The cochylid fauna of the Southern Ural Mountains, with description of *Cochylimorpha ignicolorana* Junnilainen & K. Nupponen sp. n. (Lepidoptera: Tortricidae: Cochylini)

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A list of 78 species of the tortricoid tribe Cochylini from the southern Ural Mountains is presented. The material was collected during 1996–2000 on nine different Finnish-Russian expeditions. *Cochylimorpha ignicolorana* Junnilainen & K. Nupponen sp. n. is described. The new taxon occurs on dry steppe slopes in the headland region of the southern Urals, and it is rather easy to separate from closely related taxa both externally and by the male genitalia. In addition, 7 species are reported as new for Europe and 4 species as new for Russia. The known distribution range of each species is given as well as further notes on some poorly known taxa.

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1. Introduction

There is a long tradition of lepidopterological studies in the southern Ural region, the southeasternmost corner of Europe. Prof. Eduard Eversmann (1844) made thorough faunistic investigations in the area in the 19th century and described numerous new species, among them several cochylids. The cochylid fauna is very rich in the headlands of the southern Ural Mountains and the adjacent lowland steppes, and many further cochylids were described from there and adjacent regions at the end of the 19th century by several authors (Christoph, Kennel, Möschler, Staudinger). However, since the beginning of the 20th century there has not been any serious collecting activities in the region for almost one hundred years and many of the previously discovered species have been considered great rarities to date.

The recently changed political situation in Russia has made visits to the southern Urals possible again. The present article is based on our own studies of the cochylid fauna in that area.

2. The investigated area, material and methods

The investigated area is situated in Cheliabinsk and Orenburg oblasts and Bashkiria in the southern Ural Moun-

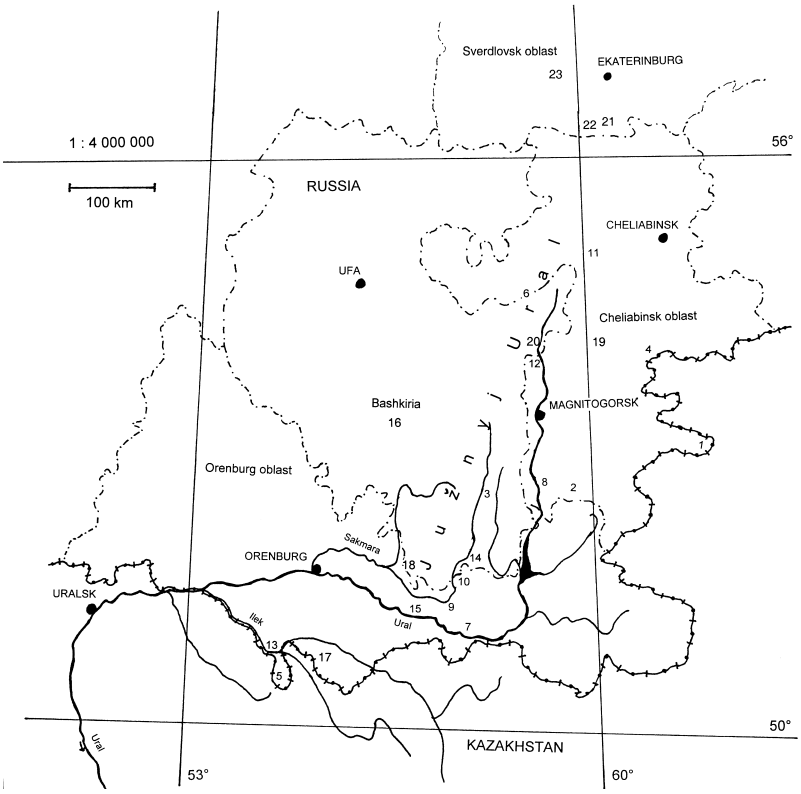

Fig. 1. Map of southern Ural region with collecting localities. — 1: Ajat river. — 2: Arkaim. — 3: Bajmak. — 4: Berlin. — 5: Chalk Hills. — 6: Iremel. — 7: Kidriasovo. — 8: Kizilskoye. — 9: Kuvandyk. — 10: Kuvandyk 2. — 11: Miass. — 12: Moskovo. — 13: Burannoe, Novoiletzk. — 14: Sakmara river. — 15: Verbljushka. — 16: Zirgan. — 17: Shkunovka. — 18: Bishtiryak. — 19: Sanarskii Bor. — 20: Uchaly. — 21: Ekaterinburg biol.st. — 22: Kosmokovo. — 23: Tavatui.

tains, between 50°40´N–56°30´N and 54°26´E–62°06´E. The majority of collecting places was located on the eastern-southern foothill region and at low altitude. The habitats were mainly different kinds of steppes, but also taiga forests, alpine meadows and mountain tundra. The lowest locality was in the valley of the river Ilek, Novoiletzk (100 m a.s.l.) and the highest one the Iremel Mountain (1580 m a.s.l.). Most localities were lying at an elevation of 200–450 m.

The present article is based on the material collected during 1996–2000 on 9 different expeditions. The dates, areas visited and collectors on each of the trips are as follows:

— 1: 13.–29.VI.1996; Cheliabinsk oblast, Bashkiria; K. Nupponen, J.-P. Kaitila, J. Junnilainen, M. Ahola.
— 2: 26.VI.–16.VII.1997; Cheliabinsk oblast; K. Nupponen, J.-P. Kaitila, J. Junnilainen, M. Ahola.
— 3: 25.V.–22.VI.1998; Orenburg oblast, Cheliabinsk oblast, Bashkiria; K. Nupponen, T. Nupponen, J. Junnilainen.
— 4: 11.–31.VII.1998; Orenburg oblast, Cheliabinsk oblast, Bashkiria; K. Nupponen.
— 5: 11.–20.V.1999; Orenburg oblast, Cheliabinsk oblast; K. Nupponen.
— 6: 13.–30.VI.1999; Orenburg oblast, Cheliabinsk oblast, Bashkiria; K. Nupponen, T. Nupponen.
— 7: 19.VI.2000; Sverdlovsk oblast (near Ekaterinburg); K. Nupponen, T. Nupponen.
— 8: 25.VII.–04.VIII.2000; Orenburg oblast, Cheliabinsk oblast, Bashkiria; T. Nupponen.
— 9: 26.VIII.–06.IX.2000; Orenburg oblast, Cheliabinsk oblast; K. Nupponen.

The material was collected both by artificial light at night and by sweeping and netting during daytime. Altogether over 2000 specimens of cochylids were collected, and a large amount of additional specimens were observed and determined in the field. The majority of the material was examined by Kari Nupponen. The following colleagues also determined parts of the material and/or confirmed the determination of some critical taxa: J. Itämies, J. Junnilainen, J.-P. Kaitila, M. Mutanen and T. Nupponen. The collected material is mostly deposited in the private collections of the observers.

The collecting localities are mentioned below. Brief variants of locality names are given in uppercase letters before each locality and used later in the species list. The italicized dates indicate daytime collecting only in the locality. The number given to each of the localities is connected with that on the map (Fig. 1).

— 1: AJAT RIVER: Cheliabinsk oblast, 53°02´N 62°06´E, 200 m, Ajat river near Nikolaevka village. A rocky hill in a riverbank, surrounded by a moist place on a riverside

and a large *Artemisia* steppe. 03.–05.VII.1997, 24.25.–VII.1998, 04.05.IX.2000.

— 2: ARKAIM: Cheliabinsk oblast, 52°39´N 59°34´E, 350 m, Arkaim reserve near Amurskii village. A large reserve with different kinds of steppe habitats. 14.–19.VI.1996, 06.–10.VII.1997, 22.–23.VII.1998, 17.V.1999, 15.–16.VI.1999.

— 3: BAJMAK: Bashkiria, 52°40´N 58°34´E, 450 m, Bajmak 15 km E. Open foothill steppe locality. 17.–18.VI.1998.

— 4: BERLIN: Cheliabinsk oblast, 53°59´N 61°12´E, 250 m, Troizkii reserve near Berlin village. A small, mainly grassland steppe surrounded by a bog and young forest. 30.VI.–02.VII.1997.

— 18: BISHTIRYAK: Bashkiria, 51°48´N 57°05´E, 500 m, Kasmarka river near Bishtiryak village. Steep rocky slopes, dry meadows and deciduous forests. 13.–14.VII.1998.

— 13: BURANNOE: Orenburg oblast, 50°58´N 54°25´E, 100 m, near Burannoe village, Ilek river valley. Lowland *Artemisia* steppes, wet meadows and wetlands. 20.–21.VI.1999, 30.VII.2000, 29.VIII.2000.

— 5: CHALK HILLS: Orenburg oblast, 50°40–45´N 54°26–28´E, 170–230 m, Pokrovka village 20 km S, Schibendy valley. A dry, open, lowland *Artemisia* steppe with wet meadows along the small riverside. Whitish limestone rocks surround the flat valley, the vegetation being luxurious in northern slopes and very sparse in southern slopes. 03.–07.VI.1998, 17.–18.VII.1998, 21.–24.VI.1999, 31.VII.–01.VIII.2000, 30.–31.VIII.2000.

— EKATERINBURG: Sverdlovsk oblast, Ekaterinburg city. 27.VII.1998.

— 21: EKATERINBURG BIOL.ST.: Sverdlovsk oblast, Ekaterinburg 50 km S, near Dvurechensk village, biological station of Ural's university. Mixed forests, bogs and meadows. 20.–22.VI.1998.

— 6: IREMEL: Cheliabinsk oblast, 54°31–35´N 58°49–54´E, 900–1580 m, Iremel Mountain reserve. Taiga forest between 800–1300 m, alpine meadows at 1300–1400 m and mountain tundra at the highest elevation over 1400 m. 23.–27.VI.1996, 11.–14.VII.1997, 25.–28.VI.1999.

— 7: KIDRIASOVO: Orenburg oblast, 51°13´N 57°37´E, 350 m, Mednogorsk 20 km S, near Kidriasovo village. Open, partly gravelly foothill steppe with plenty of *Caragana* bushes in lower parts of the slopes and wet meadows between the hills. 28.–30.V.1998, 16.VI.1999.

— 8: KIZILSKOYE: Cheliabinsk oblast, 52°39´N 59°00´E, 300 m, Kizilskoye 15 km S, near Ural river. Dry, open *Artemisia – Stipa* steppe with rocky hills. 27.–28.V.1998, 18.V.1999, 26.VII.2000, 03.IX.2000.

— 22: KOSMOKOVO: Sverdlovsk oblast, Ekaterinburg 50 km S, Kosmokovo village. Dry meadows, conifer forests, waterside meadows and cultural habitats. 19.VI.2000.

— 9: KUVANDYK: Orenburg oblast, 51°26´N 57°26´E, 250 m, Kuvandyk 12 km SE. A foothill region with different kinds of steppes and old *Quercus – Populus – Betula* forests on the top of the hills.13.–16.VI.1998, 19.–21.VII.1998, 15.V.1998, 02.VIII.2000, 02.IX.2000.

— 10: KUVANDYK 2: Orenburg oblast, 51°37´N 57°34´E, 300 m, Kuvandyk 30 km NE. Rocky hills and meadows, at the slopes some blackish coloured, hot, gravelly spots with sparse vegetation. 16.–17.VI.1998, 03.VIII.2000.

— 11: MIASS: Cheliabinsk oblast, 55°01´N 60°06´E, 350 m, Miass, Ilmen State reserve. Forest steppes and old conifer forests. The records from Miasovo lake belonging to the same reserve (appr. 10 km NE) are included in the list of Miass. 13.VI.1996, 28.–29.VI.1996, 26.–29.VI.1997, 15.–16.VII.1997, 25.–26.V.1998, 19.–20.VI.1998, 11.V.1999, 18.–20.V.1999, 29.–30.VI.1999, 26.VIII.2000, 06.IX.2000; In addition, light trap collecting during 15.VI.–24.VIII.1999 and 25.VII.–05.IX.2000.

— 12: MOSKOVO: Cheliabinsk oblast, 53°57´N 59°03´E, 650 m, near Moskovo village. Open, rocky foothill region with different kinds of steppes and wet meadows along the riverside. 22.–23.VI.1996, 10.–11.VII.1997, 26.V.1998, 18.VI.1998, 11.–13.VII.1998, 04.VIII.2000, 26.VIII.2000.

— 13: NOVOILETZK: Orenburg oblast, 50°59´N 54°17–22´E, 100 m, Novoiletzk 8 km E, Ilek river valley. Sand dune region with few *Artemisia* steppe spots, wet meadows and wetlands. 08.–09.VI.1998.

— 14: SAKMARA RIVER: Bashkiria, 51°54´N 57°43´E, 450 m, Sakmara river near Jantyshevo village. Forest steppes, meadows and mixed forests. 20.–21.VI.1996.

— 19: SANARSKII BOR: Cheliabinsk oblast, 54°06´N 60°30´E, 400 m, Sanarskii bor near Sanarka village. Old conifer forest. 26.–27.VII.1998.

— 17: SHKUNOVKA: Orenburg oblast, 50°48´N 55°18´E, 200 m, Malaja Hobda river near Shkunovka village. Large lowland steppes, rocky hills and wet meadows along the riverside. 01.–02.IX.2000.

— 23: TAVATUI: Sverdlovsk oblast, Ekaterinburg 60 km W, near Tavatui village. Mixed forests and meadows. 28.–30.VII.1998.

— 20: UCHALY: Bashkiria, 54°33´N 59°41´E, 500 m, Uchaly village 30 km NE. Foothills with different kinds of meadows. 25.VII.2000.

— 15: VERBLJUSHKA: Orenburg oblast, 51°23´N 56°49´E, 130–340 m, Donskoje village 6 km W, Mount Verbljushka. A 200 m high hill in the Ural River bank at the southern corner of the foothill region. The southern slope is extremely hot with more or less sparse vegetation. *Artemisia* steppe is present in the western slope and quite a luxuriant, rich flora in the northern slope. There are wet meadows and deciduous forest

between the hill and the river. 30.V.–02.VI.1998, 10.–12.VI.1998, 14.–16.VII.1998, 12.–14.V.1999, 17.–19.VI.1999, 27.–29.VII.2000, 27.–28.VIII.2000.

— 16: ZIRGAN: Bashkiria, 53°12´N 56°00´E, 400 m, near Zirgan village. Forest steppes. 24.VI.1999.

3. List of cochylid species

The nomenclature follows that of Razowski (1996). The known distribution for each species is given, as well as further notes on some poorly known species. The data on the distribution range of the species originate from Razowski (1970, 1996) and Kuznetsov *et. al*. (1998). The term S Russia is used for the lower Volga region, the southernmost part of European Russia.

Phtheochroa inopiana (Haworth, 1811)

Ajat river 04.VII.1997, 04.IX.2000; Berlin 01.VII.1997; Chalk Hills 23.VI.1999; Kuvandyk 13.VI.1998; Verbljushka 14.VII.1998. Common.

Distribution. Holarctic.

Phtheochroa pulvillana (Herrich-Schäffer, 1851)

Chalk Hills 04.–07.VI.1998; Kuvandyk 13.–15.VI.1998; Verbljushka 30.V.–02.VI.1998, 10.–12.VI.1998, 17.VI.1999. Rather common.

Distribution. W Palaearctic.

Phtheochroa decipiens (Walsingham, 1900)

Verbljushka 30.V.–02.VI.1998 1 ♀.

Distribution. Widely distributed in the south, from Asia Minor to C Asia.

Remark. New to Europe and Russia.

Phtheochroa sodaliana (Haworth, 1811)

Chalk Hills 03.–07.VI.1998; Kuvandyk 13.–15.VI.1998, 19.VII.1998. A total of 3 exx.

Distribution. Europe, Asia Minor.

Phtheochroa kenneli (Obraztsov, 1944)

Chalk Hills 30.VIII.2000 1 ♂, 31.VIII.2000 1 ♂, 1 ♀.

Distribution. S Russia, S Ukraine, N Caucasus.

Phtheochroa krulikovskii (Obraztsov, 1944)

Chalk Hills 30.VIII.2000 7 ♂♂, 5 ♀♀, 31.VIII.2000 6 ♂♂, 9 ♀♀.

Distribution. S Russia, Kazakhstan, C Asia, Mongolia.

Remark. The host plant of the taxon, *Nanophyton erinaceum* (Pallas) (cf. Razowski 1970), occurs in the locality.

Phtheochroa vulneratana (Zetterstedt, 1839)

Iremel 13.VII.1997 2 ♀♀.

Distribution. Holarctic, boreomontane.

Remark. In S Ural the taxon occurs only in the highest mountains at an elevation of over 1300 m.

Cochylimorpha hilarana (Herrich-Schäffer, 1851)

Ajat river 03.–04.VII.1997, 24.–25.VII.1998; Arkaim 22.VII.1998; Chalk Hills 30.VIII.2000; Kizilskoye 26.VII.2000. A total of about 20 exx.

Distribution. Europe, Asia Minor.

Cochylimorpha halophilana (Christoph, 1882)

Ajat river 25.VII.1998 1 ♂; Arkaim 23.VII.1998 3 ♀♀.

Distribution. S Russia, S Ural, Transcaucasia, Iran, Afghanistan.

Cochylimorpha asiana (Kennel, 1899)

Arkaim 14.VI.1996; Chalk Hills 03.–07.VI.1998; Kidriasovo 28.–29.V.1998; Kuvandyk 15.VI.1998; Verbljushka 30.V.–02.VI.1998, 10.–12.VI.1998. Locally abundant.

Distribution. W Palaearctic; from NE Africa and SE Europe to C Asia, Mongolia and Tuva.

Fig. 2. *Cochylimorpha asiana* (Kennel), pale form with distinct pattern on the forewing.

Remarks. *C. asiana* is externally a very variable species. However, we recorded two different forms of the species in the same locality (Verbljushka 30.V.–02.VI.1998), one paler form with dark, distinct pattern on the forewings (Fig. 2), and another with narrower, apically more elongate forewings having darker brown ground colour and more indistinct pattern (Fig. 3). *C. asiana* might contain two different species, but the genitalia of the two forms are very close to each other. The existing material should be examined more carefully. The revision of the *asiana-cultana* complex may solve the problem (*see also* Remark of *C. cultana* below).

Cochylimorpha cultana (Lederer, 1855)

Chalk Hills 03.VI.1998 1 ♀, 05.VI.1998 1 ♀, 03.–07.VI.1998 1 ♀.

Distribution. W Palaearctic; from NW Africa and SW Europe to Altai, Tuva and China.

Remark. Both *C. asiana* and *C. cultana* are very variable species, and this group might be a species-complex.

Cochylimorpha elongana (Fischer v. Röslerstamm, 1839)

Arkaim 14.–19.VI.1996 2 exx.; Kizilskoye 27.V.1998 1 ♂, 1 ♀.

Distribution. SW and C Europe, Asia Minor, S Ural.

Cochylimorpha meridiana (Staudinger, 1859)

Ajat river 04.VII.1997; Arkaim 14.VI.1996, 23.VII.1998; Bishtiryak 13.VII.1998; Burannoe 20.VI.1999, 30.VII.2000; Chalk Hills 18.VII.1998, 21.–23.VI.1999, 31.VII.2000, 30.VIII.2000; Kuvandyk 19.–21.VII.1998; Moskovo 10.VII.1997, 11.–12.VII.1998; Verbljushka 29.VII.2000. Common.

Distribution. W Palaearctic; from SW Europe to C Asia.

Cochylimorpha nodulana (Möschler, 1862)

Ajat river 03.–04.VII.1997, 24.VII.1998; Arkaim 08.–09.VII.1997, 23.VII.1998; Burannoe 20.VI.1999, 30.VII.2000; Chalk Hills 30.–31.VIII.2000; Shkunovka 01.IX.2000; Verbljushka 29.VII.2000. A total of 16 ♂♂, 2 ♀♀. Widely distributed but very rare.

Distribution. S Russia, S Ural, Transcaucasia, C Asia, Mongolia, Tuva.

Remark. The female is smaller (wingspan 15.5–16.5 mm) than male and probably it does not fly much.

Cochylimorpha blandana (Eversmann, 1844)

Ajat river 03.VII.1997 1 ♂, 24.VII.1998 1 ♂, 1 ♀.

Distribution. S Ural, S Ukraine, Libanon.

Remarks. The species has been described from S Ural. The female is smaller (wingspan 14 mm) than male and probably it does not fly much.

Cochylimorpha perturbatana (Kennel, 1900)

Ajat river 03.–04.VII.1997, 24.VII.1998. A total of 10 exx.

Distribution. S Ukraine, S Russia, S Ural, Kazakhstan, C Asia, Tuva.

Remark. The species has been described from S Ural.

Cochylimorpha fucatana (Snellen, 1883)

Arkaim 14.–18.VI.1996; Chalk Hills 07.VI.1998; Kizilskoye 27.V.1998; Kuvandyk 15.VI.1998; Verbljushka 30.V.–02.VI.1998, 10.–12.VI.1998. A total of about 25 exx.

Distribution. E Palaearctic; from S Ural to Russian Far East, C Asia, Mongolia.

Cochylimorpha woliniana (Schleich, 1868)

Ajat river 03.–04.VII.1997; Arkaim 14.–18.VI.1996;

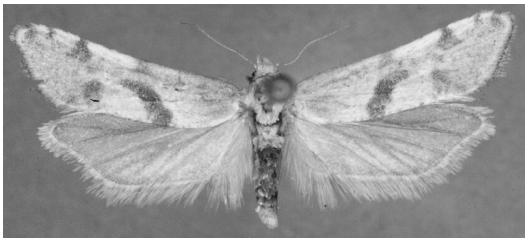

Fig. 3. *Cochylimorpha asiana* (Kennel), brown form with narrow forewings and indistinct pattern.

Burannoe 20.VI.1999; Chalk Hills 03.–07.VI.1998, 21.–22.VI.1999; Kuvandyk 13.–15.VI.1998; Miass 27.VI.1997; Novoiletzk 09.VI.1998; Sakmara river 20.–21.VI.1996; Verbljushka 30.V.1998, 18.VI.1999. Common.

Distribution. W Palaearctic; from W Europe to Mongolia.

Cochylimorpha subwoliniana (Danilewski, 1962)

Arkaim 14.–15.VI.1996 2 ♂♂; Chalk Hills 03.VI.1998 3 exx.; Kidriasovo 28.–29.V.1998 5 ♂♂; Kuvandyk 15.VI.1998 1 ♂; Verbljushka 31.V.1998 5 exx., 02.VI.1998 7 exx.

Distribution. C Asia.

Remarks. A poorly known species. Occurs in hot, calcareous steppe slopes. New to Europe.

Cochylimorpha hedemanniana (Snellen, 1883)

Kidriasovo 28.–29.V.1998 1 ♂; Sakmara river 20.–21.VI.1996 6 ♂♂.

Distribution. E Siberia, Amur, China.

Remark. New to Europe.

Cochylimorpha discolorana (Kennel, 1899)

Verbljushka 30.V.1998 6 exx, 01.VI.1998 1 ex., 02.VI.1998 1 ex., 30.V.–02.VI.1998 10 ♂♂, 3 ♀♀; Chalk Hills 04.VI.1998 1 ex.; Kuvandyk 13.VI.1998 1 ex.; Novoiletzk 08.VI.1998 1 ♂.

Distribution. Widely distributed in the south, from SE- and E Europe to C Asia and Tuva.

Remark. This species has been recorded from the European part of S Russia (Razowski 1970), but it is absent in the new list of the European cochylids (Razowski 1996).

Fig. 4. Imago (male, holotype) of *Cochylimorpha ignicolorana* Junnilainen & K. Nupponen sp. n.

Cochylimorpha fuscimacula (Falkovitch, 1963)

Shkunovka 01.IX.2000 1 ♂.

Distribution. S Russia, Turkestan, E Kazakhstan.

Cochylimorpha discopunctana (Eversmann, 1844)

Arkaim 22.VII.1998 1 ex., 23.VII.1998 3 ♂♂; Kizilskoye 26.VII.2000 26 exx.; Verbljushka 29.VII.2000 1 ♀.

Distribution. Portugal, Romania, S Russia, S Ural, Transcaspia (Kirgisensteppe), Mongolia.

Cochylimorpha obliquana (Eversmann, 1844)

Ajat river 03.–04.VII.1997; Arkaim 14.–16.VI.1996; Burannoe 20.VI.1999, 30.VII.2000, 29.VIII.2000; Chalk Hills 03.–07.VI.1998, 23.VI.1999; Kizilskoye 27.V.1998. A total of about 30 exx.

Distribution. Eastern C Europe, S Russia, N Caucasus, S Ural, Tuva.

Remark. The species has been described from S Ural.

Cochylimorpha ignicolorana Junnilainen & K. Nupponen sp. n.

Type material. Holotype: ♂ (Fig. 4): Russia, southern Urals, Orenburg oblast, 51°23´N 56°49´E, 200 m, Donskoje village 6 km W, Mount Verbljushka, 11.VI.1998, T. & K. Nupponen leg. Genitalia slide: K. Nupponen prep. no. 6/03.I.1999. In coll. T. & K. Nupponen. Paratypes (11 ♂♂, 1 ♀): Same data as holotype, except for

Fig. 5. Imago (female, paratype) of *Cochylimorpha ignicolorana* Junnilainen & K. Nupponen sp. n.

dates: 1 ♂ 12.VI.1998; 1 ♂ 17.VI.1999. Same locality as holotype: 1 ♂ 14.VII.1998, K. Nupponen leg.; 1 ♀ 10.–12.VI.1998, J. Junnilainen leg. (Fig. 5). Russia, southern Urals, Cheliabinsk oblast, 53°57´N 59°03´E, 650 m, near Moskovo village, 3 ♂♂ 11.VII.1998, 1 ♂ 12.VII.1998, K. Nupponen leg. Same locality as previous paratype: 1 ♂ 22.VI.1996, K. Nupponen, J.-P. Kaitila, J. Junnilainen & M. Ahola leg.; 2 ♂♂ 10.VII.1997, K. Nupponen & J. Junnilainen leg.; 1 ♂ 18.VI.1998, J. Junnilainen leg. Genitalia slides: J. Junnilainen prep. no. 98032501 (♂), 99021806 (♀). One further genitalia preparation preserved in glycerol. Paratypes in the collections of T. & K. Nupponen, J. Junnilainen and J.-P. Kaitila. The type material can be loaned by request through the Finnish Museum of Natural History, University of Helsinki or directly from the authors.

Diagnosis. *C. ignicolorana* Junnilainen & K. Nupponen sp. n. belongs to the *jucundana*-group of *Cochylimorpha*, which includes four species: *C. jucundana* (Treitschke, 1835), *C. pyramidana* (Staudinger, 1870), *C. emiliana* (Kennel, 1919) and *C. obliquana* (Eversmann, 1844). The typical characteristic for this group is a bifurcate aedeagus without cornuti. Externally *C. ignicolorana* is easy to separate from close relatives by its unicoloured, silky white hindwings (in male) and the reddish brown coloration of the forewings. In the male genitalia, the robust portion of the bifurcate aedeagus is very long, about 1.7× length of the thin portion, while the length ratio of these portions is between 1–1.2 in the other species of the *jucundana*-group; the rectangular distal extension of sacculus is also a good characteristic for the new taxon. The female genitalia are close

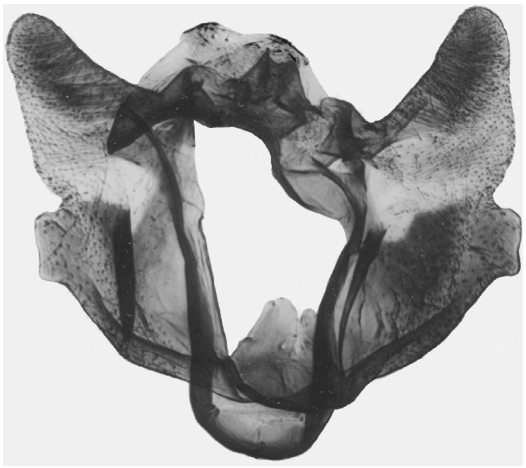

Fig. 6. Male genitalia (without aedeagus) of *Cochylimorpha ignicolorana* Junnilainen & K. Nupponen sp. n. (holotype).

to those of *C. pyramidana*, but differ from the latter by longer and narrower ductus bursae and broader sterigma.

Description. Wingspan 11–14.5 mm. Head, collar, tegula, neck tuft and thorax reddish brown, more or less mixed with whitish yellow scales. Labial palp: length 2× diameter of eye, broadest at middle, segment III short; outer surface reddish brown, otherwise whitish yellow. Antenna ciliate, scape and flagellum pale reddish brown. Legs greyish white, except upper surface of forelegs and midlegs pale reddish brown. Abdomen pale grey, ventrally and terminally paler. Forewing moderately narrow, apex more or less pointed; ground colour pale yellow; oblique dark reddish brown band from 1/3 of dorsal margin over midwing, then angled 30°, costal 1/3 of band paler and more indistinct, continues perpendicularly to costa at 0.5; subterminal area suffused with reddish brown; same colour occurs at basal area around veins and at costa, as well as at tornus forming more or less indistinct tornal spot; three dark reddish brown costal spots at 0.8, 0.9 and at apex; very small but distinct, dark brown discal spot at 0.7; cilia line distinct, reddish brown; fringe reddish brown, basally paler. Hindwing in male silky white, much paler than forewing; in female fuscous, cilia line distinct, fringe white.

Male genitalia (Figs. 6–7). Socii moderately small, apex rounded. Medial portion of transtilla

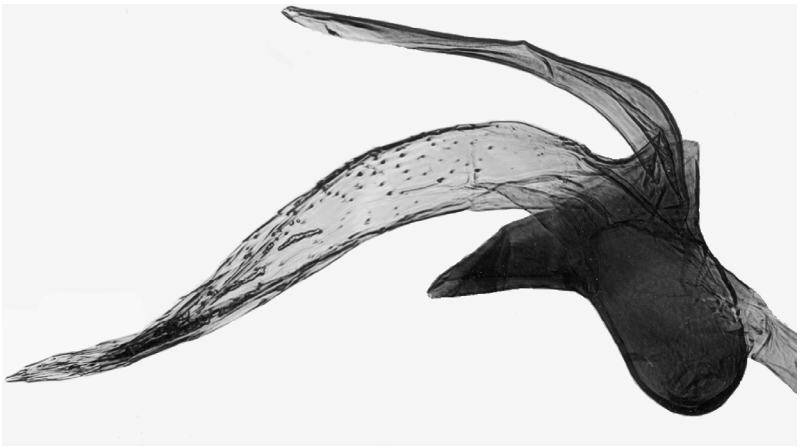

Fig. 7. Aedeagus of *Cochylimorpha ignicolorana* Junnilainen & K. Nupponen sp. n. (holotype).

large, subquadrangular, distal margin concave. Juxta broad, quadrangular, posterior margin medially incised. Vinculum broad and rounded. Valva broad, distal half tapered, apex rounded. Sacculus 0.5× length of valva, robust but narrow, distal 1/5 rectangularly extended. Aedeagus bifurcate; robust portion long and bent, tapered towards apex, distal half with minute spines; thin portion 0.6× length of robust one, basally curved 80°, distal 4/5 straight; coecum penis broad and rounded, length of caulis equals to diameter of coecum penis.

Female genitalia (Fig. 8). Papillae anales moderately broad, subtriangular. Apophyses posteriors and apophyses anteriores of equal length. Antrum weakly sclerotized. Sterigma broad, posterior margin convex. Ductus bursae narrow, 0.4× length of corpus bursae. Corpus bursae longish, anteriorly with weak sclerite; at middle about 20 minute spines.

Bionomy. The specimens were collected by artificial light on warm southern steppe slopes. The flight period is from the first third of June to the second half of July. The biology is unknown.

Distribution. Russia (S Ural). The species is known from two different places, both of them located in the headland region of the Ural Mountains (*see also* Remarks).

Etymology. Lat. *ignis* = fire; *color* = colour. From the coloration of the forewings of the moth.

Remarks. Systematically *C. ignicolorana* Junnilainen & K. Nupponen sp. n. should be placed near *C. pyramidana*, its closest relative. One doubtful specimen collected from former Yugoslavia might be the same taxon as *ignicolorana* (J. Razowski pers. comm.). However, the abdomen of that specimen has been lost and therefore it is impossible to confirm its determination.

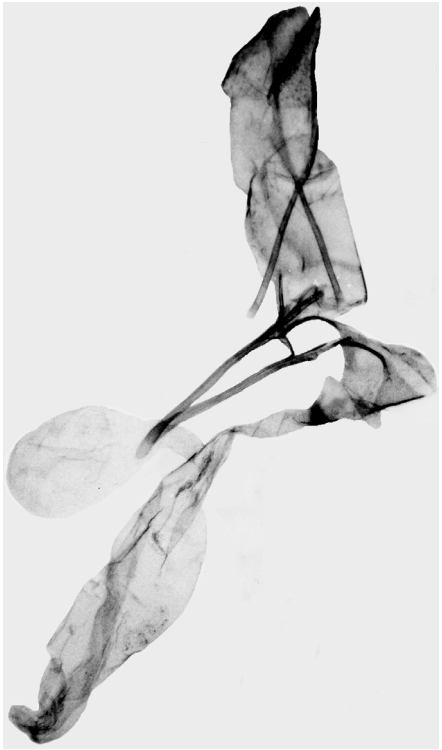

Fig. 8. Female genitalia of *Cochylimorpha ignicolorana* Junnilainen & K. Nupponen sp. n. (paratype).

***Cochylimorpha pyramidana* (Staudinger, 1871)**

Ajat river 03.–04.VII.1997, 24.–25.VII.1998. About 20 exx.

Distribution. S Russia, S Ural, S Caucasus, W Kazakhstan, Tuva.

***Cochylimorpha clathrana* (Staudinger, 1871)**

Verbljushka 30.–31.V.1998 about 60 exx.

Distribution. S Ural, S Russia.

***Cochylimorpha clathratana* (Staudinger, 1880)**

Burannoe 30.VII.2000; Chalk Hills 03.–07.VI.1998, 31.VIII.2000; Kidriasovo 28.–29.V.1998; Moskovo 26.V.1998; Verbljushka 30.V.–02.VI.1998, 10.–12.VI.1998, 15.VII.1998, 13.–14.V.1999, 27.–29.VII.2000, 27.28.VIII.2000. A total of about 35 exx. Not rare in dry steppe habitats.

Distribution. S Ural.

Remark. The species has been described from S Ural.

***Cochylimorpha alternana* (Stephens, 1834)**

Ajat river 24.VII.1998; Burannoe 29.VIII.2000; Chalk Hills 22.VI.1999, 31.VIII.2000; Kuvandyk 13.–15.VI.1998, 19.–21.VII.1998; Novoiletzk 09.VI.1998. A total of 11 exx.

Distribution. NE Africa, Asia Minor, Europe eastward to S Ural.

***Phalonidia manniana* (Fischer v. Röslerstamm, 1839)**

Kuvandyk 15.VI.1998 2 ♂♂.

Distribution. Transpalaearctic.

***Phalonidia affinitana* (Douglas, 1846)**

Ajat river 04.VII.1997, 25.VII.1998. 4 exx.; Berlin 01.VII.1997 1 ♀.

Distribution. C and S Europe, S Russia, Caucasus.

***Phalonidia latifasciana* Razowski, 1970**

Moskovo 10.VII.1997 1 ♀.

Distribution. S Siberia (Kemerowskaja oblast).

Remarks. The specimen was collected by artificial light. The habitat was a steppe slope with large wet meadows in the nearest lowland. New to Europe.

***Phalonidia albipalpana* (Zeller, 1847)**

Ajat river 03.VII.1997 1 ♂; Chalk Hills 03.VI.1998 1 ♂, 05.VI.1998 1 ♂, 07.VI.1998 1 ♂, 03.–07.VI.1998 1 ♂, 1 ♀; Burannoe 30.VII.2000 5 exx.; Kuvandyk 13.–15.VI.1998 1 ex.

Distribution. W Palaearctic; from SW Europe to C Asia.

***Phalonidia contractana* (Zeller, 1847)**

Ajat river 03.–04.VII.1997, 24.–25.VII.1998, 04.–05.IX.2000; Burannoe 30.VII.2000, 29.VIII.2000; Chalk Hills 17.–18.VII.1998, 21.–22.VI. 1999, 31.VII.2000, 30.–31.VIII.2000; Kuvandyk 02.VIII.2000, 02.IX.2000; Sakmara river 20.–21.VI.1996; Verbljushka 14.–16.VII.1998, 18.VI.1999. Common.

Distribution. W Palaearctic; from SW Europe to C Asia.

Remark. This species has been recorded from the European part of S Russia (Razowski 1970) but the record has not been mentioned in the new list of the European cochylids (Razowski 1996).

***Gynnidomorpha vectisana* (Humphreys & Westwood, 1845)**

Verbljushka 10.–12.VI.1998 1 ♂.

Distribution. Europe eastward to S Ural.

***Gynnidomorpha minimana* (Caradja, 1916)**

Berlin 30.VI.1997 6 exx.

Distribution. Transpalaearctic.

***Gynnidomorpha alismana* (Ragonot, 1883)**

Ajat river 03.–04.VII.1997, 05.IX.2000; Arkaim 23.VII.1998; Berlin 30.VI.–02.VII.1997; Burannoe 30.VII.2000; Shkunovka 01.IX.2000. Locally rather common.

Distribution. Europe eastward to S Ural.

Remark. According to the new list of the European cochylids (Razowski 1996), this taxon has not been recorded from the European part of Russia.

Agapeta hamana (Linnaeus, 1758)

Ajat river 24.–25.VII.1998; Arkaim 14.–19.VI.1996, 23.VII.1998; Chalk Hills 03.–07.VI.1998; Ekaterinburg Biol.St. 21.VI.1998; Kuvandyk 15.VI.1998; Kuvandyk 2 16.VI.1998; Miass 26.VI.1997; Moskovo 22.VI.1996, 10.VII.1997; Uchaly 25.VII.2000; Verbljushka 10.VI.1998. Common.

Distribution. Europe eastward to S Ural; Asia Minor.

Agapeta zoegana (Linnaeus, 1767)

Ajat river 24.VII.1998 1 ♂; Chalk Hills 21.VI.1999 1 ♂.

Distribution. Europe eastward to S Ural; Asia Minor.

Ceratoxanthis externana (Eversmann, 1844)

Bajmak 17.VI.1998; Burannoe 20.VI.1999; Chalk Hills 07.VI.1998, 22.VI.1999; Kuvandyk 13.–16.VI.1998; Kuvandyk 2 16.VI.1998; Moskovo 10.VII.1997; Novoiletzk 08.VI.1998; Verbljushka 30.V.1998, 10.–12.VI.1998, 17.–18.VI.1999; Zirgan 24.VI.1999. A total of about 80 exx.

Distribution. S Ural, Transcaucasia, Turkestan.

Remarks. The species occurs in steppe habitats, preferably close to wet meadows. The moth is active at dusk and later it comes to artificial light. Only two females were recorded (Novoiletzk 08.VI.1998 and Kuvandyk 2 16.VI.1998). The species has been described from S Ural.

Eugnosta lathoniana (Hübner, 1800)

Ajat river 03.VII.1997, 04.IX.2000; Arkaim 15.–19.VI.1996, 08.VII.1997, 23.VII.1998; Bishtiryak 13.VII.1998; Burannoe 29.VIII.2000; Chalk Hills 03.–07.VI.1998, 22.VI.1999, 17.–18.VII.1998, 30.VIII.2000; Kizilskoye 26.VII.2000; Kuvandyk 13.–15.VI.1998, 19.–20.VII.1998; Novoiletzk 09.VI.1998; Shkunovka 01.IX.2000; Verbljushka 30.V.–02.VI.1998, 10.–12.VI.1998, 14.VII.1998, 17.–18.VI.1999, 27.–29.VII.2000. Rather common.

Distribution. N Africa, S Europe, Asia Minor, Caucasus, S Russia, S Ural.

Remark. This species has been recorded from the European part of S Russia (Razowski 1970) but the record has not been mentioned in the new list of the European cochylids (Razowski 1996).

Eugnosta hydrargyrana (Eversmann, 1842)

Arkaim 14.–18.VI.1996, 23.VII.1998; Chalk Hills 04.–07.VI.1998, 17.VII.1998, 22.VI.1999, 31.VII.–01.VIII.2000, 30.VIII.2000; Kuvandyk 19.VII.1998; Verbljushka 29.VII.2000. Rather rare, about 30 exx. were recorded.

Distribution. W Palaearctic; from eastern C Europe to C Asia, Mongolia and Altai.

Remark. The species has been described from S Ural.

Eugnosta magnificana (Rebel, 1914)

Ajat river 03.–05.VII.1997, 25.VII.1998; Bajmak 17.VI.1998; Chalk Hills 31.VII.–01.VIII.2000, 30.–31.VIII.2000; Kuvandyk 20.VII.1998, 02.IX.2000; Moskovo 22.VI.1996, 10.VII.1997, 18.VI.1998, 11.–12.VII.1998; Verbljushka 29.VII.2000, 27.–28.VIII.2000. Widely distributed and locally common.

Distribution. W Palaearctic; from S Europe to C Asia.

Eupoecilia angustana (Hübner, 1799)

Berlin 30.VI.–01.VII.1997; Kuvandyk 13.–15.VI.1998; Miass 28.VI.1996, 19.VI.1998; Moskovo 10.VII.1997; Verbljushka 12.VI.1998. Common.

Distribution. Transpalaearctic.

Eupoecilia ambiguella (Hübner, 1796)

Miass 15.–28.VI.1999 1 ♂.

Distribution. Transpalaearctic.

Eupoecilia sanguisorbana (Herrich-Schäffer, 1856)

Arkaim 09.VII.1997, 22.–23.VII.1998; Burannoe 30.VII.2000; Ekaterinburg 28.VII.1998; Miass 28.–29.VI.1997, 1999; Moskovo 10.VII.1997, 04.VIII.2000; Sanarskii bor 26.VII.1998; Tavatui 29.VII.1998; Uchaly 25.VII.2000. Rather common.

Distribution. From C Europe to S Ural.

Aethes hartmanniana (Clerck, 1758)

Arkaim 19.VI.1996, 07.–09.VII.1997; Berlin 30.VI.–02.VII.1997; Kuvandyk 15.VI.1998; Miass 29.VI.1997; Verbljushka 01.–02.VI.1998, 10.–12.VI.1998, 12.–13.V.1999. Locally not rare.

Distribution. From W Europe to S Ural; Asia Minor, Caucasus.

Aethes margarotana (Duponchel, 1836)

Arkaim 18.VI.1996 1 ♂; Berlin 30.VI.1997 1 ♀; Kizilskoye 28.V.1998 1 ♂; Kuvandyk 15.VI.1998 1 ♂,13.–15.VI.1998 1 ♂.

Distribution. C and S Europe, N Africa, Asia Minor, Transcaucasia, S Ural.

Remark. According to the new list of the European cochylids (Razowski 1996), this taxon has not been recorded from the European part of Russia.

Aethes moribundana (Staudinger, 1859)

Ajat river 04.VII.1997; Arkaim 07.–09.VII.1997, 23.VII.1998; Berlin 30.VI.1997; Kidriasovo 28.–29.V.1998; Kizilskoye 27.V.1998; Kuvandyk 16.VI.1998; Miass 26.–27.VI.1997, 15.VII.1997, 25.V.1998, 29.VI.1999; Moskovo 26.V.1998, 10.VII.1997, 12.VII.1998; Uchaly 25.VII.2000. Common.

Distribution. W Palaearctic; from SW Europe and N Africa to C Asia, Mongolia and Tuva.

Aethes caucasica (Amsel, 1959)

Chalk Hills 04.–05.VI.1998, 17.–18.VII.1998, 21.–23.VI.1999; Kuvandyk 19.–20.VII.1998; Verbljushka 30.V.–02.VI.1998, 10.VI.1998. A total of about 30 exx.

Distribution. S Ural, Caucasus, Italy.

Remarks. Rare and local, occurs in calcareous steppe slopes. The flight period is from early June to the end of July, and the moth is more frequent in July. There are three females in our material (Verbljushka 10.–12.VI.1998 1 ex. and Chalk Hills 17.VII.1998 2 exx.). The hindwings of female are unicoloured, fuscous, darker than in male.

Aethes margaritifera Falkovitch, 1963

Chalk Hills 03.VI.1998 2 exx., 04.VI.1998 1 ex., 05.VI.1998 1 ex., 07.VI.1998 2 exx., 03.–07.VI.1998 6 ♂♂, 4 ♀♀; Kidriasovo 28.V.1998 5 exx., 29.V.1998 2 exx., 28.–29.V.1998 1 ♂; Novoiletzk 09.VI.1998 8 exx.; Verbljushka 30.V.1998 3 exx., 30.V.–02.VI.1998 5 ♀♀.

Distribution. S Ural, S Russia, Transcaucasia, C Asia.

Remark. Very rare, occurs in different kinds of steppe habitats.

Aethes margaritana (Haworth, 1811)

Ajat river 03.–04.VII.1997; Arkaim 07.–09.VII.1997, 22.–23.VII.1998; Berlin 30.VI.1997; Chalk Hills 04.–07.VI.1998, 17.VII.1998; Kidriasovo 28.V.1998; Kuvandyk 13.–15.VI.1998, 19.VII.1998; Miass 29.VI.1999; Moskovo 18.VI.1998; Sakmara river 20.–21.VI.1996. Common.

Distribution. W Palaearctic; from W Europe to C Asia.

Aethes triangulana (Treitschke, 1835)

Arkaim 14.–19.VI.1996; Moskovo 22.VI.1996; Verbljushka 10.–12.VI.1998. Locally not rare.

Distribution. Transpalaearctic.

Aethes smeathmanniana (Fabricius, 1781)

Arkaim 08.VII.1997 1 ♂; Miass 15.VII.1997 1 ♂,19.VI.1998 1 ♂.

Distribution. Holarctic.

Aethes tesserana (Denis & Schiffermüller, 1775)

Arkaim 14.–19.VI.1996 1 ex.; Berlin 01.VII.1997 1 ex.; Verbljushka 17.–19.VI.1999 3 exx.

Distribution. Europe eastward to Ural; Asia Minor.

Remark. This species has been recorded from the European part of S Russia (Razowski 1970) but the record has not been mentioned in the new list of the European cochylids (Razowski 1996).

Aethes dilucidana (Stephens, 1852)

Arkaim 14.–19.VI.1996; Bajmak 17.VI.1998; Chalk Hills 04.VI.1998, 30.–31.VIII.2000; Novoiletzk 08.VI.1998. A

total of 10 exx.

Distribution. W Palaearctic.

Remark. The species has two generations in the south (c.f. Razowski 1970, p. 347).

Aethes flagellana (Duponchel, 1836)

Bishtiryak 13.VII.1998 1 ♀; Moskovo 22.VI.1996 1 ♀, 10.VII.1997 4 ♂♂, 2 ♀♀, 18.VI.1998 1 ♂.

Distribution. N Africa, S Europe, Asia Minor, Iran, W Turkestan, S Ural.

Aethes francillana (Fabricius, 1794)

Ajat river 04.VII.1997, 24.VII.1998; Berlin 30.VI.1997; Kuvandyk 20.VII.1998; Miass 26.VI.1996; Moskovo 10.VII.1997, 11.VII.1998; Sakmara river 20.VI.1996; Verbljushka 12.VI.1998, 15.VII.1998. A total of 14 exx.

Distribution. W Palaearctic; from NW Africa, SW and C Europe to C Asia.

Aethes bilbaensis (Rössler, 1877)

Ajat river 24.VII.1998; Chalk Hills 04.–07.VI.1998, 17.–18.VII.1998, 31.VIII.2000; Kidriasovo 29.V.1998; Novoiletzk 08.VI.1998; Shkunovka 01.IX.2000; Verbljushka 30.V.–02.VI.1998, 14.VII.1998, 27.VII.2000. Common.

Distribution. W Palaearctic; from NW Africa SW Europe to C Asia.

Aethes fennicana (M. Hering, 1924)

Ajat river 03.VII.1997 1 ♂, 24.VII.1998 1 ♀; Miass 28.VI.1997 2 ♂♂.

Distribution. C and N Europe, S Ural.

Remark. According to the new list of the European cochylids (Razowski 1996), this taxon has not been recorded from the European part of Russia.

Aethes cnicana (Westwood, 1854)

Ajat river 03.–04.VII.1997, 24.VII.1998; Arkaim 14.–19.VI.1996, 23.VII.1998; Ekaterinburg biol. stat. 21.VI.1998; Ekaterinburg city 27.VII.1998; Sakmara river 20.–21.VI.1996; Tavatui 28.VII.1998. Rather common.

Distribution. From C Europe to S Ural.

Aethes hoenei Razowski, 1964

Ajat river 24.VII.1998 3 ♀♀, 25.VII.1998 1 ♀.

Distribution. China.

Remark. New to Europe and Russia.

Aethes xanthina Falkovitch, 1963

Chalk Hills 04.VI.1998 1 ♂, 07.VI.1998 1 ♀; Novoiletzk 09.VI.1998 2 ♂♂; Verbljushka 30.V.–02.VI.1998 1 ♂.

Distribution. Iran, Turkmenia.

Remark. New to Europe and Russia.

Aethes prangana (Kennel, 1900)

Chalk Hills 03.VI.1998 1 ♀.

Distribution. Caucasus, Armenia, N Iran.

Remark. New to Europe and Russia.

Aethes kindermanniana (Treitschke, 1830)

Ajat river 03.–04.VII.1997; Arkaim 23.VII.1998; Bishtiryak 13.VII.1998; Chalk Hills 30.–31.VIII.2000; Kuvandyk 19.VII.1998; Shkunovka 01.IX.2000; Verbljushka 15.VII.1998. Rather common.

Distribution. From W Europe to S Ural; Asia Minor.

Cochylidia moguntiana (Rössler, 1864)

Ajat river 04.VII.1997 1 ♂, 05.VII.1997 2 ♂♂; Arkaim 09.VII.1997 1 ♂; Moskovo 10.VII.1997 1 ♂.

Distribution. W Palaearctic; from W Europe to C Asia, China and Tuva.

Cochylidia heydeniana (Herrich-Schäffer, 1851)

Ekaterinburg biol. st. 21.VI.1998; Kuvandyk 13.VI.1998, 19.–21.VII.1998; Kosmokovo 19.VI.2000. A total of 7 exx.

Distribution. From W Europe to S Ural; Syria.

Cochylidia implicitana (Wocke, 1856)

Ajat river 05.VII.1997 1 ♂; Berlin 01.VII.1997 1 ♂; Miass

25.V.1998 1 ♂; Uchaly 25.VII.2000 1 ♂; Verbljushka 13.V.1999 1 ♀.

Distribution. W Palaearctic.

***Cochylis nana* (Haworth, 1811)**

Arkaim 14.–19.VI.1996 1 ex.; Iremel 25.VI.1996 1 ♂; Kidriasovo 28.–29.V.1998 1 ex.; Miass 19.VI.1998 few exx., 29.VI.1999 1 ex.

Distribution. Holarctic.

***Cochylis roseana* (Haworth, 1811)**

Kuvandyk 02.IX.2000 1 ♀.

Distribution. C and S Europe, S Ural, Asia Minor, Iran.

***Cochylis hybridella* (Hübner, 1813)**

Ajat river 04.VII.1997, 24.–25.VII.1998; Arkaim 07.–09.VII.1997, 23.VII.1998; Moskovo 10.VII.1997. A total of 11 exx.

Distribution. Transpalaearctic.

***Cochylis dubitana* (Hübner, 1799)**

Miass 29.VI.1999 1 ex.; Uchaly 25.VII.2000 4 ♂♂.

Distribution. Holarctic.

***Cochylis atricapitana* (Stephens, 1852)**

Ajat river 03.–05.VII.1997; Chalk Hills 03.–06.VI.1998, 17.–18.VII.1998, 22.VI.1999; Kuvandyk 13.–15.VI.1998, 19.VII.1998; Verbljushka 10.–12.VI.1998. Rather rare.

Distribution. From N Africa and W Europe to Ural.

***Cochylis pallidana* Zeller, 1847**

Miass 27.–29.VI.1997 4 exx.

Distribution. Europe, S Russia, Asia Minor.

***Cochylis posterana* Zeller, 1847**

Ajat river 04.–05.VII.1997, 04.–05.IX.2000; Arkaim 15.–18.VI.1996; Bajmak 17.VI.1998; Burannoe 29.VIII.2000; Chalk Hills 03.–07.VI.1998, 31.VII.2000, 31.VIII.2000; Kizilskoye 27.V.1998, 26.VII.2000; Moskovo 26.V.1998, 18.VI.1998; Shkunovka 01.IX.2000; Uchaly 25.VII.2000; Verbljushka 30.–31.V.1998, 10.–12.VI.1998, 14.VII.1998, 29.VII.2000. Common.

Distribution. From W Europe to Ural and N Iran; N Africa.

***Cochylis defessana* (Mann, 1861)**

Chalk Hills 05.VI.1998 1 ex., 06.VI.1998 1 ex., 07.VI.1998 1 ex., 17.VII.1998 1 ex.; Burannoe 30.VII.2000 1 ♀.

Distribution. SE Europe, Asia Minor, S Russia, N Iran, Transcaspia.

***Falseuncaria degreyana* (McLachlan, 1869)**

Ajat river 03.VII.1997, 04.IX.2000; Arkaim 14.–19.VI.1996, 07.–09.VII.1997, 23.VII.1997; Bajmak 17.VI.1998; Bishtiryak 13.VII.1998; Chalk Hills 06.–07.VI.1998, 17.VII.1998, 21.–22.VI.1999, 31.VII.2000, 30.–31.VIII.2000; Kidriasovo 28.–29.V.1998; Kizilskoye 27.V.1998, 03.IX.2000; Kuvandyk 13.–16.VI.1998, 19.–21.VII.1998, 02.IX.2000; Miass 25.V.1998, 19.VI.1998; Moskovo 10.VII.1997, 26.V.1998; Novoiletzk 08.–09.VI.1998; Shkunovka 01.IX.2000; Uchaly 25.VII.2000; Verbljushka 30.V.–02.VI.1998, 17.VI.1999. Common.

Distribution. W Palaearctic; from W Europe to C Asia.

Remark. Occurs everywhere in steppe habitats, often abundant.

***Falseuncaria ruficiliana* (Haworth, 1811)**

Miass 1.–16.VII.1999 1 ♂; Verbljushka 30.V.–02.VI.1998 1 ♂.

Distribution. W Palaearctic; from W Europe to C Asia.

4. Discussion

The cochylid fauna is very rich in the region studied. However, many of the species are very locally distributed and difficult to record during a few expeditions. On the other hand, new collecting methods such as effective light catching has enabled the collecting of night-active moths that were not easily observed in the past. Razowski

(1970) reports 7 species from S Ural (Uralsk), which we have not recorded: *Phtheochroa exasperantana* (Christoph, 1872), *P. farinosana* (Herrich-Schäffer, 1856), *Cochylimorpha straminea* (Haworth, 1811), *Phalonidia curvistrigana* (Stainton, 1859), *Gynnidomorpha permixtana* (Denis & Schiffermüller, 1775), *Ceratoxanthis argentomixtana* (Staudinger, 1870) and *Aethes nefandana* (Kennel, 1899). To date, altogether 85 species of cochylids are known in the southern Ural region. Several additional species occur in lower Volga region and some of them might be possible to find also in the Urals.

Seven species were recorded for the first time from Europe. Two of them — *C. hedemanniana* and *P. latifasciana* — are southern Siberian species, probably having the western border of their distribution range in the Urals. Four species — *P. decipiens*, *C. subwoliniana*, *A. xanthina* and *A. prangana* — are southern/southeastern species and their range just reaches the southernmost part of the Urals in the north. *A. hoenei* is a poorly known species. Our record from southern Ural is surprising, because the taxon was previously known only from central China. Four species are also new to Russia: *P. decipiens*, *A. hoenei*, *A. xanthina* and *A. prangana*. *C. ignicolorana* Junnilainen & K. Nupponen sp. n. might be endemic to the southern Ural Mountains (*see* Remarks of *ignicolorana* above).

Many cochylid species occur in various kinds of steppe types in the Urals, and in many cases it is impossible to connect a species with any specific habitat. In several species the larva feeds on *Artemisia* spp., which are dominant plants everywhere in steppe regions. A few species are restricted to chalk slopes and/or they use some rare host plant (e.g. *Phtheochroa krulikovskii*, *Cochylimorpha chlatrana* and *Aethes caucasica*). Many species prefer rocky slopes where the microclimate is very hot (e.g. *Cochylimorpha blandana*, *C. perturbatana*, *C. pyramidana* and *Eugnosta hydrargyrana*). Usually such habitats are not threatened, because it is difficult to use them for agricultural purposes. Only a few species prefer grassy lowland steppes, where *Artemisia* spp. are growing in rocky spots only (e.g. *Cochylimorpha discopunctana*). Some species have an extremely long flight period from early spring to late autumn (e.g. *Cochylimorpha chlathratana*, *Eugnosta lathoniana* and *Falseuncaria degreyana*). Possibly such species have two generations during the season, although the specimens can be met through the summer.

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