# EARIAS VITTELLA (FABRICIUS) (LEP.: NOCTUIDAE) THE FIRST OCCURRENCE OF WILD-CAUGHT MOTHS IN EUROPE

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### **Abstract**

The first capture of wild adults of *Earias vittella* (Fabricius) (Lep.: Noctuidae) in Britain and Spain are reported. The occurrence is discussed.

### Introduction

On the evening of 16 June 2003, a single example of *Earias vittella* was attracted to m.v. light at Durlston Country Park, Dorset. Immigrant moth activity was very high at the time. On 15 June, the pyrale *Euchromius ocellea* (Haw.) and the Striped Hawkmoth *Hyles livornica* (Esp.) were both taken at sites on the Dorset coast. A species of macro moth not seen in Britain since 1853 was taken in south-east Kent, on 17 June and is being published by another party (Keith Redshaw, pers. comm.), whilst four Eastern Bordered Straw *Heliothis nubigera* (H.- S.) recorded on the south coast during the month equaled all previous known British records! This appears to be not only the first occurrence of a wild-caught moth in Britain, but also the first confirmed record in Europe (Michael Fibiger, pers. comm. via Colin Plant).

# Description

Earias vittella is one of the most striking and easily recognisable species in the genus, although some variation can occur. There is a form where the green areas are replaced with light brown (Goater, 1994). The ground colour can vary; Martin Honey (Natural History Museum, London) has very kindly examined the material in that institution and reports that in some it is pinkish, as appears to be the case in the Dorset specimen, but in others it is buff or even greenish. In a few examples the central green band is reduced from the fringe to the lower centre of the wing (more extreme than in the Dorset example). The male is illustrated in Bretherton *et al.*, 1983, but both the description and illustration refer only to the yellow form.

The description that follows is based on the Swanage specimen (Plate O), which is a female. Wingspan 22 mm. Head and antennae white, collar and patagium white, rest of thorax green with longitudinal white median stripe. Metathorax with a prominent, green tuft. Legs white. Forewings long and narrow, cream with green longitudinal median wedge, narrow at base, broader towards the termen which is fairly straight; dorsum with small green elongate blotch near base; costa straight, except for weak curve at the base and near the apex, tinged pink; cilia white, tinged green. Hindwings white, darker towards termen; cilia white. Abdomen white.

### Discussion

Earias vittella is a serious pest of cotton (Gossypium) and other malvaceous species such as Hibiscus. Large infestations can destroy a whole crop. It has been recorded previously from Britain as larvae intercepted at Heathrow airport, Middlesex between February and June 1976, on Okra pods (Abelmoschus



**Plate J.** Earias vittella (Fabricius) (Lep: Noctuidae) Female, 16.vi.2003, Durlston Country Park, Dorset (VC 9). Photograph: ©Steven Nash, 2003

esculentus) imported from India (Seymour, 1978). It is an Old World tropical species (László Ronkay pers. comm., via Colin Plant), widespread common throughout the Middle East, and from India Countries Australia. represented by specimens in the Natural History Museum, London, or references literature (alphabetically) include Afghanistan, Andamans, Brunei, Burma, Cambodia, Caroline Islands, Celebes,

China, Fiji, India, Indonesia, Java, Laos, Loyalty Island, Malaysia, Mariana Islands, New Guinea, New Hebrides, Northern Australia, Pakistan, Papua, Philippines, Sarawak, Saudi Arabia, Seychelles, Singapore, Sri Lanka, Solomon Islands, Taiwan, Tenimber Island, Thailand, Tonga, Vietnam and West Irian, The only African country for which there seems to be a record is the Sudan (Capizzi, 1987; specimens in the Natural History Museum, London). None of these countries seem likely as a point of origin for the Dorset specimen. Shortly before going to press, I was informed by Jon Clifton that a specimen of *E. vittella* had been taken by him in Spain, but not identified until a photograph of the Swanage specimen was published on the *Immigration of Lepidoptera* web site (migrantmoth.com). He had collected that moth near Estapona, Málaga, Spain between 20 and 28 September 2001, and this would appear to be the earliest known European record. The possibility that the species is established in southern Spain, and that this was the source of the British example, should not be overlooked. Certainly an origination in southern Spain fits well with the general pattern of immigrant activity at the time and with the species composition of the immigrants involved.

# Acknowledgements

I am most grateful to Martin Honey for confirming the identity of the Swanage moth, to Martin Corley and Colin Plant for assistance in preparing this manuscript and to Jon Clifton for allowing me to publish his record.

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