

Notes on the genus *Acerbas* De Nicéville (Lepidoptera: HesperIIDae)

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ABSTRACT. — Two new taxa of the genus *Acerbas* are described, viz., *A. anthea luzona* from Luzon, and *A. latefascia* from Sulawesi. As a consequence Evans' (1949) key to the species is no longer adequate and a new, simple key is given.

The genus *Acerbas* De Nicéville is a group of only five species (Evans, 1949) distributed from Burma to Java, Sulawesi and the Philippines. The species are generally rare and fly in the lowland forests. Their separation is not particularly difficult, but the discovery of two new taxa not only extends the known distribution area of one of the species considerably, but also makes the key by Evans (1946) unreliable for identification. Therefore a new, simplified key is provided here after the description of the two new taxa.

I am indebted to Mr. C. G. Treadaway (Frankfurt am Main) for his continuous support of the study of the HesperIIDae of the Philippines.

Acerbas anthea luzona subspecies nova, figs. 1, 2

Description. — Female. Length of forewing 18.8 mm. Forewing with well-developed spots in spaces 2, 3, and 6-8. Hindwing with white area extending to tornus. Dark brown submarginal border of hindwing starting at vein 1b; on upperside this border continuous to dark area above vein 4, on underside broken into spots in space 1b just entering space 2, at the end of vein 3, from upper part of space 3 to midway space 7, indented along veins 6 and 7.

Material. — Holotype, ♀, Luzon, Quezon, Atimonan, 28.IV.1969, T. Nuyda. From the Treadaway Collection, deposited in the Rijksmuseum van Natuurlijke Historie, Leiden.

Remarks. — Similar to ssp. *javanica* Snellen in the extension of the white area in spaces 2 and 3 to the termen on the underside of the hindwing, but differs from this as well as from the other known subspecies (ssp. *anthea* Hewitson, Burma to Kalimantan; ssp. *pista* Evans, Thailand) in the white tornus on the upper and underside of the hindwing. The species was not yet known from the Philippines, the nearest locality being Kalimantan.

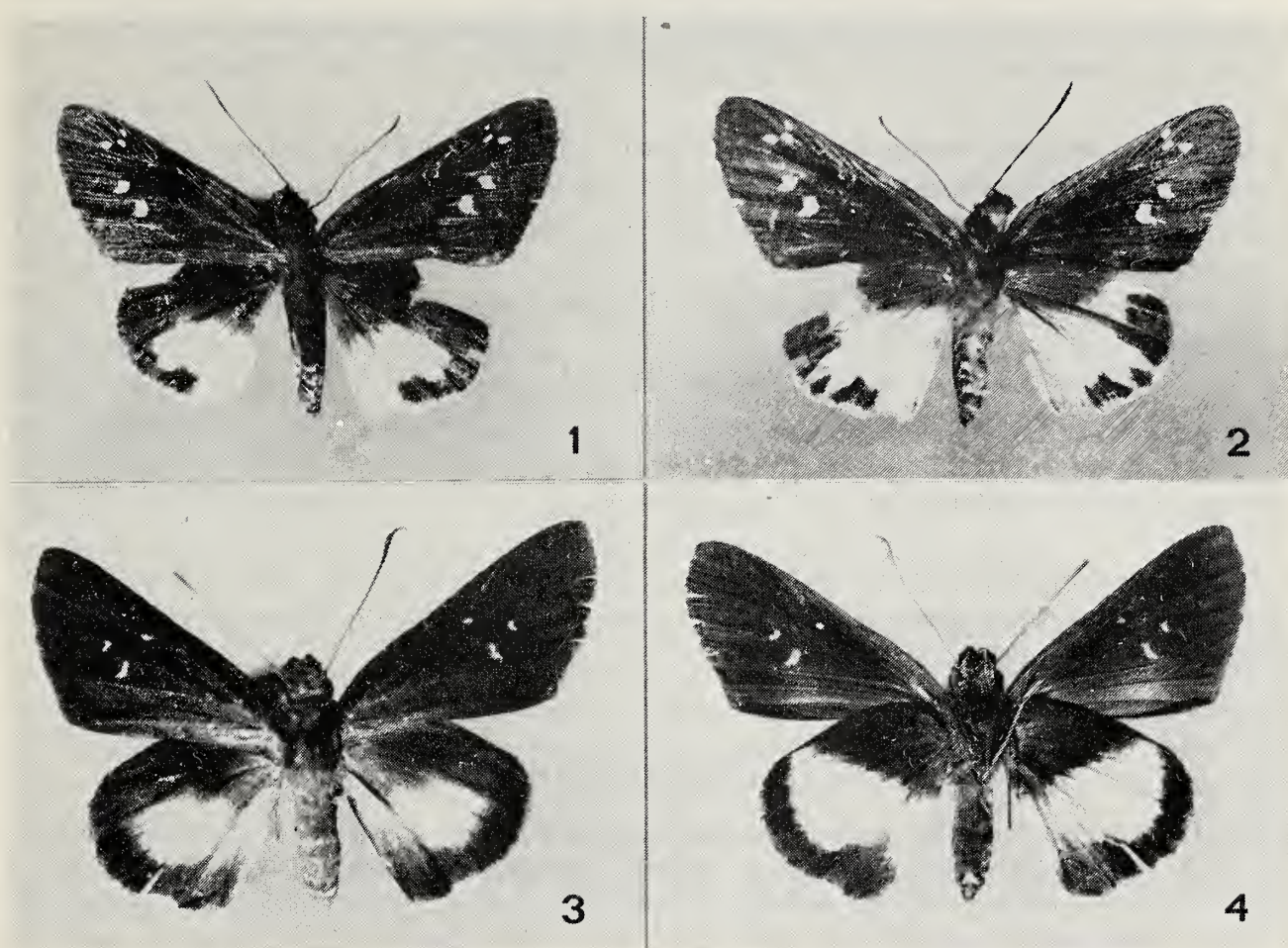
The only other *Acerbas* species with a white tornus of the hindwing is *A. azona* Hewitson from Sulawesi. This species has the white area more restricted, especially on the underside of the hindwing where it does not extend beyond vein 6, while in *A. anthea* it reaches the costa.

Acerbas latefascia species nova, figs. 3, 4

Description. — Female. Length forewing 22 mm. Upperside dark brown, forewing with small spots in spaces 2 (almost halfway the origin of vein 3 and the spot in space 3) and 3, and a small upper cell spot, no apical spots; hindwing with a broad white area from vein 6 to dorsum, twice as wide as the dark border along termen. Underside similar; forewing from dorsum to vein 2 a little paler with a vague whitish area in space 1b under the spot in space 2; hindwing with broad white band running from dorsum to end of vein 8, inner edge straight, outer edge parallel to termen, but dark border broadening in space 1b. Bases of forewing upper and underside, of hindwing underside, basal part of tegulae, palps, head, and underside of thorax including legs, with green reflection.

Material. — Holotype, ♀, Minahasa (N. Sulawesi), 1937-'41, P. Zondervan. Deposited in the Rijksmuseum van Natuurlijke Historie, Leiden.

Remarks. — The new species differs from *A. duris* Mabille in the reduced spotting of the forewing, in the spot in space 2 not being directly under the cell spot, in the stronger green



Figs. 1-4. Upper- (left) and undersides of *Acerbas* species. 1-2, *A. anthea luzona* ssp. n., holotype. 3-4, *A. latefascia* sp. n., holotype.

reflection of the head, thorax and wing bases, and particularly in the broad white band of the hindwing which on the upperside is twice as broad as the dark border instead of being as wide, while the inner edge of the band on the underside reaches the costa at the end of vein 8 instead of much more basad. With Evans (1949: 336-338) the new species keys to *A. martini* Distant & Pryer. The latter has, however, two cell spots, and vein 2 of the forewing rises further distad than in *A. latefascia* (and the other *Acerbas* species, for that matter). If not for the position of the spot in space 2 of the forewing and the direction of the inner edge of the white band on the underside of the hindwing, *A. latefascia* could be considered a subspecies of *A. duris*. Discovery of the male would greatly help in establishing the exact relationship.

Key to the species of *Acerbas*

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| 1. Forewing without cell spots | 2 |
| Forewing with a single upper cell spot | 5 |
| Forewing with two cell spots | 7 |
| 2. Upperside hindwing white at tornus | 3 |
| Upperside hindwing dark brown at tornus | 4 |
| 3. Length of forewing more than 24 mm. Sulawesi | <i>A. azona</i> Hewitson |
| Length of forewing less than 19 mm. Luzon | <i>A. anthea luzona</i> ssp. n. |
| 4. Underside hindwing dark terminal border unbroken. Thailand | <i>A. anthea pista</i> Evans |
| Underside hindwing dark terminal border deeply indented in space 2 (♂) or in spaces 2 and 3 (♀). Burma to Kalimantan | <i>A. anthea anthea</i> Hewitson |
| Underside hindwing dark terminal border broken by extension of the white band reaching | |

- the termen in space 3 (in ♀ often also in space 2). Java..... *A. anthea javanica* Snellen
5. Underside forewing with suffused yellow costal spot. Underside hindwing with yellow colouring at upper end of white band. Length of forewing ♂ 18.4-20.5 mm. Philippines..... *A. duris duris* Mabille
- Underside forewing without yellow costal spot. Underside hindwing without yellow colouring at upper end of white band 6
6. Forewing, apical spots well marked. Hindwing, white band as wide as dark border. Length of forewing ♂ 17 mm. Kalimantan *A. duris dorka* Evans
- Forewing, apical spots absent. Hindwing, white band twice as wide as dark border. Length forewing ♀ 22 mm. Sulawesi..... *A. latefascia* sp. n.
7. Forewing vein 2 rising much nearer to base than the origin of vein 3; spot in space 2 under the cell spot and origin of vein 3. Kalimantan..... *A. selta* Evans
- Forewing vein 2 rising mid base and origin of vein 3; spot in space 2 well beyond origin of vein 3. Burma to Kalimantan *A. martini* Distant & Pryer

Note. — After completion of the manuscript I received a photograph of an apparently new *Acerbas* species or subspecies from Sulawesi from Major A. Bedford Russel, who intends to describe it before long.

LITERATURE CITED

Evans, W. H., 1949. *A. Catalogue of the HesperIIDae of Europe, Asia and Australia in the British Museum (Natural History)*: I-XIX, 1-502, pls. 1-53, British Museum, London.

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SEMIOCHEMICALS: THEIR ROLE IN PEST CONTROL, 1981. D. A. Nordlund, R. L. Jones & W. J. Lewis, eds. pp. XIX, 306, index 20 kolommen. ISBN 0-471-05803-3. J. Wiley & Sons, New York. Prijs (gebonden) £ 25.20.

Door de snelle ontwikkelingen op het gebied van de chemische analysemethoden zijn een groot aantal chemische verbindingen bekend geworden, die van belang zijn voor de communicatie tussen individuen van dezelfde soort, dan wel een signaalfunctie vervullen bij relaties tussen individuen van verschillende soorten. Dergelijke chemische verbindingen worden samengevat onder de term „semiochemicals”. In dit boek zijn artikelen opgenomen, die gepresenteerd zijn tijdens een tweetal symposia over het mogelijk belang van semiochemicals bij de bestrijding van insektenplagen, nl. de „1978 Meeting” van de Entomological Society of America en het Symposium „Behavioral Chemicals: Role and Employment in Plant Protection”, dat werd gehouden tijdens het 9de internationale congres voor „Plant Protection”.

Het werk geeft een goed overzicht van de verschillende groepen van semiochemicals, die een rol spelen bij de „chemische oecologie”. Het is in een 5-tal secties onderverdeeld: een inleiding met onder meer een bespreking van de in gebruik zijnde namen voor de verschillende groepen van semiochemicals, secties over rol en belang van allelochemicals, over rol en belang van feromonen, een sectie over chemie en evolutie van semiochemicals en tenslotte een samenvattende sectie, waarin de mogelijkheden worden besproken voor toepassing van de verschillende typen verbindingen bij bestrijding van plaaginsekten.

De artikelen zijn van goede kwaliteit, maar het boek is geen volledig overzicht van dit vakgebied, doch veeleer een verzameling van symposium-presentaties. Toch heeft dit boek een grote verdienste, daar het één van de eerste werken is, waarin een overzicht wordt gegeven van het gehele gebied van semiochemicals. Werken tot nu toe gepubliceerd bleven over het algemeen beperkt tot de sexattractantia. — L. P. S. van der Geest