

- 2197 (10005) Southern Wainscot *Mythimna straminea* (Treitschke, 1825)
 2198 (10006) Smoky Wainscot *Mythimna impura* (Hübner, 1808)
 2199 (10007) Common Wainscot *Mythimna pallens* (Linnaeus, 1758)
 2200 (10008) Mathew's Wainscot *Mythimna favicolor* (Barrett, 1896)

Local
 Common
 Common
 Nationally Scarce B

Diagnostic external characters

The characters described by Waring *et al.* (2009) and Skinner (2009) hold true for most individuals of *straminea*, *impura* and *pallens*. However, problems can be encountered and over-reliance on a single character can result in errors, therefore in cases of doubt the genitalia should be checked. Some *straminea* (especially males) have the forewing apex only weakly hooked or projecting and it easily becomes worn, so that in the field they can very easily be overlooked among *impura*. Others with a well-developed apex and often broader forewing, are quite distinctive.

Some *pallens* and *impura* are very difficult to tell apart. Examples of *pallens* with the hindwing smoky are not infrequent, especially in the autumn generation, and some are quite dark on the forewing, with a dusting of blackish scales, sometimes quite dense. Conversely, some *impura* (mainly in the southern half of Britain) have rather faintly smoky hindwing. Further north, forms of *impura* with the hindwing much darker predominate. The shape of the termen (straighter and more angled in *pallens*, more curved in *impura*) is a reasonable guide, but the termen can be quite straight in some *impura*.

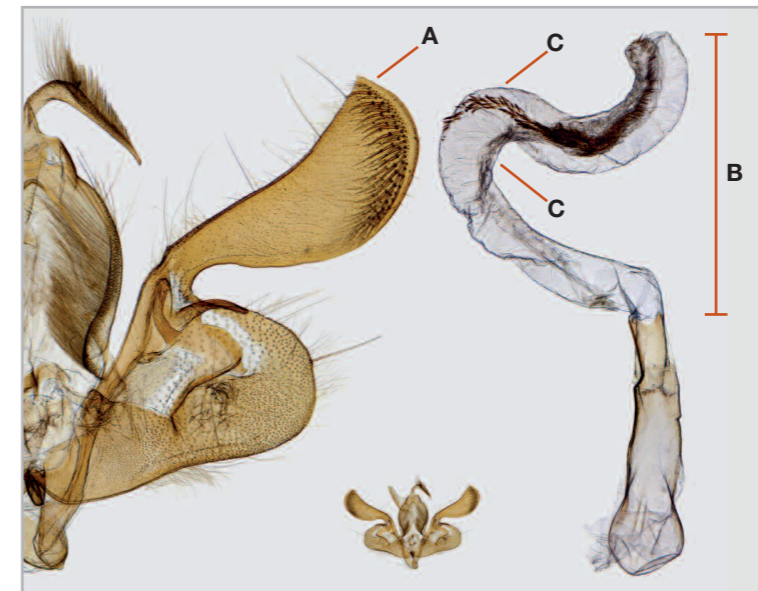
Status of *M. favicolor*

The status of this taxon as a species distinct from *pallens* has been the subject of much debate (Heath and Emmet, 1979) and some believe it to be an ecotype or race. The genitalia are indistinguishable from those of *pallens*. Therefore they are not illustrated in the present guide. Hacker *et al.* (2002) recognise *favicolor* as a species, but the only difference they note in the genitalia is that those of the male are slightly larger, notably the cucullus. Outside of south-east England, *favicolor* is known very locally from the coasts of The Netherlands, Germany (Karsholt and Razowski, 1996) and Denmark (Hacker *et al.*, 2002). In spite of the uncertainty, moths with the physical and ecological characteristics of *favicolor* should be recorded as such.

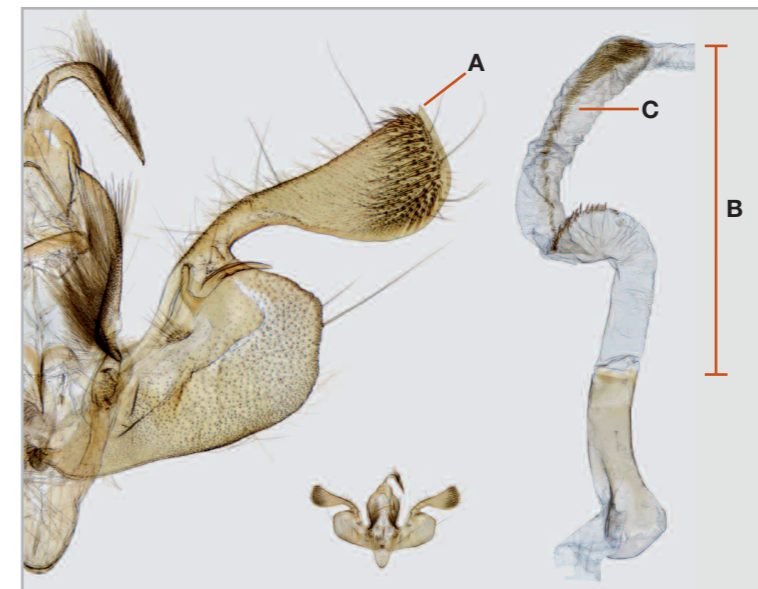
Key to diagnostic morphological characters of the males

The differences in the cuculli can easily be seen if the valvae are extruded.

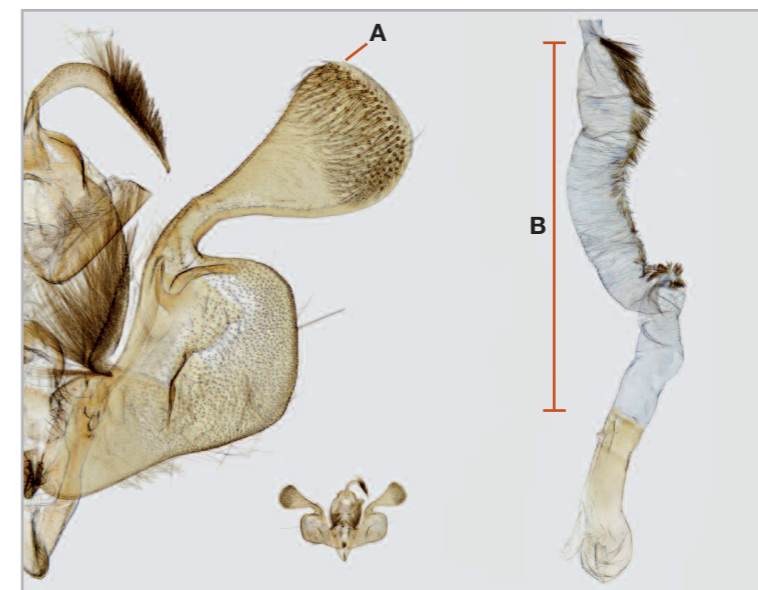
1. Cucullus with apex rounded (Fig. 82, A). Vesica when everted straight (B).....*pallens/favicolor*
 - Cucullus with small sharp point at apex (Figs. 80-81, A). Vesica when everted S-shaped, with two curves roughly equal in length (B).....2
2. Cucullus smaller (Fig. 81, A). Vesica with one long area of cornuti in distal two-thirds (C).....*impura*
 - Cucullus much larger (Fig. 80, A). Vesica with two distinct areas of cornuti in distal two-thirds (C).....*straminea*



80. *Mythimna straminea*



81. *Mythimna impura*



82. *Mythimna pallens**

Plate 22. Genitalia of male *Mythimna straminea*, *M. impura* and *M. pallens*, including everted aedeagus.

*Note that the genitalia of *M. favicolor* resemble those of *M. pallens* and therefore are not illustrated.

Key to diagnostic morphological characters of the females

The differences in the females are slight and comparative and it is therefore advisable to compare specimens of confirmed identity before determining those that are problematical.

1. Ovipositor comparatively long (Fig. 83, A). Ductus bursae narrow near junction with corpus bursae (B).....*straminea*
- Ovipositor comparatively short (Figs. 84-85, A). Ductus bursae broad near junction with corpus bursae.....2
2. Ribbed sclerotisation at junction of corpus bursae and appendix bursae relatively narrow and weak (Fig. 84, B).....*impura*
- Ribbed sclerotisation at junction of corpus bursae and appendix bursae relatively broad and strong (Fig. 85, B).....*pallens*



83. *Mythimna straminea*



84. *Mythimna impura*



85. *Mythimna pallens*