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PYRALIDS OF THE *MESENERIALIS* SPECIES GROUP OF THE GENUS *ENDOTRICHA* ZELLER (LEPIDOPTERA, PYRALIDAE: PYRALINAE) FROM PRIMORSKII KRAI

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A review of the *mesenterialis* species group of the genus *Endotricha* from Primorskii krai is given. *E. valentis* sp. n. and *E. admirabilis* sp. n. are described.

KEY WORDS: Pyralidae, Russian Far East, taxonomy, new species.

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Дан обзор видов группы *mesenterialis* рода *Endotricha* Приморского края. Описаны новые для науки *E. valentis* sp. n. и *E. admirabilis* sp. n.

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INTRODUCTION

There are more than 90 species of the genus *Endotricha* Zeller, 1847 in the Old World (Whalley, 1963; Inoue, 1982; Yoshiyasu, 1987). The majority of them are recorded from Australian and Oriental regions, which seems to be the centre of origin of the genus (Whalley, 1963). Until now five species of the genus *Endotricha*

were found in the Russian Far East: *E. portialis* Walker, 1859, *E. costaemaculalis* Christof, 1881, *E. flavofascialis* (Bremer, 1864), *E. kuznetzovi* Whalley, 1963 and *E. olivacealis* Bremer (Kirpichnikova, 1995; 1999). Among them only the *E. olivacealis* belongs to *mesenterialis* species group (Whalley, 1963). This group consists of six species including *E. mesenterialis* (Walker, 1859) and characterised by the enlarged basal segment of the antenna (scapus) and the enlarged basal process on the male valve. The species of *mesenterialis* group occur in Oriental and Australian regions (mainly, in islands), except *E. olivacealis* which occurs in the East Palearctic region also.

Additional material of the *mesenterialis* species group have been collected in the south part of Primorskii krai in 1999-2000. I examined the photos of the types of all six known species of the *mesenterialis* group and found that my specimens belong to the three species. In this paper one species is redescribed and two new species are described from south of Primorskii krai.

Holotypes of new species are deposited in the Institute Biology and Soil Science, Far East Branch of the Russian Academy of Sciences (Vladivostok), the paratypes – in author's collection (the Mountain-Taiga Station, Gornotayozhnoe, Primorskii krai, Russia).

***Endotricha olivacealis* (Bremer, 1864)**

Figs 1-3

Rhodaria olivacealis Bremer, 1864: 66.

Endotricha olivacealis: Whalley, 1963: 422; Inoue, 1982, I: 248, II: 386; Kirpichnikova, 1995: 212, 1999: 443.

REDESCRIPTION. Wingspan 18-23 mm. Male antenna ciliated basal segment (scapus) enlarged and shiny golden; female antenna simple and filiform. Labial palpi short, brown, terminal segment yellow and forward, maxillary palpi dark and small. Proboscis, ocelli and chetosema present. Frons dirty yellow or tan, vertex, back of the head tan, with pink-violet scales. Ground colour of forewings yellow-brown, with bushy violet scales in the basal and external area. One dark pink elongate transverse spot on discocellula. Submarginal band blackish, double and slightly toothed. Fringe lemon-yellow, with pink violet black spots on the apex and between the veins M_1-M_3 , sometimes with pink-violet proximal narrow line in the anal part. Ground colour of hindwings pink violet; costal area brownish-yellow, middle area with double black lines. Fringe lemon yellow, with pink violet proximal line between the veins $R-Cu_1$ and black spots in the anal part. Tegulae black yellow, the bunch on both sides coloured as tegulae. Forewing with 11 veins. Veins $R_3+R_4+R_5$ and M_2+M_3 stalked. Hindwing with 7 veins. Veins M_2+M_3 stalked.

Male genitalia. Uncus shorts broad, apical magrin flat and slightly expanded, with bushy dorsal setae. Valva moderate, its termen rounded, the basal process of sacculus short and directed. Juxta nearly rounded. Vinculum small, slightly narrowed. Aedeagus moderate, with small cornuti.

Female genitalia. Ovipositor long. Apophysis posterioris slenderer and almost 2 times longer than apophysis anterioris. Ductus bursa short and thin. Corpus bursa rather elongate with small rounded signum.

MATERIAL. Primorskii krai: Rjazanovka River, 10 km from Andreevka, 28.VII 2002, 1♂ (Kirpichnikova); Kedrovskii zverosovkhoz, 8-16.VII 1976, 5♂, 3♀ (Omelko); 18 km SE Ussuriysk, Gornotayozhnoe, 25.VII 1975, 1♂ (Kirpichnikova), 17.VII 1993, 1♀ (Kirpichnikova), 20-29.VI 2000, 3♂, 15♀ (Kirpichnikova), 3-12.VII 2000, 1♂, 6♀ (Kirpichnikova), 3.VII 2001, 1□ (Kirpichnikova), 2.VII 2000, 2♀ (Omelko); Tigrovoi, 16-25.VI 1975, 2♂, 1♀ (Kirpichnikova); Yakovlevka, 14.VII 1926, 1♂, 1♀ (Djakonov, Phillipjev); Pshenitsyno, 18-27.VII 1974, 1♂, 2♀ (Mescherjakov).

DESTRIBUTION. Russia: Primorskii krai, South-East Siberia. – Japan (from Hokkaido to Ryukyu), Korea, China (including Taiwan), India, Malaysia, West Java.

***Endotricha valentis* Kirpichnikova, sp. n.**

Figs 4-6

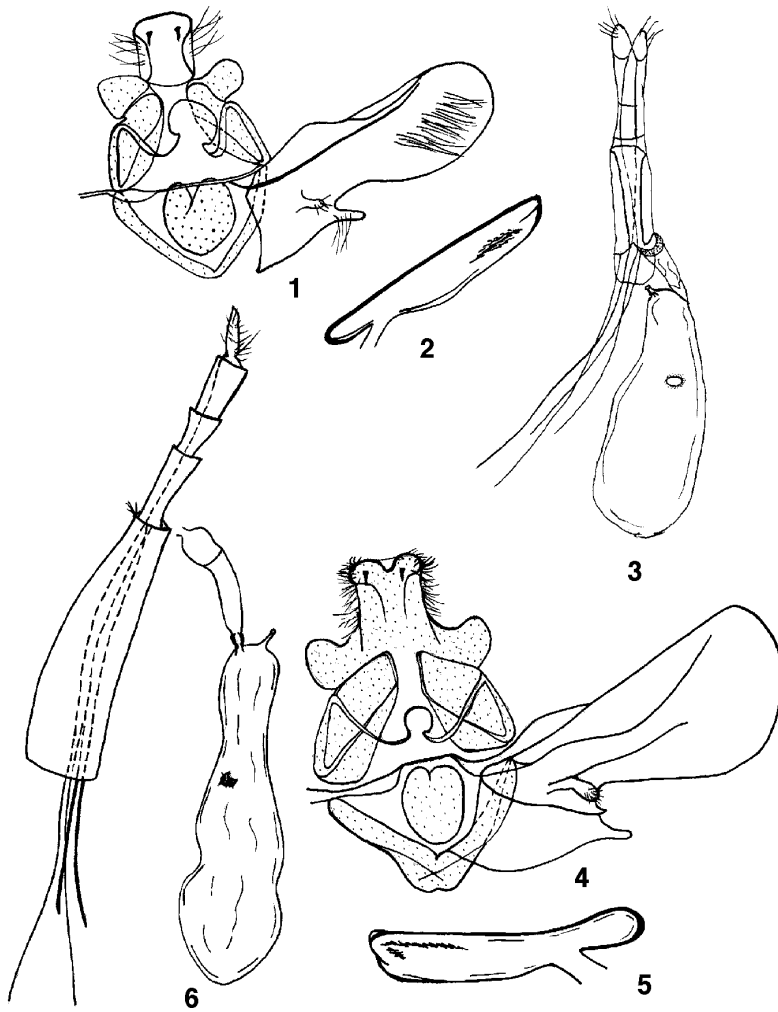
MATERIAL. Holotype – ♂, Russia: Primorskii krai, 18 km SE Ussuriysk, Gornotayozhnoe, 21.VI 2000 (Kirpichnikova). Paratypes – the same locality as holotype, 2♂, 1-2.VIII 1999; 18♂, 3♀, 20-29.VI, 3-13.VII 2000 (Kirpichnikova).

DESCRIPTION. Wingspan 19-22 mm. Male antenna ciliated, basal segment enlarged and shiny golden; female antenna simple and filiform. Labial palpi brown, short, terminal segment small, yellow, maxillary palpi small. Proboscis covered with brown scales near basal part. Ocelli and chetosema present. Frons, vertex, back of the head tan. Tegulae long, almost ½ length of abdomen, chocolate brown, the bunch on the both sides yellow. Ground colour of forewings pink violet, with dark pink violet basal area. Middle area with brown yellow broad band; costal area brown yellow with small black and yellow points. One black spot on discocellula. Antemedian line pink violet narrow, outwardly curved. Submarginal band double black, slightly dentate, parallel to external border. Fringe lemon yellow, with pink violet black points on the apex, between the veins M_1 - M_3 and on the under corner. Ground colour of hindwings pink violet, suffused with black scales; costal area and middle band yellow. Fringe lemon-yellow, with pink violet proximal line or points.

Forewing with 11 veins. Veins $R_3+R_4+R_5$ and M_2+M_3 stalked. Hindwing with 7 veins. Veins M_2+M_3 stalked.

Male genitalia. Uncus moderate, parallel-sides, its apical margin slightly expanded, with bushy lateral-dorsal setae. Valva moderate, termen rounded, the basal process of sacculus short, termen rounded. Juxta nearly rounded, its terminal margin bisected about ½ of length. Vinculum short, rounded. Aedeagus thin, with small cornutus.

Female genitalia. Ovipositor long. Apophysis posterioris slenderer almost 2 times longer than apophysis anterioris. Ductus bursa short, thin, its proximal part slightly sclerotized. Corpus bursa rather elongate, big, signum small, rounded and covered numerous short teeth.



Figs 1-6. Genitalia of *Endotricha*. 1-3) *E. olivacealis*; 4-6) *E. valentis* sp. n.: 1, 4) male genitalia; 2, 5) aedeagus; 3, 6) female genitalia.

DIAGNOSIS. The new species is similar with *E. olivacealis* by the structure of the genitalia of both sexes, but coloration of the wings and the tegulae are different from those of *E. olivacealis* in following characters: ground colour of forewings dark pink violet, with wide middle brown yellow band, ground colour and marks of hindwings as forewings, tegulae chocolate-brown, bunch on the both sides yellow (in *E. olivacealis* ground colour of forewings uniformly brown yellow, ground colour hindwings darker, tegulae brown yellow, bunch on the both sides brown yellow).

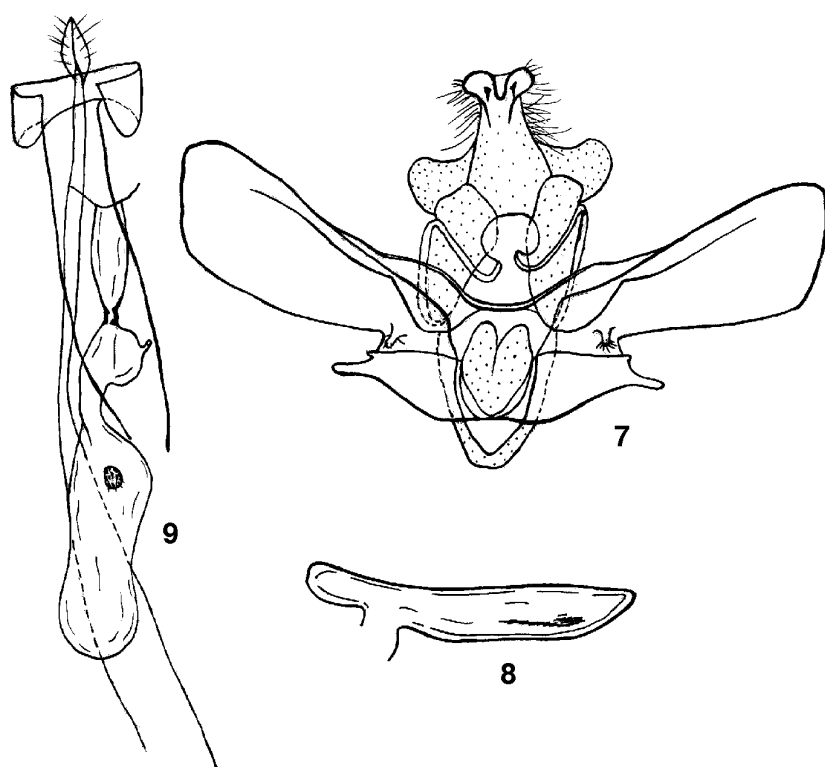


Fig. 7-9. *Endotricha admirabilis* sp. n.: 7) male genitalia; 8) aedeagus; 9) female genitalia.

***Endotricha admirabilis* Kirpichnikova, sp. n.**

Figs 7-9

MATERIAL. Holotype – ♂, Russia: Primorskii krai, 18 km SE Ussuriysk, Gornotayozhnoe, 26.VI 2000 (Kirpichnikova). Paratypes – the same locality as holotype, 2♂, 9♀, 12-29.VI 2000; 2♂, 13.VII 2000; 1♂, 1♀, 8-13.VII 2001 (Kirpichnikova).

DESCRIPTION. Wingspan 17-18 mm. Male antenna ciliated, basal segment enlarged and shiny golden; female antenna simple and filiform. Labial palpi short brown, upwards, terminal segment yellow. Maxillary palpi small. Proboscis covered with brown scales near basal part. Ocelli and chetosema present. Frons, vertex and back of the head tan. Frons on the both sides with narrow yellow bands. Tegulae long, almost ½ length of abdomen, dark pink violet, the bunch on the both sides yellow. Ground colour of forewings pink violet, with dark pink violet basal area. Middle area and costa suffused brown yellow scales. One black spot on discocellula.

Small black and yellow spots on costal area. Submarginal band double black, slightly dentate. Fringe lemon yellow, with pink violet black points on the apex, between the veins M_1-M_3 and on the under corner. Ground colour of hindwings violet dark grey, suffused bushy dark grey scales; postmedian band double black. Fringe yellow with pink violet black proximal line between apex and the vein Cu_2 , this line interrupted on small points on the under corner. Forewing with 11 viens. Viens $R_3+R_4+R_5$ and M_2+M_3 stalked. Hindwing with 7 viens. Viens M_2+M_3 stalked.

Male genitalia. Uncus short, constricted, apical margin slightly expanded, with bushy lateral-dorsal setae. Valva narrow, termen oblique, the basal process of sacculus short, termen rounded. Juxta nearly rounded, its terminal margin bisected about $\frac{1}{2}$ of length. Vinculum short, rounded. Aedeagus moderate, with small cornutus.

Female genitalia. Ovipositor moderate. Apophysis posterioris slender, almost 2 times longer than apophysis anterioris; ductus bursa short, its proximal part slightly sclerotized. Corpus bursa elongate, signum small, rounded and covered numerous short teeth.

DIAGNOSIS. *E. admirabilis* sp. n. closely related to *E. valentis* sp. n. in the structure of the genitalia of both sexes. However, the size, external characters and the structure of the genitalia separate these species. *E. admirabilis* sp. n. has the smaller size, the form of the basal segment (scapus) of antenna, hindwings slightly darker, tegulae slightly lighter, the ground colour of forewings not so wide brown yellow band in the middle area. The male genitalia of *E. admirabilis* sp. n. has constricted uncus, narrow valva, its termen oblique. The female genitalia of *E. admirabilis* sp. n. has shorter ovipositor.

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