

XVI. — CONTRIBUTION TO THE KNOWLEDGE OF THE JAVANESE
YPTHIMA-SPECIES.

BY R. VAN EECKE.

Messrs. Henry J. Elwes and James Edwards have carefully studied the species of the genus *Ypthima* and have published the important results of their researches in the Transactions of the Entomological Society of London, 1893, part I, pp. 1—54. The limited acquaintance with the Dutch language and the want of sufficient Javanese material have prevented the above named authors from doing justice to the species, described by the late Mr. P. C. T. Snellen in the „Tijdschrift voor Entomologie”, XXXV, pp. 133 and 135. In recent years, 1910 and 1913, Messrs. H. Fruhstorfer and M. C. Piepers have made a more particular study of the Indo-Australian and Javanese species of *Ypthima*. The results of Mr. Fruhstorfer's researches are published in the work of Prof. A. Seitz, and those of Mr. Piepers' in „The Rhopalocera of Java”. The latter has not examined the anatomical characters and has separated the Javanese species, just as Mr. Snellen did, by the outward morphological characters only. The work of Messrs. Elwes and Edwards has undoubtedly shown to us the great systematic value of the modification of the male genitalia. Arranging the large number of Javanese *Ypthima*-specimens in the collection of the Leiden Museum of Natural History, I have taken the fortune at the tide to examine the male genitalia of the species not examined by Messrs. Elwes and Edwards, and to compare the descriptions in the four named publications.

Ypth. fasciata Hew.

Hewitson, Trans. Ent. Soc. of London, (3) 2, p. 287, 1864. — Elwes and Edwards, l. c. 1893, p. 44. — Fruhstorfer, Seitz, Grossschm. IX, p. 237, pl. 99 g, 1910. — Piepers and Snellen, Rhop. of Java, Dan., Satyr. etc. p. 52, pl. 16, f. 39, 1913.

The female specimen, collected by Mr. Piepers in the Resid. Besoeki in East-Java in the year 1887, is not a *fasciata* Hew. but really a *jarba* Nicév. *Ypth. fasciata* from Borneo is much smaller, darker coloured and it possesses a very characteristic continuous series of ocelli on the under side of the hind wing. The number of these ocelli is generally seven. The specimen from Besoeki shows only five well developed ocelli and one small second ocellus under the apical one. This fact happens

more in *Ypth. jarba eupeithes* Fruhst. from West-Java. The median part of the under side of the hind wings is whitish coloured, just as in *eupeithes* Fruhst. It is a pity, that the figure in „The Rhopalocera of Java” is not accurate, the brown colour being much too dark and the ocelli not well placed and defined.

I believe therefore, that *Ypth. fasciata* Hew. does not occur in Java.

Ypth. argillosa Snell.

Snellen, Tijdschr. v. Ent. XXXV, p. 133, 1892. — Elwes and Edwards, Trans. Ent. Soc. Lond., 1893, p. 52. — Fruhstorfer, Seitz, Grossschm. IX, p. 290, 1911. — Piepers and Snellen, Rhop. of Java, Dan. Satyr. etc. p. 51, pl. 16, f. 36 a—b, 1913.

The typical specimens of Mr. Snellen indicate immediately on the species *stellera* Hew. from the Philippines. I can not see any specific difference between the three types of Mr. Snellen and five specimens of *stellera*, collected by Mr. Semper in the Philippines. Messrs. Elwes and Edwards have written on page 27, l. c., that *stellera* has been captured by Mr. Kaden in Java. The name *argillosa* Snell. may be retained for the Javanese race of *stellera* Hew.

The meaning of Mr. Fruhstorfer, that *aphnius* Godt. and *argillosa* Snell. belong to the same species, seems to me to be very probable.

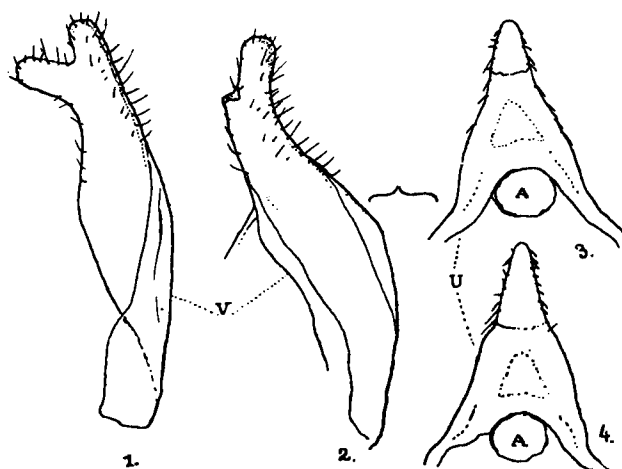
Ypth. baldus (F.).

Fabricius, Syst. Ent. App. p. 829, 1775. — Elwes and Edwards, Trans. Ent. Soc. Lond. 1893, p. 25. — Fruhstorfer, Seitz, Grossschm. IX, p. 289, pl. 99, 1911. — Piepers and Snellen, Rhop. of Java, Dan., Satyr. etc. p. 51, pl. 16, f. 37 a—b, 38 a—d, 1913.

It is very remarkable to see, how the opinions of the lepidopterologists differ as to the acknowledge of the several forms of this species or better of the two species, which are united by the name *baldus*. Messrs. Elwes and Edwards have been right by anatomically separating two different species, which they have inexactly called *marshalli* Butl. and *horsfieldii* Moore. *Marshalli* Elwes and Edwards is a common appearance in Java and also in Sumatra. The Javanese specimens of *marshalli* Elwes and Edwards are brought together by Mr. Fruhstorfer under the name *horsfieldi*. *Horsfieldii* Elwes and Edwards is not synonymous with *horsfieldi* Fruhstorfer, because there are morphological and anatomical differences between the two forms. *Marshalli* Elw. & Edw. indicates the same species as *horsfieldi* Fruhstorfer, which forms may easily be separated from *horsfieldii* Elw. & Edw. by the shape of the wings, the

colour on the under side of the hind wings, the ocellus on the upper side of the fore wings and, last not least, by the claps (valvae) and the uncus in the genitalia of the male specimens. Messrs. Elwes and Edwards have given figures on plate 1 in the cited Transactions.

Mr. Piepers „is not unable to admit the separate wet-season race *marshalli* Butl. of Fruhstorfer, at least as far as Java is concerned.” As far as I can determine, the name *marshalli* Butl. of Fruhstorfer indicates the dry-season form (Seitz, p. 289). The eleven specimens of both sexes, taken at the height of the dry season at Tjandi by Mr. Edw. Jacobson, must belong, concerning the opinion of Mr. Piepers, to the form *baldus* F. These eleven specimens belong to the species *horsfieldii* Elw. & Edw. and not to the species *marshalli* Elw. & Edw. or *baldus* Piepers and Fruhstorfer. The figures 37 a—b and 38 a—d on plate 16 in „The Rhopalocera of Java” are showing distinctly the morphological differences between the two species, while, in the table of species on page 25 of the cited Transactions, Messrs. Elwes and Edwards have indicated the anatomical differences. It is a pity, that the latter authors have not figured the valvae of their *horsfieldii*. Therefore I have sketched here the valva



(V.) and the uncus (U.) of *marshalli* (1,3) and *horsfieldii* (2,3) Elw. & Edw. De Nicéville's investigation of the seasonal dimorphism of *marshalli* Elw. & Edw. proves conclusively that the dry-season form has the ocelli on the under side of the hind wing very much smaller than the wet-season form, but he has not written that between the two seasonal forms distinct differences in the shape of the wings and in the genitalia exist. As far as I know such a fact would be unknown. On

this subject Dr. K. Jordan has published a very important memoir in the „Zeitschrift für wissenschaftliche Zoologie”, Bd. 33, S. 151—205, 1905. In the genitalia of two seasonal forms, belonging to one species, till now never anatomical differences have been found. I self have researched several seasonal forms, but I never found any difference. My opinion is, that in Java are living two species: *baldus* F. (*marshalli* Elw. & Edw.) and another one, which is named *horsfieldii* by Elwes and Edwards, who have cited the first description by Moore. Mr. Fruhstorfer has given the name *horsfieldii* Moore to the Javanese race of *baldus* F. It is not possible to decide this question before having seen Moore's types.

At last I will give here a list of the localities and the data of the Javanese specimens, most collected by Mr. Piepers and Mr. Jacobson.

<i>Ypth. baldus</i> (F.).	<i>Ypth. horsfieldii</i> Elw. & Edw.
Batavia. 6 January	Goenoeng Kidoel February
Tjandiroto 25 „	Semarang 15 August
Djokdja February	Semarang 5 September
Depok March	Semarang December
Tandjong Priok. 25 May	
Batavia. 25 November	
Batavia. 9 December	
Buitenzorg.	
Palaboean	
Djember	
Wijnkoopsbaai	

Mr. Jacobson has captured the two species in the same month, February, *horsfieldii* Elw. & Edw. only in the vicinity of Semarang. Also in December the two species seem to fly at the same time.

Mr. Piepers mentions a specimen, which should be an intermediate form between *baldus* and *horsfieldii*. I have seriously examined that specimen from Djokdja, but it is undoubtfull a *baldus*.

Ypth. nigricans Snell.

Snellen, Tijdschr. v. Ent. XXXV, p. 135, 1892. — Elwes and Edwards, Trans. Ent. Soc. Lond. 1893, p. 52. — Fruhstorfer, Seitz, Grossschm. IX, p. 294, 1911. — Piepers and Snellen, Rhop. of Java, Dan., Satyr. etc. p. 63, pl. 16, f. 40 c, 1913.

The anatomical differences between the species *pandocus* Moore and *nigricans* Snell. prove to be not so distinct as in the two preceding species, but nevertheless they exist. The copulatory organs of the male specimens may be distinguished at a glance by the length of the uncus and that of the valvae. The more size and pattern of the wings offer good systematic characters. *Nigricans* Snell. is considered not to be a seasonal form of *pandocus*, because many specimens of both forms have been captured on the same spots and at the same time. Yet Mr. Piepers can only recognize smaller, less developed individuals of *pandocus*. The figures of *pandocus* and *nigricans*, given by Mr. Piepers are showing to us the contrary. I think that *nigricans* is also distributed in Celebes and that Mr. Fruhstorfer has named those representatives *ancus*.

The following species are to be mentioned from Java:

1. *Ypth. jarba* de Nicév.
2. „ *philomela* Joh. (= *hübneri* Piepers & Snell.).
3. „ *stellera* Hew. (= *argillosa* Snell.).
4. „ *baldus* F.
5. „ *horsfieldii* Elw. & Edw.
6. „ *pandocus* Moore.
7. „ *nigricans* Snell.

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