A new species of genus *Hypsopygia* Hübner (Lepidoptera, Pyralidae: Pyralinae) from the South of the Russian Far East

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Received: 2 March 2018 │ Accepted by V. Pešić: 28 March 2018 │ Published online: 2 April 2018.

The genus *Hypsopygia* Hübner (1825) was isolated in the early 19th century and currently contains 7 species. The greatest number of species is found in Southeast Asia and India (Hampson 1898, Inoue 1982, Kirpichnikova 2009, Lee, Bae 2007, Sinev 2008). Only one species, clover hayworm moth (*H. costalis*) is found in the Holarctic realm (Europe, northern Africa, Asia, North America, and Australia); in mild climate it can also dwell in indoor areas being an injurious pest of dry plant raw materials, hay, dried herbs, etc. (Zagulyaev 1965). Three species were known in the Russian Far East (Kirpichnikova 2009). A new species (*Hypsopygia insolitus*, sp. n.) was discovered by taxonomic analysis of the materials collected by the authors in 1975-2005 in the Ussuri and Khasan districts of the Primorsky krai.

Family Pyralidae Latreille, 1802
Subfamily Pyralinae Latreille, 1809

Genus *Hypsopygia* Hübner, (1825)
Type species: *Hypsopygia costalis* Fabricius, 1775

*Hypsopygia insolitus* Kirpichnikova, sp. n.

Material examined:
Holotype: female, Primorsky krai, Gornotayazhnaya station, 13.VII.2000 (Kirpichnikova leg.). The Holotype is deposited in Federal Scientific Center of the East Asia Terrestrial Biodiversity, Far Eastern Branch of the Russian Academy of Sciences, (Vladivostok, Russia).

Description of the imago (Fig. 1a). Wingspan 25 mm. Female antennae simple; basal segment thickened and powdered with pink scales; funicular filiform. Short labial palpi oriented upwards; their middle segment powdered with long sordid creamy white scales and oriented frontwards. Maxillary palpi small, thin, sordid creamy white. Proboscis well-developed. Ocelli and chaemosemata absent. Frons, vertex and occiput covered with sordid creamy white scales.
Forewings patternless, violet-brown, with blackish scales that are thicker along the costal and posterior margins and in the outside field. Fringe concolorous with wing but with two dark, brown-blackish lines. Hindwings unicolorous brown. Fringe with two dark lines.

Forewings with veins R₁ and R₂ arising from the median cell; veins R₃, R₄ and R₅ sharing a common stalk; veins M₂ and M₃ separating from the median cell at the same point. Hindwings with veins M₂ and M₃ also separating from the median cell at the same point.

Female genitalia (Fig. 1b): Apophyses thin and long, almost the same length; ostium membranous; ductus long and narrow, with the caudal portion surrounded by a weakly sclerotized ring and the basal portion having a weakly sclerotized hardly visible band not connected with signa; bursa copulatrix oblong, almost pear-shaped, with a small funnel-shaped signa.

Male: unknown.

Figure 1. a – Female holotype Hypsopygia insolitus Kirpichnikova, sp. n., b – genitalia of holotype, c - female genitalia of Hypsopygia kawabei Yamanaka.

**Distribution:** Russia: Primorsky Krai.

The newly discovered species is close to Hypsopygia kawabei Yamanaka found in Japan (Yamanaka 1965). However, the size, wing colour pattern and the morphology of female genitalia (Fig. 1c) provide a distinct difference between these two species. The wingspan of *H. kawabei* is 16-21 mm; the forewings are yellowish ash-gray mixed with fuscous scales; the costal margin has a narrow fringe consisting of dark and yellow dots, with costal dots becoming blurred at the apex; the postmedial line is blurred and almost straight between the costal and the posterior margin; the fringe is of the same color as the ground color of the wing. The hindwings are ash-gray, without dots on the forewings, with fuscous scales like on the forewings; the postmedial line almost disappears; the fringe is similar to that on the forewings. The ductus of female genitalia of *H. kawabei* has a strongly sclerotized band connected to the basal segment of signa; signa is large, having three protruding thorns, one being longer than the other two thorns.
**Keys for identification of the Far Eastern species of pyralid moths belonging to the genus *Hypsopygia***

1. Hindwings with a broad golden yellow streak tapering towards the posterior margin. Forewings and hindwings purple-red, with some blackish scales........................................... *H. aurotaenialis* Chr.
   - The hindwings are different.............................................................................................. 2

2. Hindwings unicolorous brown without streaks. Forewings patternless, unicolorous, violet-brown, with some black scales ................................................................. *H. insolitus* Kirp., sp. n
   - Hindwings having 2 narrow yellow streaks or lines........................................................ 3

3. Forewings violet-brown, with 5-7 bright yellow dots along the costal margin and 2 transverse yellow lines; the external one at the costal margin forms a bright yellow triangular spot. Hindwings pinkish-purple, with 2 yellow transverse lines ........................................... *H. regina* Btl.
   - Forewings brown, with some violet scales, 2-3 yellow dots along the costal margin and 2 transverse yellow-rusty orange streaks becoming yellow-orange spots at the costal margin. Hindwings of the same color as forewings, with 2 yellow-whitish transverse lines............................................. *H. costalis* F.

**Acknowledgment**

The authors are grateful to Dr. Hiroshi Yamanaka (Japan) who kindly provided the photographs of genitalia and description of the species found in Japan (*Hypsopygia kawabei*).

**References**


