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A NEW SPECIES OF *MOMPHA* (MOMPHIDAE) FROM THE QUEEN CHARLOTTE ISLANDS, BRITISH COLUMBIA

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ABSTRACT. *Mompha nancyae* is described, figured, and compared with *M. terminella* (Westwood).

Additional key words: Canada, *M. nancyae*, *M. terminella*, distribution, endemic species.

A considerable body of literature exists on the geology, endemism, and the possibility of a refugium in the Queen Charlotte Islands, British Columbia, Canada, but very little has been written on the lepidopterous fauna. Specifically, Holland (1930) described *Chrysophanus charlottensis* (currently known as *Lycaena mariposa charlottensis*) (Lycaenidae). Subsequently, Freeman (1966) described *Zeiraphera pacifica* (Tortricidae) from Sandspit and later Mutuura and Freeman (1966) treated this species in more detail. Then Prentice (1966) listed eight species as indicated on his distribution maps. These were *Polychrosis piceana* Freeman (currently *Endopiza piceana*), *Griselda radicana* Heinrich, *Choristoneura fumiferana* (Clemens), *Argyrotaenia pinatubana* (Kearfott), *Acleris fishiana* (Fernald) (a synonym of *A. maccana* (Treitschke)), *Acleris variana* Fernald, *Acleris senescens* (Zeller) (Tortricidae), and *Martyrhilda sciadopa* (Meyrick) (a synonym of *Agonopterix canadensis* (Busck)) (Oecophoridae). Ferguson (1987) then described *Xanthorhoe clarkeata* (Geometridae).

One species, *X. clarkeata*, is an alpine endemic. *Lycaena mariposa charlottensis* is a bog insect found at low evaluation. *Zeiraphera pacifica* is apparently endemic; the others are forest insects found primarily at low elevations.

There may be other references to the Lepidoptera of these islands which I have missed, but Anderson (1904) and Blackmore (1927) listed nothing.

The *Mompha* described here is also a low elevation species, which we found along the main road on the east side of Sandspit. Between the road and the beach there is a long strip of native herbaceous plants and shrubs with some weed species mixed in. There is a surprising number of microlepidoptera in this area.

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[1] J. F. Gates Clarke, an Honorary Life Member of the Lepidopterists' Society, died 17 September 1990.

FIG. 1. *Mompha nancyae* Clarke, new species. Holotype male.

Mompha nancyae, new species
(Figs. 1, 2)

Description. Labial palpus grayish fuscous on outer surface; inner surface sordid white. Antenna black; thicker in male than in female. Head dull leaden color. Thorax fuscous dorsally, with posterior tuft leaden metallic; tegula leaden metallic; laterally shining leaden metallic. Alar expanse 10–11 mm. Forewing ground color ochraceous tawny; base of forewing silver; on costa at one-third, a rectangular shining silver patch extending across wing to fold; at middle of costa a small white spot bordered inwardly by a small cluster of shining silver scales; at outer third of costa a subquadrate patch of shining silver scales; beyond this a large triangular white spot followed by black scaling before apex; at one-third of dorsum a quadrate patch of shining silver scales, joining the coastal patch, and followed by a raised tuft of black scales; on middle of dorsum a small group of shining silver scales; before tornus, a raised tuft of black scales at the base of which are shining silver scales; beyond this tuft a longitudinal line of shining silver scales terminating in an expanded group of shining silver scales at apex; cilia fuscous. Hindwing blackish fuscous; cilia somewhat lighter. Foreleg black; tibia white inwardly; tarsi annulated white, midleg black; tarsi annulated white; hindleg lustrous black; tibia with silver scales at base of spurs; tarsi with silver annulations. Abdomen blackish fuscous dorsally; lustrous ventrally; anal tuft blackish fuscous dorsally, whitish ventrally.

Male genitalia (Fig. 2a) (slides USNM 27270, USNM 69785). Harpe divided; coastal part tapering to a bluntly pointed cucullus; sacculus strongly sclerotized and very broad basally, tapering to a long point, and reaching or exceeding the costal part in length. Uncus a slender, curved process. Vinculum broadly rounded with a ventral median point. Tegumen rather strongly sclerotized, broader anteriorly than posteriorly. Anellus fused with aedeagus, terminating in two widely separated, slender lobes. Aedeagus stout, short, lightly sclerotized; vesica armed with a single cornutus.

Female genitalia (Fig. 2b) (slides USNM 69782, USNM 69786). Ostium oval. Antrum moderately sclerotized. Inception of ductus seminalis at about junction of antrum and ductus bursae. Ductus bursae coiled; moderately sclerotized posteriorly, membranous anteriorly. Bursa copulatrix membranous. Signa two lighty sclerotized discs, each with a strongly sclerotized hook from near center. Lamella antevaginalis broad, subrectangular. Lamella postvaginalis triangular with a club-shaped sclerite on each side.

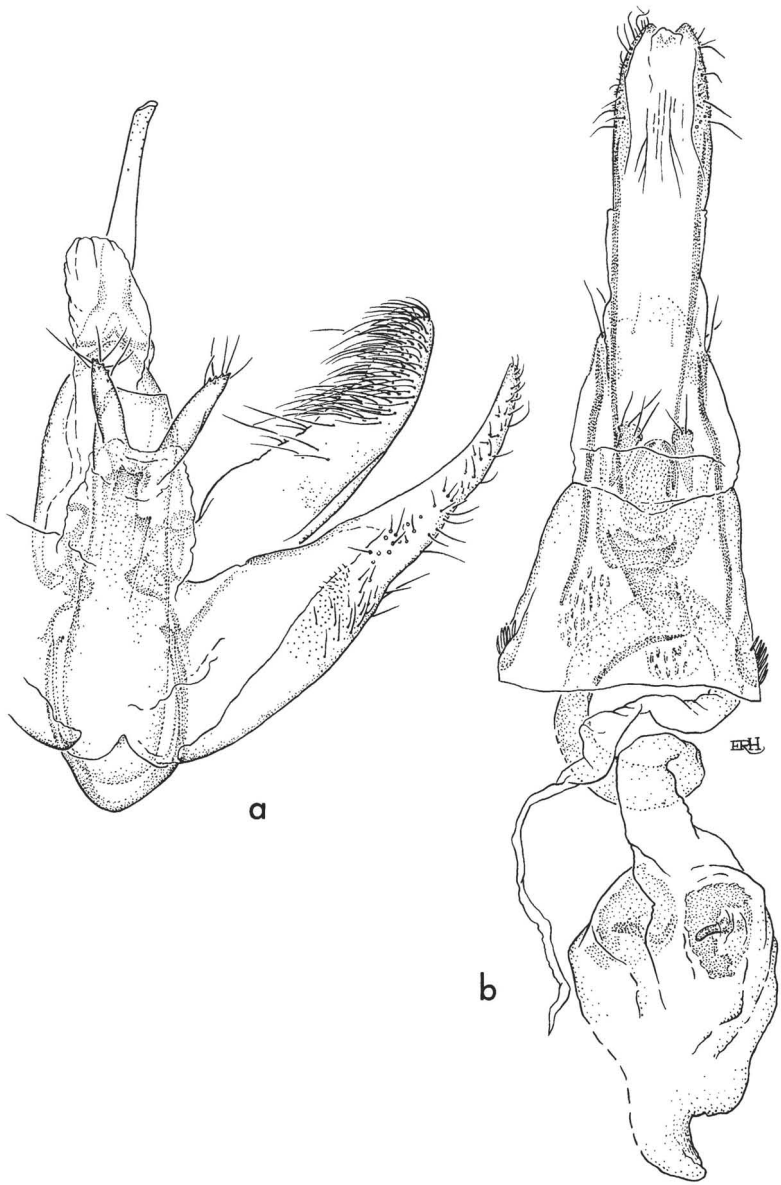

FIG. 2. *Mompha nancyae* Clarke, new species. a, Male genitalia (left harpe not shown); b, ventral view of female genitalia.

Types. Described from the male holotype, six male and two female paratypes all from the type locality, on 21 July 1987 and from 9 to 23 August 1988, collected by my wife and me. One paratype will be placed in the Canadian National Collection, Ottawa, one in the Provincial Museum, Victoria, British Columbia and the remainder in the U.S. National Museum.

The holotype is in the United States National Museum of Natural History.

Type locality: Canada, British Columbia, Queen Charlotte Islands, Sandspit.

Distribution: Known only from the Queen Charlotte Islands.

Food plant: Unknown.

Etymology. I am very pleased to name this species for my wife, Nancy, who has accompanied me and has endured many cold and wet days and nights in the Queen Charlottes; who has not only helped me collecting but has assumed many tasks incident to our expeditions.

DISCUSSION

This species is closely related to the European *Mompha terminella* (Westwood) but differs from it in several respects. *Mompha terminella* is native to Europe, but has been introduced to North America (see Riedl 1969: 674 for illustrations). First, *nancyae* is larger, measuring 10 to 11 mm in alar expanse, whereas European specimens of *terminella* measure 9–10 mm. We have a substantial series of *terminella* in the USNM from Illinois, Michigan, Iowa, Ohio, and Pennsylvania, and these measure 7–9 mm, although one U.S. specimen exists that measures 10 mm, an exception. In addition, the antenna of *terminella* displays a conspicuous terminal white band that is absent in *nancyae*, although the two female paratypes of *nancyae* show an indication of this band. On the middle of the forewing costa of *nancyae* there is a conspicuous white spot, totally absent in our large series of both the European and U.S. specimens of *terminella*.

The male genitalia are similar, but those of *nancyae* are proportionately larger than those of *terminella*. The prolonged sacculus of *nancyae* reaches, or slightly exceeds, the dorsal part of the harpe, but in *terminella* the sacculus is considerably shorter. In the female genitalia of *nancyae*, the club-shaped sclerite on each side of the lamella postvaginalis is absent in *terminella*.

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