

Notes on Some Tineids from Korea and Russian Far East, with Description of Four New Species (Lepidoptera: Tineidae)

한국과 극동러시아의 좀나방과 4 新種 기재 및 未記錄種

M. G. PONOMARENKO¹ and K. T. PARK²

엠. 지. 포노마렌코 · 朴奎澤

ABSTRACT Based on the material in the Center for Insect Systematics, Chuncheon, Korea and Institute of Biology and Pedology, Vladivostok, Russia, 4 species of tineids are described as new to science: *Morphaga parabucephala* sp. nov., *Ceratuncus orientanus* sp. nov., *Gerontha amplipecta* sp. nov., and *G. namhaensis* sp. nov. Furthermore 6 species are recognized new to Korea: <*Montescardia kurenzovi* (Zagulajev), *Morphagoides ussuriensis* (Caradja), *Gerontha borea* Moriuti, *Niditinea baryspilas* (Meyrick), *Monopis pavlovskii* Zagulajev, and *M. rusticella* Hubner>, and 4 species new to Russian Far East: <*Morphaga fasciculata* Robinson, *Monopis nonimella* Zagulajev, *Trichophaga abruptella* Wollaston, *Opogona nipponica* Stringer>

KEY WORDS Systematics, Lepidoptera, Tineidae, new species, Far Eastern Asia.

초 록 곤충계통분류연구센터와 러시아동물보양연구소에 소장된 표본을 중심으로 조사한 결과, 4종의 新種 (*Morphaga parabucephala* sp. nov., *Ceratuncus orientanus* sp. nov., *Gerontha amplipecta* sp. nov., and *G. namhaensis* sp. nov.)을 발견, 기재 발표한다. 또한 6 종 (*Montescardia kurenzovi* (Zagulajev), *Morphagoides ussuriensis* (Caradja), *Gerontha borea* Moriuti, *Niditinea baryspilas* (Meyrick), *Monopis pavlovskii* Zagulajev, and *M. rusticella* Hubner)이 한국 未記錄種으로 보고되며, 4종 <*Morphaga fasciculata* Robinson, *Monopis nonimella* Zagulajev, *Trichophaga abruptella* Wollaston, *Opogona nipponica* Stringer>은 극동러시아에서 처음 기록되는 種이다.

검색어 분류, 나비목, 좀나방과, 新種, 극동아시아

DESCRIPTION

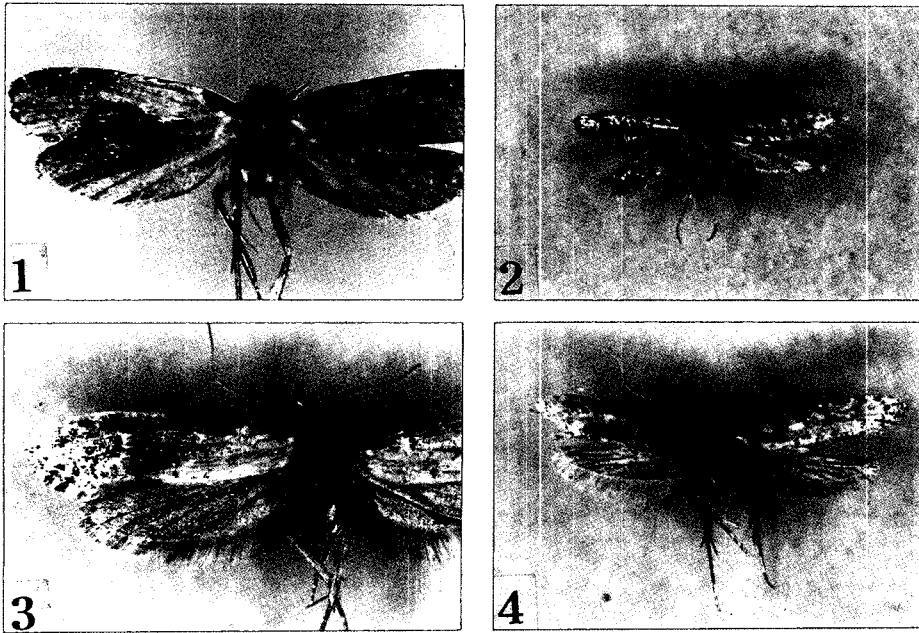
Morphaga parabucephala sp. nov. (Figs 1, 8, 9)

Diagnosis. This new species closely resembles *Morphaga bucephalae* (Snellen), but it can be separated by the forewing with three large brown costal spots beyond mid to apex, and by the male genitalia: dorsal margin of valva truncated; lobes of uncus broader and more expanded laterocaudally; and aedeagus lacking rows of thorn-like carinae. It is also resembles *Morphaga vadonella* (Viette), but can be separable by the yellowish-grey inner surface of labial palpi, and valva without square-shaped lobe before apex.

Description. Wingspan 19 mm. Head brown. Antenna about 3/4 length of forewing. Labial palpi brown on outer surface, and yellowish-grey on inner surface, as same as that of *M. bucephala* (Snellen). Thorax and tegula dark-brown anteriorly, and yellowish-grey posteriorly. Forewing yellowish-white, patterned by bold brown spots: costal margin with long-ovate spot near base, 5 short oblique streaks before mid, and different shape of 3 large spots beyond mid to apex: inner one triangular, middle one ovate and largest, and smaller one triangular near apex; large brown-spot on dorsal margin rounded anteriorly and slightly sinuated on outer margin. Venation as same as that of *M. bucephala* (Snellen) with R_3 and R_4 stalked near 1/3. Hindwing grey.

¹Institute of Biology and Pedology, Far East Branch of Russian Academy of Sciences, Vladivostok, 690022, Russia

²Center for Insect Systematics, Kangwon National University, Chuncheon, 200-701, Korea



Figs. 1-4. Adult: 1-*Morophaga parabucephala* sp. nov., 2-*Ceratuncus orientanus* sp. nov., 3-*Gerontha amplipecta* sp. nov., 4-*Gerontha namhaensis* sp. nov.

Male genitalia (Figs 8, 9). Uncus bilobed; lobes spatulate, broader, and expanded laterocaudally, and slightly curved ventrally. Tegumen short, about 1/2 length of uncus. Subscaphium elongate, ribbon-like. Valva with digitate ventral apex, lacking subapical process, with m-shaped bilobate process on medial surface; dorsal margin truncated, almost straight, whereas heavily convex in *becephala*. Saccus wide, elongate, rounded at apex, longer than uncus+tegumen. Aedeagus slender, about 2 times of valva in length, without thorn-like carinae apically; vesica without cornuti. Female unknown.

Type. Holotype: male, Kwangleung, Kyunggi Prov., Korea, 17. VI. 1994 (B.K. Byun & H.P. Jeong).

Distribution. Korea.

***Ceratuncus orientanus* sp. nov. (Figs 2, 5-7)**

Diagnosis. This new species is close to the type-species of the genus: *Ceratuncus danubiellus* Mann., but can be distinguished by smaller forewing, and the following male genitalic characters: lobes of uncus

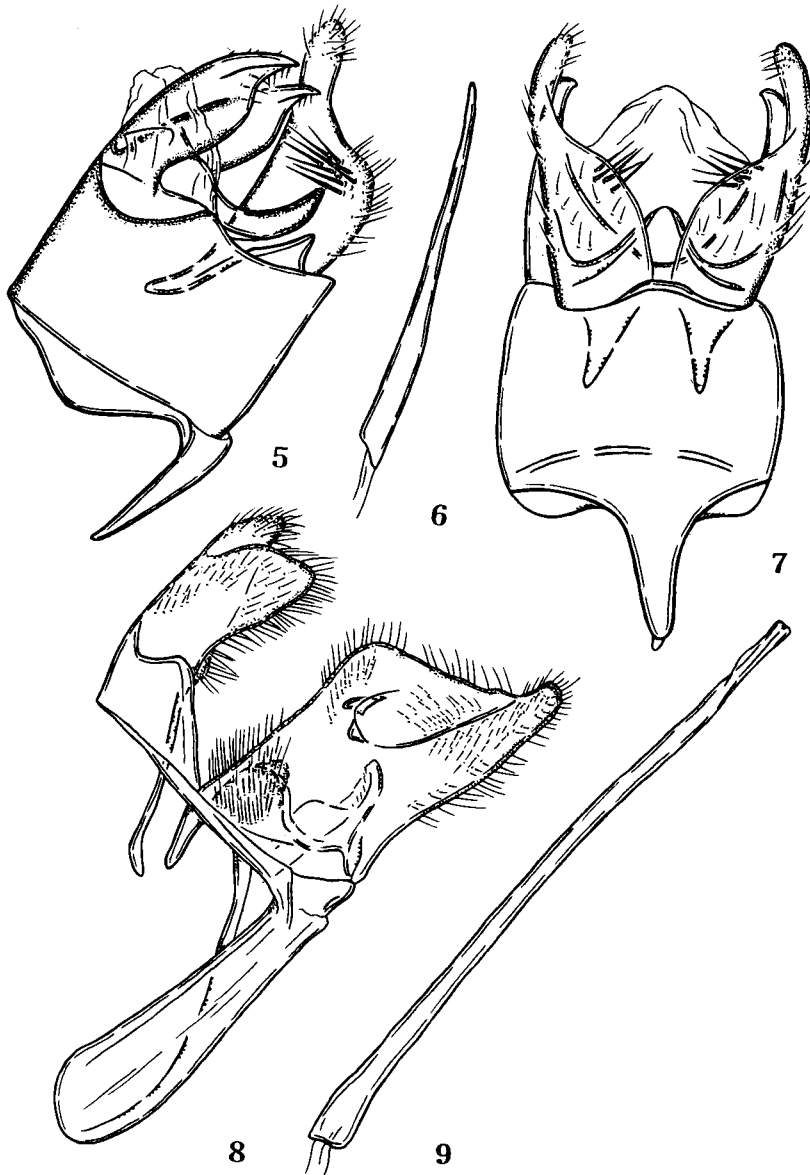
with single apex, valva with narrower distal part and with tuft of strong spines on ventral part.

Description. Wingspan 10 mm. Head brownish-grey. Labial palpi concolourous. Antenna about 4/5 length of forewing. Thorax and tegula with mixed whitish and brownish-grey scales. Forewing with ground-colour greyish white, scattered with greyish-brown scales forming transversal lines and spots irregularly. Hindwing brownish-grey.

Male genitalia (Figs 5-7). Uncus strongly emarginated, with two large lobes laterally; apex pointed, and proximal part dilated. Tegumen+vinculum together forms a large ring. Gnathos with two narrow arms joining at apex. Valva digitate at distal part, and convexed on medioventrally, with strong spines on inner surface medially. Saccus elongate, narrowed towards apex. Aedeagus slender, narrow, slightly longer than valva. Female unknown.

Type. Holotype: male, Kwangleung, Kyunggi Prov., Korea, 8. VI. 1977 (K.R. Choe). Paratype: 1♂, same locality as holotype, 8. VI. 1977 (J.C. Paik).

Distribution. Korea.



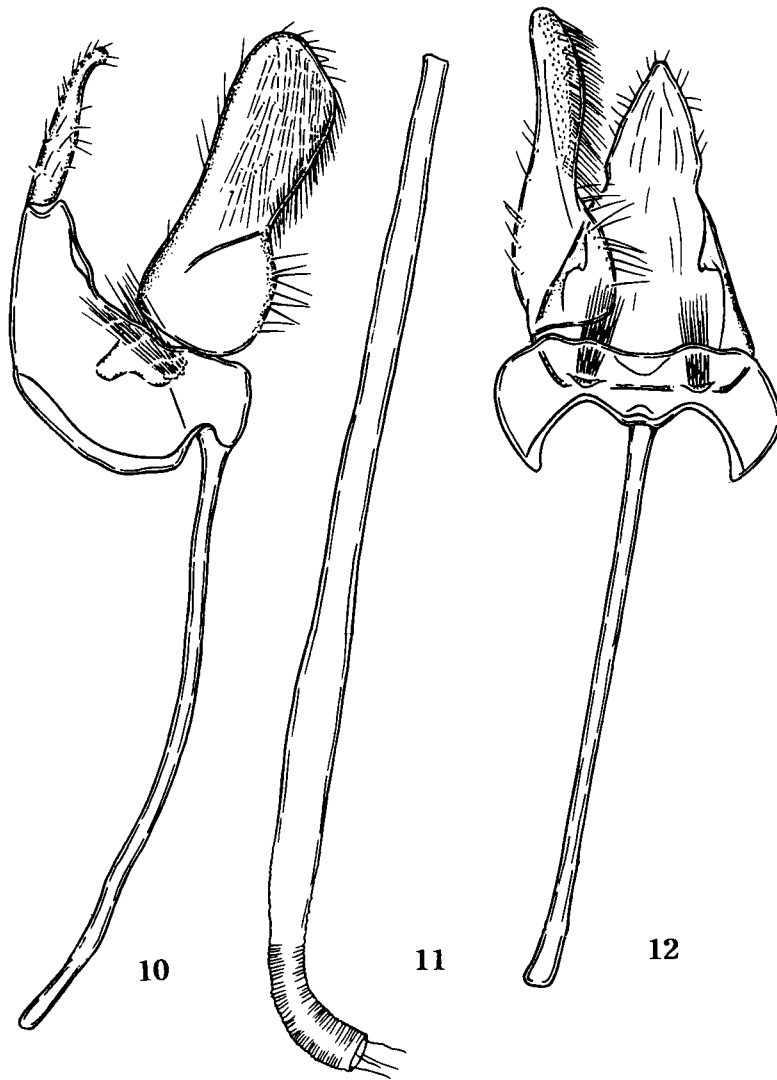
Figs. 5-9. Male genitalia: 5-*Ceratuncus orientanus* sp. nov., lateral view, 6-ditto, aedeagus, 7-ditto, ventral view; 8-*Morophaga parabucephala* sp. nov., 9-ditto, aedeagus.

***Gerontha amplipecta* sp. nov (Figs 3, 10-12)**

Diagnosis. The forewing pattern of this new species is similar to *Gerontha borea* Moriuti known from Japan, but it is separable by having a large brown-spot near the end of cell. Male genitalia of this species are quite different from those of *G. borea*; with triangularly pointed uncus, lacking gnathos, tuft with strong spines near

base of valva. It is also close to *G. soronii* Moriuti from Thailand, but can be separable from the latter by the shape of valva, lacking basal process.

Description. Wingspan 20.5-21 mm. Head with whitish scales. Labial palpi yellowish-white. Thorax and tegula slightly brownish anteriorly and greyish-white posteriorly. Antenna as long as 3/4 length of forewing. Forewing with veins R_4 and R_5 stalked near middle, M_3



Figs. 10-12. *Gerontha amplipecta*, male genitalia: 10-lateral view, 11-aedeagus, 12-ventral view.

approximate to CuA_1 at base, ground-colour white with dispersed dark-brown scales irregularly, patterned by 5 dark-brown spots along costal margin, round spot at the end of cell and small dark-brown dots along the cell and dorsal margin. Hindwing brownish-grey with veins M_1 and M_2 stalked before $2/3$ length of wing.

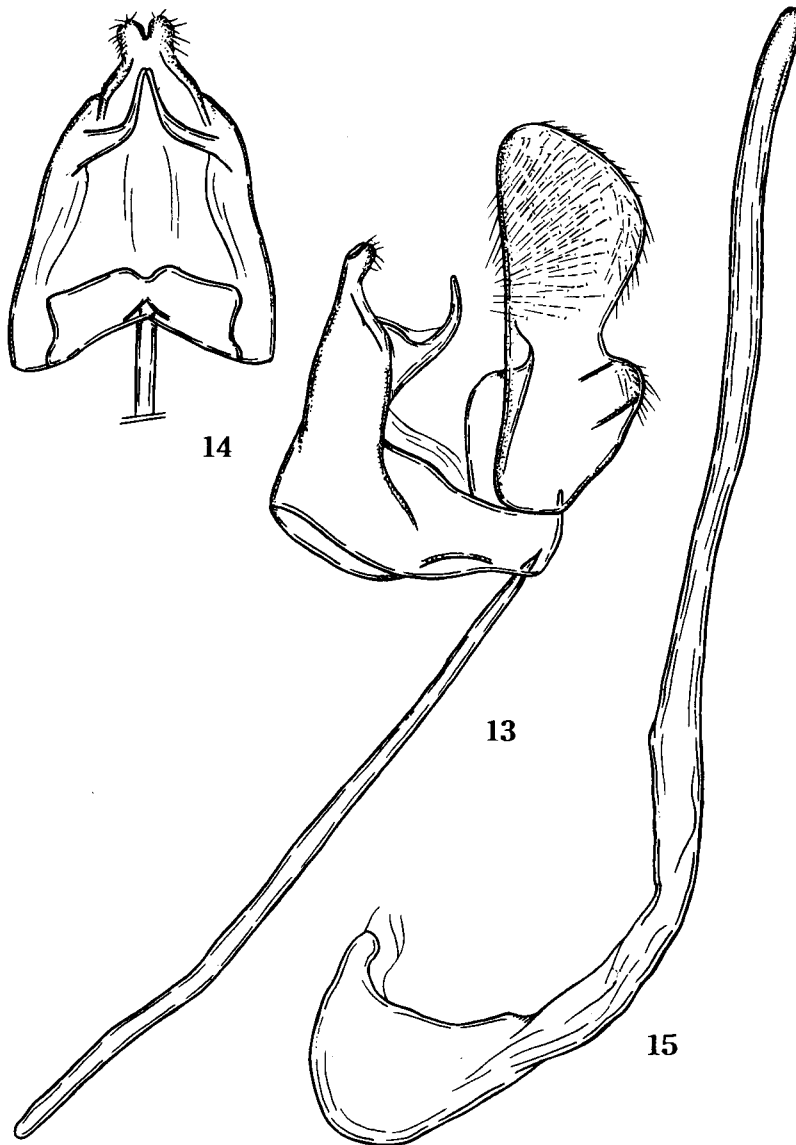
Male genitalia (Figs 10-12). Uncus triangular, slightly truncated at apex. Tegumen dilated towards base, together with vinculum forming a ring. Gnathos absent, as same as in *Gerontha siroii* Moriuti, only strongly sclerotized triangular plates arising on lateral sides. Valva quadrate, slightly narrowed medially, with rounded

apex, tuft of strong setae near its base. Vinculum with narrow saccus, about 2 times of valva in length. Aedeagus slender, as long as 3 times of valva, wrinkled at base. Female unknown.

Type. Holotype: male, Bongmyoung-ri, Hongcheon, Kangwon Prov., Korea, 30. VI. 1992 (K.T. Park & B. K. Byun). Paratype: 1♂, Mt. Samak-san, near Chuncheon, Kangwon Prov., Korea, 22. VI. 1989 (K.T. Park).

Distribution. Korea.

Gerontha namhaensis sp. nov. (Figs 4, 13-15)



Figs. 13~15. *Gerontha namhaensis* sp. nov., male genitalia. 13-lateral view, 14-ventral view, 15-aedeagus.

Diagnosis. *Gerontha namhaensis* sp. nov. differs from the previously known species of the genus by the square-shaped lobes of uncus, and strong emargination near middle of the ventral margin of valva.

Description. Wingspan 14 mm. Head, thorax and tegula with whitish scales. Antenna as long as 3/4 length of forewing. Inner surface of labial palpi white with brown scales basally, its outer surface brown in proximal half and white distally. Costal margin of

forewing with 7 small dark brown spots, ground-colour white with irregular small dark brown dots; veins R_4 and R_5 stalked beyond the middle, M_3 approximate to CuA_1 at base. Hindwing brownish-grey, with M_1 and M_2 stalked at about 4/5 length of wing.

Male genitalia (Figs 13~15). Uncus with two square-shaped lobes distally. Tegumen dilated towards base, together with vinculum forms a ring. Gnathos with two relatively narrow arms joined ventrally. Valva dilated

towards apex, with gutter-like structure before middle of dorsal margin, ventral margin strongly emarginate near middle. Saccus extremely long, almost 2 times of valva in length. Aedeagus slender, narrow, inflated and wrinkled at base, longer than 1.5 times of saccus in length. Female unknown.

Type. Holotype: male, Kwangleung, Kyunggi Prov., Korea, 10. VII. 1990 (K.T. Park). Paratypes: 2♂, Namhae, Kyungnam Prov, Korea, 25. VII. 1985 (K.T. Park), gen. prep. no 1398 & 1399/ Park..

Distribution. Korea.

SPECIES NEW TO KOREA

Montescardia kurenzovi (Zagulyaev)

Zagulyaev, 1966, Entomol. obozr., 45: 637 (*Scardia*).

Material examined: 1♀, Mt. Seolak-san, Kangwon Prov., 26. V. 1983 (H.S. Lee.)

Distribution. Korea (first record), Russian Far East: Primorye Territory.

Morophagoides ussuriensis (Caradja)

Caradja, 1920, Dt. ent. Z. Iris : 167 (*Scardia*).

Material examined: ♂ Mt. Jiri-san, Jeonnam Prov., 11. VII. 1976 (Y.Y. Ha).

Distribution. Korea (first record), Russian Far East.

Gerontha borea Moriuti

Moriuti, 1977, Tinea, 10: 131.

Material examined: 3♂, Kwangleung, Kyunggi Prov., 8. VII. 1992 (K.T. Park & B.K. Byun); 3♂, Chuncheon, Kangwon Prov., 21. VII. 1992 (K.T. Park & B.K. Byun); 1♂, Kwangleung, Kyunggi Prov., 17. VI. 1994 (B.K. Byun & H.P. Jeong).

Distribution. Korea (first record), Japan.

Monopis pavlovskii Zagulyaev

Zagulyaev, 1955, Trudy Zool. Institute, XXI: 278-291.

Material examined: 1♀, Suweon, Kyunggi Prov., 13. VII. 1975 (K.T. Park); 1♂, Kwangleung, Kyunggi Prov., 15. V. 1982 (K. T.Park); 1♀, Seoul, 28. II. 1982 (K.T. Park); 1♂, Mt. Daelyong-san, near Chuncheon,

Kangwon Prov., 15. VI. 1984 (K.M. S.); 1♀, Chuncheon, 6. V. 1990 (K.T. Park); 1♂, same locality, 28. V. 1990 (K.T. Park); 1♀, same locality, 26. VI. 1990 (S.W. Cho); 3♂, Bongmyoung-ri, Hongcheon, Kangwon Prov., 30. VI. 1992 (K.T. Park & B.K. Byun).

Distribution. Korea (first record), China, Russian Far East.

Monopis laevigella [Denis et Schiffermüller]

Denis et Schiffermüller, 1775, Ankundung eines Systematischen Werkes von den Schmetterlinge der Wienergegend Bernardi, Vienna. 322pp., 2pls. (*Tinea*).

= *rustcella* Hübner, 1796

Material examined: 1♂, Kwangleung, Kyunggi Prov., 8. VI. 1977 (K.R. Choe).

Distribution. Korea (first record), Japan, Russian Far East, Middle Asia, Caucasus, Europe.

Niditinea baryspilas (Meyrick)

Meyrick, 1937, Exotic Microlepidoptera, 5: 112 (*Tinea*).

Material examined: 1♂, Suweon, Kyunggi Prov., 18. V. 1977 (K.T. Park); 1♀, Cheongju, Chungbug Prov., 21. VII. 1974 (K.T. Park); 1♀, Mapo, Seoul, 15. IX. 1988 (S.W. Cho).

Distribution. Korea (first record), Japan, Middle Asia.

SPECIES NEW TO RUSSIAN FAR EAST

Trichophaga abruptella Wollaston

Wollaston, 1858, Ann. Mag. Nat. Hist., I: 120.

Material examined: 5♂, Primorsky Territory, 12 Km SW Slavyanka, 14-20. VIII, 1992 (M. G. Ponomarenko); 1♀, Primorsky Terr. 28 km W Partisansk, 19. VI. 1988 (M.G. Ponomarenko).

Distribution. Russian Far East: Primorye Territory (first record), Mongolia, Asia Minor, Middle Asia, Kazakhstan, Caucasus, Europe.

Morophaga fasciculata Robinson

Robinson, 1986, Bull. Br. Mus. nat. Hist., 52(2): 133.

Material examined: 1♂, Primorsky Territory, 14 km

E Artyom, 14. VII. 1995 (M.G. Ponomarenko).

Distribution. Russian Far East: Primorye Territory (first record), Korea, Japan.

***Opogona nipponica* Stringer**

Stringer, 1930, Ann. Mag. Nat. Hist., 10(6): 420.

Material examined: 1♂, Primorsky Territory, 14 km SW Partisansk, 5. VIII. 1993 (Beljaev); 1♀, Primorsky Territory. Popov Island, 21. VIII. 1993 (M.G. Ponomarenko); 1♂, Primorsky Territory, 24 km NW Maryak-Rybolov, 6. VIII. 1995 (M.G. Ponomarenko); Distribution. Russian Far East: Primorsky Territory (first record), Korea, Japan.

***Monopis nonimella* Zagulyaev**

Zagulyaev, 1955, Trudy Zool. Institute, XXI: 278-291.

Material examined: 1♀, Primorsky Territory, Popov Island, 21. VIII. 1993 (M.G. Ponomarenko).

Distribution. Russian Far East: Primorsky Territory (first record), Siberia, Middle Asia, Europe.

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