

**AB. DISCOFLAVA, AB. NOV.: A PREVIOUSLY UN-DESCRIBED
ABERRATION OF THE SWALLOWTAIL BUTTERFLY
PAPILIO MACHAON BRITTANICUS SEITZ (LEP.: PAPILIONIDAE)**

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At least ninety aberrational forms of the Swallowtail butterfly have been named, some of them spectacular, but most consisting of minor colour or pattern changes only and, until recently, it seemed unlikely that there were any major aberrations as yet un-described. A few years ago I purchased a number of butterflies from Professor Alan Davies, among which was an unusual looking Swallowtail of the British subspecies, taken originally on 5 May, 1911, at Wicken Fen by G. Brookes. A thorough search of the British and European literature has failed to identify further examples of this, or, indeed, evidence of a previous description.



Plate B. *Papilio machaon brittanicus* Seitz ab. *discoflava* ab. nov.

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Male Wingspan: 69mm. Emmet & Heath (1989) give the normal range as 76-83 mm. for the male and 86-93mm. for the female). Length of forewing: 35mm. Maximum width of forewings: 24mm. The ground-colour is pale (*cf.* ab. *pallida* Tutt), but the discoidal cells of all four wings are deep yellow, of a shade indistinguishable from the typical form. The underside is of a more uniform yellow colour, although the discoidal cells of the forewings are very slightly darker than the ground colour. The black markings are normal, as are the yellow marginal lunules and blue and red hindwing markings.

David Carter of the Natural History Museum, London, very kindly examined the specimen and demonstrated by light microscopy that the wing scales in the pale yellow areas were defective. Individual scales appeared curled along their long axes, which made them appear narrower than expected. The scales of the darker discoidal cells and from the black markings appeared normal. It was then suggested that the specimen might have been "treated" with a bleaching agent in order to manufacture the aberration.

With this in mind one recalls Charlton's Piltdown butterfly (*Papilio ecclipsis* L.), the manufactured Brimstone "aberration", of which there are two specimens in the Linnean Collection. However, very careful microscopic examination failed to detect a single abnormal scale in the normal dark yellow areas encompassed by the discoidal cells. At the same time examination of the adjacent black markings failed to identify any defective scales. It would thus appear that this abnormal specimen does exhibit a true scale defect and not a "manufactured" abnormality. It seems inconceivable that anyone might possess the necessary skill to bleach the pale areas so accurately that not a single scale in the black markings or the discoidal cells was involved.

Acknowledgments

I am most grateful to David Carter for his expertise in examining this specimen and to David Wilson for the photograph in Plate B.

Reference

Emmet, A.M. & Heath, J., 1989. *The Moths and Butterflies of Great Britain and Ireland* 7(1). Harley Books, Colchester.

Collecting notes 1997

I will begin these notes by completing the story of the Goat Moth *Cossus cossus* L. larvae which I introduced in my notes for 1996 (*Ent. Rec.* **109**: 144). About 140 larvae stopped feeding and began the winter diapause in silken tubes in mid-December. I left the five-litre plastic ice cream boxes in an unheated, frost-free, south-facing sun-room. On 13 February 1997 my eye was caught by a large, pink larva hurriedly crossing the sun-room floor. My worst fears were confirmed when I lifted up the boxes to discover several large holes through the plastic and a set of new tunnels in the carpet below, (fortunately, the sun-room has a concrete floor!). One enterprising group of larvae tunnelled straight through a one-inch thick piece of soft wood upon which their box was standing. A sheet of glass prevented further escapes.

The larvae were hungry and I renewed the wood shavings, wholemeal bread and apple and left them to it. There was some evidence of cannibalism during the winter which was probably due to overcrowding. A swarm of small flies of biblical proportions prompted me to clean out the boxes in the middle of May. I was



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