



## A description of the new *Egira* species from the Russian Far East (Lepidoptera, Noctuidae: Orthosiini)

BALÁZS BENEDEK<sup>1</sup> JÁNOS BABICS<sup>2</sup> & VLADIMIR KONONENKO<sup>3,4</sup>

<sup>1</sup>H-2045 Törökbálint, Árpád u. 53, Hungary. E-mail: benedekbalazs@icloud.com

<sup>2</sup>H-1042 Budapest, Munkásotthon utca 70-72, Hungary. E-mail: janos.babics@gmail.com

<sup>3</sup>RF-690022 Vladivostok, Russia, Laboratory of Entomology, Institute of Biology and Soil Science, Far Eastern Branch of Russian Academy of Science. E-mail: vlad\_kononenko@mail.ru; kononenko@biosoil.dvo.ru

<sup>4</sup>Corresponding author

The Holarctic Noctuidae genus *Egira* Duponchel, 1845 (type-species *Phalaena conspicillaris* Linnaeus, 1758) enumerates 32 species in the Old and New World. According to the modern classification it belongs to the tribe Orthosiini of the subfamily Noctuinae. The genus is represented in the Old World by fifteen species, distributed from the West Palaearctic to Sino-Himalayan region, where some species have recently been described from Nepal and Thailand (Hreblay 1994; Hreblay & Ronkay 1999). One species, *E. saxea* (Leech, 1889) is known from Japan.

The European species of *Egira* were revised by Ronkay *et al.* (2001). The authors detailed discussed the morphological features of the genus and presented the checklist of the Palaearctic species. According to Ronkay *et al.* (2001) the genus is separated into four species-groups, one of them is the *conspicillaris*-group, including five species, which can be regarded as *Egira sensu stricto*. The group includes *E. conspicillaris* (Linnaeus, 1758), *E. tabori* Hreblay, 1994, *E. fatima* Hreblay, 1994, *E. anatolica* (Hering, 1933) and *E. servadei* Berio, 1982. This lineage has been considered as being exclusively Western-Palaearctic, the distribution area of the species extending from Morocco to the southern Urals on the North and across Turkey and Iran to the Tien-Shan and Pamir mountains in the South. No one species of *Egira* was known previously from the Russian Far East neither from the South Siberia (Kononenko 1990; 2005).

In the spring of 2013, a single male of an unknown *Egira* species, similar to *E. conspicillaris*, was collected in the south of Primorye territory of the Russian Far East in a well-studied and classical collecting place for many entomologists since decades. The examination of the species doubtlessly confirmed that it is new to science. Present article contains the description and the proper taxonomic placement of the new species comparing to its closest relative. We express our thanks to Vadim Golovizin (Russia, Krasnoyarsk) for presenting of the material for description. The holotype of the new species deposited in the collection of Balázs Benedek, Törökbálint, Hungary, later will be deposited to the Hungarian Nature History Museum.

### *Egira vadimi* Benedek, Babics & Kononenko, sp. n.

(Figs 1, 2, 6, 8)

**Material examined. Holotype:** male, Russia, Primorsky krai, Anisimovka village, 26.v.–2.vi.2013, slide No.JB2196 male, (coll. Balázs Benedek, Törökbálint, Hungary). **Paratype:** female, Russia, Primorsky Krai, Anisimovka village, 11.v.2014, slide No.JB2231 female (coll. Vadim Golovizin, Krasnoyarsk, Russia).

**Diagnosis.** The new species is a member of the *conspicillaris*-species group and it is closely related to *Egira conspicillaris* (Linnaeus, 1758). It differs from *E. conspicillaris* (figs 3-5) in the larger size, more robust thorax, the narrower reniform stigma and the deeper incision on the upper half of termen on the forewing. The colouration and pattern of the forewing are similar to those of *E. conspicillaris*, especially to its pale form with reduced pattern (fig. 5). Similarly to *E. conspicillaris* the new species is dimorphic: female (fig. 2) coloured darker than male, with brown-magenta tone of forewing. It differs from female of *E. conspicillaris* (fig. 5) by reduced wing pattern. The male genitalia of *E. vadimi* sp. n. (fig. 6) differs from *E. conspicillaris* (fig. 7) in the relatively shorter uncus, broader tegumen, squarely angled harpe and apically more acute valva with well-developed corona and saccular process. The aedeagus of *E. vadimi*

**Male genitalia.** (Fig. 6). Uncus relatively short, apically characteristically slender and hooked, basal plate moderately broad, tegumen relatively broad but short, low positioned, characteristically bell-shaped, penicular lobes narrow, covered with long hairs, fultura inferior relatively broad, heart cut diamond-shaped, vinculum strong, elongated and V-shaped, valva characteristically sinuous wave-shaped with more or less parallel margins, sacculus relatively broad but short, saccular process short and broad, rounded-triangular in shape with more or less quadrangular basal plate, saccular extension thorn-like, slender, strongly sclerotized, editum slightly-developed but prominent, weakly hairy, harpe strongly sclerotized, finger-shaped and characteristically cranked at middle, cucullus evenly cut, apically acute, corona well-developed. Aedeagus relatively elongated and curved along, carinal plate heavily sclerotized, dorsal side serrate-covered. Vesica everted ventrally, basal plate armed with three, variably-shaped cornutus: two less developed, smaller one and a somewhat larger one with well-developed globular basis, subbasal diverticulum long, tubular with a large, thick, terminal cornutus, surface of vesica covered with numerous belt-like sclerotisation, terminal diverticulum armed with a brush-like branch of long and strong cornutus.

**Female genitalia.** (Fig. 8). Papillae anales short, small and rather weak, apophyses anteriores and apophyses posteriors short, thin; ostium wide, antrum large and broad, cup-like; ductus bursae rather short but strongly sclerotised; cervix bursae well developed, large and complex, somewhat cauliflower-like in shape and heavily sclerotized, corpus bursae characteristically elliptical in shape with four strong band-like signa.

**Bionomics and distribution.** The species is known from the type locality only, Anisimovka village in the Primorye territory, Russia (fig. 11). The flight period of the species is from early May to beginning of June. It was collected in rich Manchurian mixed broad-leaved forest with dominating deciduous trees (*Quercus mongolica*, *Betula manchurca*, *Ulmus laciniata*, *Tilia amurensis*, *Acer* spp.) and sub-dominating coniferous (*Pinus koraiensis* and *Abies holophila*) at elevation approximately 300–400 m. Like other species of the genus, *E. vadimi* flies together with the typical elements forming the spring phenological aspect of the Noctuidae fauna: *Orthosia*, *Perigrapha*, *Panolis*, *Pseudopanolis*, *Brachionycha* and *Cerastis*.

**Etymology.** The specific name is dedicated to Mr. Vadim Golovizin (Russia, Krasnoyarsk), enthusiast entomologist, collector of the new species and many other interesting nocturnal moths in the Russian Far East.

## References

- Hreblay, M. (1994b) New taxa of the tribe Orthosiini, IV. (Lepidoptera, Noctuidae). *Acta zoologica hungarica*, 40 (3), 241–252.
- Hreblay, M. & Ronkay, L. (1999) Neue trifide Noctuidae aus dem himalayanischen Raum und der südostasiatischen Region (Lepidoptera: Noctuidae). *Esperiana*, 7, 485–620.
- Kononenko, V.S. (2005) *Noctuidae Sibiricae. Vol. 1. An annotated check list of the Noctuidae (s. l.) (Lepidoptera, Noctuoidea: Nolidae, Erebidae, Micronoctuidae, Noctuidae (of the Asian part of Russia and the Ural region.* Entomological Press, Soro, 243 pp.
- Kononenko, V.S. (1990) Synonymic check list of the Noctuidae (Lepidoptera) of the Primorye Territory, the Far East of U.S.S.R. *Tinea*, 13 (Supplement 1), 1–40.
- Ronkay, L., Yela, J.L. & Hreblay, M. (2001) *Hadeninae II. Noctuidae Europaeae. Vol. 5.* Entomological Press, Sorø, 452 pp.