The teneral beetle trap: identification pitfalls due to immaturity

Paul F. Whitehead

Moor Leys, Little Comberton, Pershore, Worcestershire WR10 3EH, England.

Email: paul@thewhiteheads.eu

Introduction

Near-adult beetles may look quite different from adults of the same species and this can frustrate the process of identification. Significant problems arise when immature adults of one species resemble mature adults of another closely related species and some examples are cited here.

There have been occasions in the past when I have pored over an immature beetle at some length only to realise that it was an immature example of something else! Immature adults in some cases are able to gain functionality of their flight wings before full skeletal pigmentation occurs and these may turn up in unexpected places.

Discussion

01 shows such a specimen of the omaliine staphylinid *Xylodromus concinnus* (Marsham, 1802), a much darker species when mature that could, if fine details were not attended to, be confounded with the rarer normally pale *Xylodromus testaceus* (Erichson, 1840).



01. Teneral *Xylodromus concinnus*, Little Comberton, Worcestershire, SO94, 8 September 2018, dead when found. P. F. Whitehead

During October 2018, a teneral *Longitarsus* swept along the dip slope of Bredon Hill at Bredon's Norton (SO93 184 m altitude) proved hard to identify. It was elongate with subparallel uniformly pale elytra (02:1a). The shape and microsculptured sheen of the finely pitted elytra were distinctive and the beetle was relatively large. Identification even after scrutiny of the aedeagus (02:1c) proved daunting. In this regard I received assistance from Professor Lech Borowiec until, little by little, we eventually arrived at a determination.

The teneral male (e.g. 02,1) proved to be *Longitarsus dorsalis* (Fabricius, 1781) which is a larval root-feeder generally on *Senecio* spp., and according to Cox (2007) emerging from September through to November. The aedeagus (02:1c) was well-sclerotised but more weakly pigmented than those of cohabiting mature males (01, 2c). The involuted elytra depicted in 02.1a are a post-mortem effect and the elytral sheen already mentioned was exaggerated by immaturity. It can also be observed from the images that the pale legs of the teneral example differ significantly from those of the adult.

Adult *Longitarsus* are often subject to colour variation, but in this instance it can be observed how both the immature and mature adults share the noticeably robust ultimately uniformly dark antennae.

Acknowledgements

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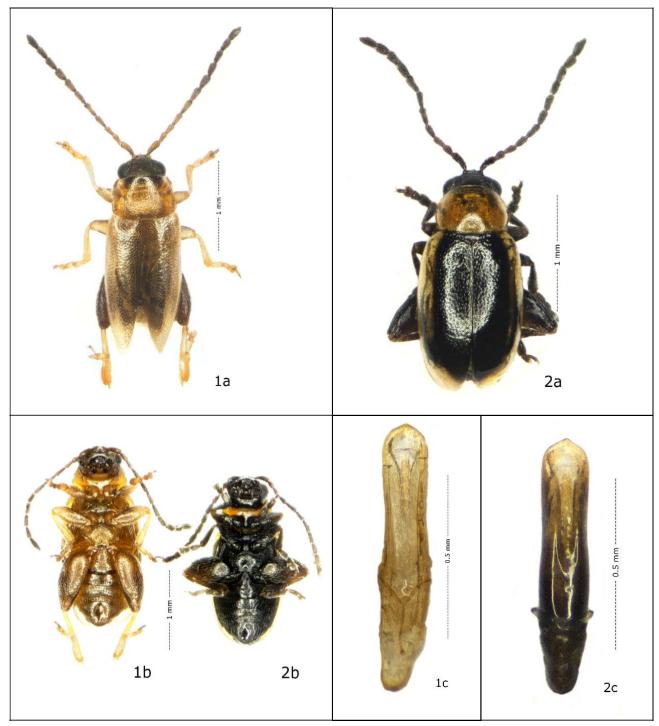
Reference

Cox, M.L. 2007. Atlas of the seed and leaf beetles of Britain and Ireland. pp.i-vii, 1-336. Pisces Publications

Images

01. Teneral *Xylodromus concinnus*, Little Comberton, Worcestershire, SO94, 8 September 2018, dead when found. P. F. Whitehead

02. 1: Longitarsus dorsalis, teneral male, calcareous grassland, Bredon's Norton, Worcestershire, 16 October 2018. 2: Longitarsus dorsalis mature male, Bredon's Norton, 20 October 2018. a: habitus dorsal. b: habitus ventral. c: aedeagi. Pictures P. F. Whitehead.



02. 1: *Longitarsus dorsalis*, teneral male, calcareous grassland, Bredon's Norton, Worcestershire, 16 October 2018. 2: *Longitarsus dorsalis* mature male, Bredon's Norton, 20 October 2018. a: habitus dorsal. b: habitus ventral. c: aedeagi. Pictures P. F. Whitehead