difference of locality. Those localities need not be far distant from each other to produce the variety, if the sea divides them.

10. ON A NEW SPECIES OF THE FAMILY PAPILIONIDÆ FROM BACHIAN. BY GEORGE ROBERT GRAY, F.L. & Z.S., ETC.

(Annulosa, Pls. LXVIII. LXIX.)

In the Catalogue of the family of Papilionidae, which I formed on the specimens contained in the Collection of the British Museum, I enumerated several species that belong to the subdivision Ornithoptera, which had previously been considered as only varieties of Papilio priamus. It now falls to my lot to add another splendid species (also supposed by some entomologists to form only a further variety of that insect), sent by the indefatigable collector and naturalist, Mr. A. R. Wallace, from the Island of Bachtian, one of the Moluccas.

The beautiful golden colour of the insect about to be described, has induced the discoverer to propose for it the name of Ornithoptera cresus, which I have adopted. I should otherwise have called it after Mr. Wallace himself, as a slight record of the valuable services he has rendered to entomology during his sojourn amongst the Eastern Isles. I am further led to describe this insect as distinct from any hitherto recorded, as, after a careful comparison with all the others, many peculiarities can be pointed out, which will be incorporated in the following account.

Papilio (Ornithoptera) cresus.

Primary wings deep black, with the anterior band widening towards the middle, and this is of a golden orange-colour; this colour is also represented by an abbreviated band at the base of the inner margin, and by a few scattered specks on the inner and outer margins.

Secondary wings of a dull orange-colour, with some spots of kings-yellow; this difference of colour is occasioned by the semitransparency of the more decided spots of the under surface of the wings when the insect is held against the light; the base, subcostal and medial nervures, first subcostal nervules, and the narrow edge on the outer margin are deep black. A black spot is sometimes found between the second and the first discoidal nervules.

The under surface of the primary wings is most like that of Ornithoptera richmonidia in the form of the markings, but they are of a rich golden-green.

The under surface of the secondary wings also closely approaches that of Ornithoptera richmonidia; but it is of a golden-green, with a lengthened spot of rich kings-yellow above the black spot between the costal nervure and the first nervule, and a small spot below the black spot; the same kind of yellow spot above and below the black spot in each space between the first and second nervules.
and the second and first discoidal nervules; the next two black spots with a yellow spot beneath each: in the discoidal cell is placed a lengthened spot of kings-yellow. The anal angle kings-yellow, without any black spot such as is found in the other species. The base, nervures, and narrow margin deep black.

Length across the primary wings 6½ inches.

Mr. Westwood has remarked, that he was not sure whether the present insect "might not be a local variety of Ornithoptera priamus." I will, however, point out some dissimilarities, which induce me to differ from so high an authority. The form of the primary wings appears rather shorter and thereby broader than in O. priamus, while the band that runs near the anterior margin is much broader; the middle and these wings are without the band that borders the posterior and exterior margins, except at the base of the former, where there is an abbreviated band, and but slight indication of spots (formed by a series of minute specks) on the latter. The dull black hirsute space is formed of a single large spot, which in O. priamus is composed of two, a large one and small one.

The under surface of the primary wings has the golden-green spots that occupy the spaces between the nervures divided by a wider irregular band than is found in O. priamus.

The secondary wings are without the black spots at the anal angle; and the marginal border is much narrower, while the edge is less dentated than in O. priamus.

The under surface of the secondary wings has various gold marks not found in O. priamus: one in the discoidal cell; and a spot above each of the black spots between the second and third discoidal nervules is very small, while the marginal black spots are further removed from the outer margin: the discoidal cell is more broadly surrounded with black.

Many of these peculiarities cause Mr. Wallace's insect to approach nearer the species I have named Papilio (Ornithoptera) richmondia, than any of the others recorded in my Catalogue of the family Papilionidae; viz. the want of the posterior and exterior band, the single form of the dull black space on the primary wings, the increased number of the golden spots on the under surface of the secondary wings, and the breadth of the black margin within the discoidal cell.

It may also be remarked that the female is decidedly more like that of P. richmondia in its colour and markings than the same sex of P. priamus.


The genus Sclerostoma, which forms only a section of the genus Strongylus of Rudolphi, but which has been adopted by De Blainville, Dujardin, and Diesing, is not numerous in species. Removing