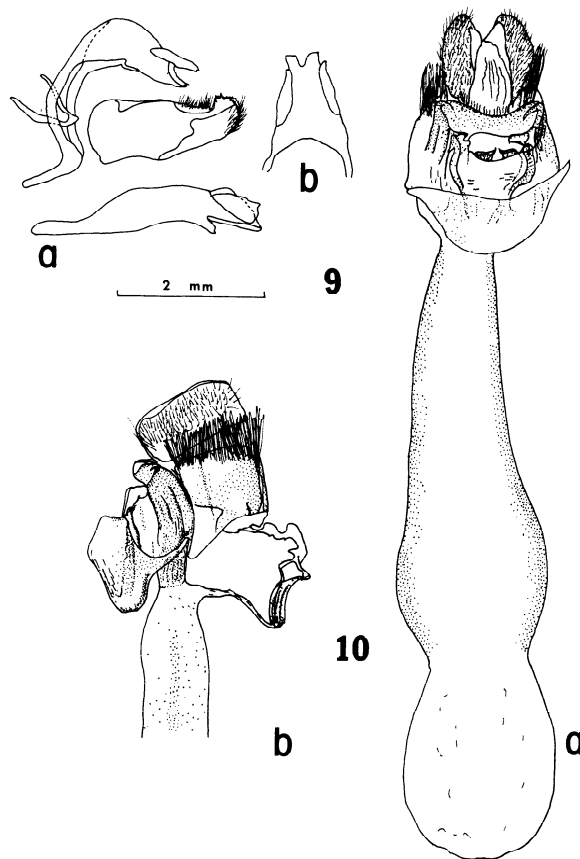
The name refers to the darker coloration the upper surface of this subspecies.

Diagnosis: *Ebusus ebusus nigrior* is separable from the nominate subspecies particularly by the lack of pale marking on the dorsal forewing and the restricted white patch of the dorsal hindwing. Appa-

rently these features are somewhat clinal in nature. The Chiapas female paratype is perhaps the darkest of the lot, and Panamanian material is intermediate between typical *nigrior* and typical *ebusus* (the figure in Godman and Salvin 1901: pl. 102, figs. 7-8 is an example of a male in Staudinger's collection collected at Chiriqui). The Panamanian specimens have broader white hindwing dorsal patches than Mexican specimens, but the restricted forewing patches are more reminiscent of those of Mexican material; I have seen no specimens from intervening areas.

The subspecies of *E. ebusus* may be distinguished by the following key:

1. Male forewing upper surface fuscous with white postdiscal spots well developed from M_1-M_2 to Cu_2-2A ; white patch on upper hindwing enters cell; Central and South America. *ebusus*.



Figs. 9-10: genitalia of *Ebusus ebusus nigrior*, new subspecies. 9, holotype male (genitalia preparation M-4009-v [Lee D. Miller]); a, lateral view of genitalia; b, ventral view of uncus, gnathos and tegumen. 10, paratype female (genitalia preparation M-6753-v [Jacqueline Y. Miller]); a, ventral view of entire genitalia; b, lateral view of sterigmal area.

- 1'. Male upper forewing with pale markings absent to obsolescent; white patch on upper hindwing does not enter cell; Mexico. **nigrrior**.

I know of material of the nominate subspecies from Panama (AME, USNM), Trinidad (AME, BM, USNM), Guyana (BM, AMNH, USNM), French Guiana (AME, AMNH, BM), Brazil (BM, AMNH, CM), Peru (BM, AMNH), Bolivia (BM). The subspecies **nigrrior** is known only from the states of Veracruz and Chiapas in Mexico; it should be sought in at least Oaxaca. None of the synonyms of **ebusus** mentioned in the first paragraph of this paper can be applied to the Mexican subspecies (see above).

Apparently the butterfly is not very common, except perhaps in Para, Brasil, whence Evans (1955: 220) recorded 27 specimens.

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