

Review of the Palaearctic species of the genus *Eusterinx* Förster, 1868 (Hymenoptera: Ichneumonidae) with descriptions of new species

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Обзор палеарктических видов ихневмонид рода *Eusterinx* Förster, 1868 (Hymenoptera: Ichneumonidae) с описанием новых видов

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Abstract. A review of the Palaearctic species of the genus *Eusterinx* Förster is given. Four new species of the genus *Eusterinx* are described: *E. (Divinatrix) apophysa* sp. n. (Primorskiy Terr.), *E. (D.) kurilensis* sp. n. (Kurile Is.), *E. (Holomeristus) jakutica* sp. n. (Yakutia) and *E. (E.) tobiasi* sp. n. (W. Siberia). Male of the Eastern Palaearctic species *E. permiranda* Rossem is described and this species moved from subgenus *Ischyrae* Förster to *Holomeristus* Förster.

Key words. Hymenoptera, Ichneumonidae, *Eusterinx*, review, new species, Palaearctic.

Резюме. Дается обзор палеарктических видов рода *Eusterinx* Förster. Описываются 4 новых вида: *Eusterinx (Divinatrix) apophysa* sp. n. (Приморский край), *E. (D.) kurilensis* sp. n. (Курильские острова), *E. (Holomeristus) jakutica* sp. n. (Якутия) и *E. (E.) tobiasi* sp. n. (З. Сибирь). Описан ранее неизвестный самец восточнопалеарктического *E. permiranda* Rossem и этот вид перемещен из подрода *Ischyrae* Förster в подрод *Holomeristus* Förster.

Ключевые слова. Hymenoptera, Ichneumonidae, *Eusterinx*, обзор, новые виды, Палеарктика.

Introduction

The genus *Eusterinx* was described by Förster (1868) in the ichneumonid subfamily Plectiscoidae (= Helictinae Gupta, 1987). Some authors consider now Helictinae as synonym of Orthocentrinae s. l. (Wahl, 1990; Yu, Horstmann, 1997). The *Eusterinx* species are extremely varied morphologically, as evidenced by the description of several species in different genera. For example, *E. tenuicincta* Förster was described originally in *Holomeristus* Förster, *E. bispinosa* Strobl – in *Ischyrae* Förster. Several genera described by A. Förster (1868, 1871) (*Holomeristus*, *Ischyrae*, *Trestis*) and by Thomson (1888) (*Catomicrus*) were synonymized with *Eusterinx* by Townes (1971). Van Rossem described a set of species and proposed subgeneric division for this genus. The Nearctic fauna was monographed by Dasch (1992). Type material of Förster's species was revised by Aubert (1968) and Van Rossem (1980, 1982, 1987, 1988, 1991), but unfortunately the situation in the genus is not yet fully clarified.

According to the Catalogue of world Ichneumonidae, 42 species of *Eusterinx* with mainly Holarctic distribution are divided into 6 subgenera: *Dallatorrea* Ashmead (4 species), *Divinatrix* Rossem (2 spe-

cies), *Eusterinx* Förster (21 species), *Holomeristus* Förster (7 species), *Ischyracis* Förster (2 species) and *Trestis* Förster (6 species). Altogether 24 species from all mentioned subgenera are known to occur in the Palaearctic (Yu, Horstmann, 1997). Later it was shown that *E. (E.) hirticornis* Strobl is a synonym of the cryptine *Polyaulon paradoxus* Zett. (Horstmann, 1998).

Four new species from the collections of the Zoological Institute RAS (St. Petersburg) not included in a recent review of the Russian fauna (Humala, 2003) are described below. The subgenus *Eusterinx* is excluded from this review because it requires special revision. Additional materials from several European collections were also studied: Zoologische Staatssammlung (München); Zoological Museum and Department of Applied Biology of Helsinki University; private collections of R. Jussila (Turku, Finland), C.J. Zwakhals (Arkel, Netherlands) and M. Schwarz (Kirchschlag, Austria). Type specimens of new species are deposited at the Zoological Institute RAS (St. Petersburg, Russia).

Systematic part

Genus *Eusterinx* Förster, 1868

Subgenus *Divinatrix* Rossem, 1987

Type species: *Eusterinx inaequalis* Rossem, 1982.

Remarks. The subgenus is characterized by the presence of distinct transverse groove on tergites 2–4, not found in other groups of this subfamily. Previously two species of this subgenus were known: the Holarctic *E. inaequalis* Rossem and *E. inaspicua* Rossem from the Eastern Palaearctic. Two new species from the Russian Far East are described below.

1. *Eusterinx (Divinatrix) apophysa* Humala, sp. n. (Figs 2, 4).

Diagnosis. This new species is closely allied to *E. (D.) inaequalis* Rossem, differing in the presence of apophyses, the long first metasomal segment, the slender flagellomere 1, and the presence of tyloids on male flagellomeres 6 and 7.

Description. Female. Body length 3.2 mm; fore wing length 2.7 mm. Flagellomere 1 somewhat curved, about 6.0 times as long as wide; flagellomere 2 about 5.0 times as long as wide; head width 1.15 times its height; face width on the level of antennal sockets 1.27 times its height, 0.4 times of head width, polished; eyes large, convex, almost touching clypeus; malar space short, as long as diameter of flagellomere 1; eyes strongly convergent ventrally, without setae; clypeus width 1.63 times its height; apical margin of clypeus depressed, with 2 rounded corners and emargination between them (Fig. 4); mandibles slender, bidentate, twisted inwards, upper tooth longer than lower tooth; ocelli of moderate size, OOL 2.6 times Od; occipital carina present; temple width almost equal to OOL.

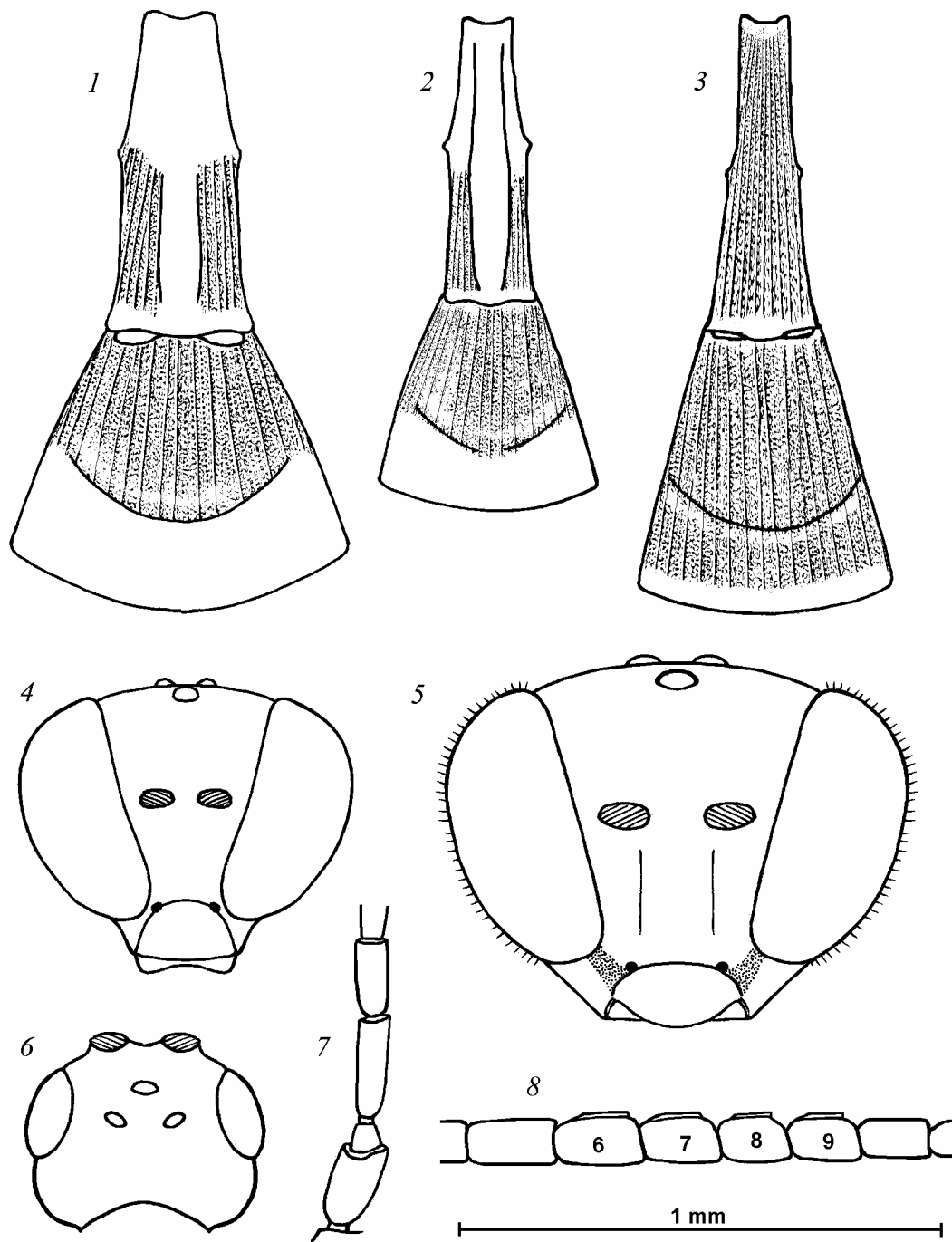
Mesosoma 1.58 times as long as high; epomia present; mesoscutum granulate, notauli deep, meeting in the middle of mesoscutum and forming a small median ridge; scutellum striate; prepectal carina well developed, complete; sternauli short and deep; mesopleuron polished; propodeum granulate, its carinae complete; apophyses developed, somewhat flattened. Fore wing with petiolate, parallel-sided areolet; second recurrent vein with 2 bullae; nervulus situated opposite basal vein; nervellus not intercepted, discoidella absent. Hind coxae coriaceous; hind femur 5.56 times as long as wide; hind basitarsus 0.44 times as long as hind tibia.

First metasomal segment striate, 3.2 times as long as wide; sternite and tergite fused, glymma absent, spiracle situated at 0.45 of tergite, apex of first sternite at 0.67 of segment; dorsal carinae present; 2nd segment 0.97 times as long as wide. Tergites 2–4 roughly striate with arcuate transverse groove in apical half, sculpture of basal parts considerably more rough, apical margins polished (Fig. 2); epipleurae of tergites 2–4 separated by a crease; remaining tergites nearly impunctate; ovipositor sheath 0.59 times as long as hind tibia, tip of ovipositor strongly narrowed.

Colour. Fuscous; base of antennae, palpi, apical margins of tergites 2–4 and legs yellowish brown; rest of antennae, clypeus, mandibles, tegulae and hind coxae brown. Wings hyaline, pterostigma light brown.

Male. Body length 3.5 mm; fore wing length 2.8 mm. Antennae with 19 segments; flagellomere 1 about 6.0 times as long as wide; flagellomere 2 about 5.8 times as long as wide; tyloids present on flagellomeres 6 and 7; emargination between corners on apical margin of clypeus developed less distinctly. Other characters as in female.

Material. Holotype: ♀, Russia, Primorskiy Terr., Spassk-Dalniy, 15 VII 1995 (Belokobylskij). Paratype: 1 ♂, Primorskiy Terr., Gornotayozhnaya, 20 km SE Ussuriysk 30 VIII 1978 (Kasparyan).



Figs 1-8. *Eusterinx inaequalis* Rossem (1), *E. apophysa* sp. n. (2, 4), *E. kurilensis* sp. n. (3), *E. jakutica* sp. n. (5, 8) and *E. tobiasi* sp. n. (6, 7). 1-3 — first and second tergites of metasoma; 4, 5 — head of female, frontal view; 6 — head, dorsal view; 7 — base segments of left antenna; 8 — tyloids of the left antenna, ♂.

2. *Eusterinx (Divinatrix) inaequalis* Rossem, 1980.

Diagnosis. This species is recognizable by the absence of apophyses, the short first metasomal segment, the differences in the sculpture of the distal and apical parts of metasomal segments 2–4, and the presence of tyloids on flagellomeres 6–9 or (sometimes) 6–8.

Material. 25 ♀, 12 ♂, Russia: Karelia, Leningradskaya Prov., Western Siberia (Taz River), Buryatia, Chita Prov., Primorskiy Terr.; Ukraine (Carpathians), Finland, Netherlands, Italy.

Distribution. Holarctic: Canada, USA (including Alaska), Netherlands, Italy, Finland, Lithuania, Russia.

3. *Eusterinx (Divinatrix) inaspicua* Rossem, 1988.

Diagnosis. The species differs from other species in this subgenus in the absence of the areolet and occipital carina, and the more robust hind femora. The male of this species is unknown.

Material. 2 ♀, Russia: Primorskiy Terr.

Distribution. Palaearctic: Russian Far East.

4. *Eusterinx (Divinatrix) kurilensis* Humala, sp. n. (Fig. 3).

Diagnosis. This new species differs from the closely allied *E. (D.) inaequalis* Rossem and *E. (D.) apophysa* sp. n. in the long first metasomal segment, the slender basal flagellomeres and hind femora, the distinct longitudinal sculpture on the apical parts of tergites 2–4, and the completely fuscous hind coxae. *Eusterinx (D.) kurilensis* sp. n. differs from *E. (Divinatrix) inaspicua* in the presence of an areolet and occipital carina, and the slender hind femora.

Description. Female. Body length 4.0 mm; fore wing length 3.3 mm. Antenna long, with 20 flagellar segments, all flagellomeres longer than wide; flagellomere 1 about 6.0 times as long as wide, almost as long as flagellomere 2; head width 1.1 times height; face width on the level of antennal sockets 1.67 times its height, 0.38 times of head width, sub-polished and closely punctate; eyes large, convex, without setae, strongly convergent ventrally; clypeus width 1.6 times its height, apical margin of clypeus nearly truncate; malar space very small, 0.4 times as long as basal width of mandible; subocular groove lacking; mandibles slender, bidentate, twisted inwards, upper tooth longer than lower tooth; ocelli of moderate size, OOL twice Od; occipital carina present; temple short, its width almost equal to OOL.

Mesosoma 1.58 times as long as high, polished; epomia present; notauli deep, extending to middle of mesoscutum; prepectal carina well developed, complete; sternaui short, but distinct; propodeum with all carinae, apophyses not developed, areola well defined. Fore wing with petiolate areolet; second recurrent vein with 2 bullae; nervulus situated nearly opposite basal vein; nervellus not intercepted, discoidella absent. Hind coxae coriaceous; hind femur 6.6 times as long as wide; hind basitarsus 0.42 times as long as hind tibia.

First metasomal segment striate, 2.9 times as long as wide; sternite and tergite fused, glymma absent, spiracle situated at the middle, apex of first sternite at 0.8 of segment; second segment 1.05 times as long as wide. Tergites 2 to 4 coarsely striate with distinct arcuate transverse groove in apical halves, sculpture of both their parts with no evident differences (Fig. 3), remaining tergites nearly impunctate; epipleura of tergites 2–4 separated by a crease; ovipositor surpassing the metasoma apex, broken in the available specimen.

Colour. Fuscous; apical margins of tergites 2–4 brown; antennae, clypeus, mandibles, palpi and legs brownish except fuscous hind coxae and femora. Wings hyaline, pterostigma light brown.

Male. Unknown.

Material. Holotype: ♀, Russia, Kurile Is, Kunashir I., 7 km N Mendeleevo, mixed forest, 2 VIII 1981 (Belokobylskij).

Subgenus *Dallatorrea* Ashmead, 1902

Type species: *Dallatorrea armata* Ashmead, 1902.

Remark. This is only one known Palaearctic species of this subgenus.

Eusterinx (Dallatorrea) circaea Rossem, 1980.

Diagnosis. This is the largest species of the genus in the Palaearctic fauna (body length up to 7.0 mm). The species is characterized by large convex eyes strongly converging to clypeus, and well developed, flattened apophyses.

Material. 8 ♀, 2 ♂, Russia: Karelia; Kazakhstan, Finland, Germany, Austria, Italy.

Distribution. Palaearctic: Germany, Austria, Italy, Finland, Russia, Kazakhstan.

Subgenus *Ischyracis* Förster, 1868

Type species: *Ischyracis bispinosa* Strobl, 1900.

Remarks. This subgenus is recognizable by the well-developed apophyses on the propodeum, the concave tyloid on flagellomere 6, and the absence of the fore wing areolet. Only one species is known in this subgenus — the Holarctic *E. (I.) bispinosa* Strobl. *E. (I.) permiranda* Rossem from the Eastern Palaearctic is excluded from this subgenus and moved to *Holomeristus*.

***Eusterinx (Ischyracis) bispinosa* (Strobl, 1900).**

= *Catomicrus alpigenus* Strobl, 1903.

Material. 17 ♀, 5 ♂, Russia: Karelia, Krasnoyarsk Terr., (Yartsevo, Jenisei River), Khabarovsk and Primorskiy Terr., Kurile Is (Kunashir); Ukraine (Carpathians), Netherlands, Germany, Austria.

Distribution. Holarctic: Canada, USA (including Alaska), Netherlands, Germany, Austria, Ukraine, Russia.

Subgenus *Trestis* Förster, 1868

= *Catomicrus Thomson*, 1888.

Type species: *Tryphon pusillus* Zetterstedt, 1838.

Remarks. This subgenus is characterized by the presence of apophyses on the propodeum, the lack of a fore wing areolet, and the eyes often pubescent and convergent ventrally.

1. *Eusterinx (Trestis) trifasciata* (Ashmead, 1899).

= *Eusterinx (Catomicrus) disparilis* Rossem, 1982

Diagnosis. This species is recognizable by the somewhat developed apophyses, the pubescent eyes, the presence of tyloids on flagellomeres 6–9, and the coriaceous tergites.

Material. 3 ♀, 4 ♂, Russia: Yakutia; Finland.

Distribution. Holarctic: Canada, USA (including Alaska), Sweden, Finland, Russia.

2. *Eusterinx (Trestis) trichops* (Thomson, 1888).

= *Tryphon pusillus* Zetterstedt, 1838.

Diagnosis. This species is characterized by the undeveloped apophyses, the pubescent eyes, the absence of tyloids, the slender hind femur, and the striate second tergite.

Material. 31 ♀, 2 ♂, Russia: Karelia, Komi, Western Siberia (Taz River), Yakutia, Primorskiy Terr.; Finland, Sweden.

Distribution. Palaearctic: Sweden, Finland, Russia.

Subgenus *Holomeristus* Förster, 1868

Type species: *Holomeristus tenuicinctus* Förster, 1871.

Remarks. The species of this subgenus are characterized by the wide head, the flat clypeus, the areolet present (except for *E. truculenta*), and the ovipositor comparatively long. Tyloids are present on flagellar segments 6–9 (sometimes also on 10–12).

1. *Eusterinx (Holomeristus) aquilonigena* Rossem, 1982.

Diagnosis. This species is recognizable by the straight ovipositor, the narrow malar space, the weak notauli, the wide areola, the presence of tyloids on flagellar segments 6–9 (rarely also 10 and 11).

Material. 12 ♀, 18 ♂, Russia: Karelia, Leningradskaya, Arkhangelsk, Yaroslavl and Chita Prov., Primorskiy Terr., Kamchatka; Finland.

Distribution. Palaearctic: Sweden, Finland, Russia.

2. *Eusterinx (Holomeristus) jakutica* Humala, sp. n. (Figs 5, 8).

Diagnosis. New species is recognizable by the eyes setose and convergent ventrally, the areolet in fore wing small, and the presence of tyloids on flagellar segments 6–9.

Description. Female. Body length 6.0 mm; fore wing length 4.5 mm. Antennae slender, with 19–20 flagellar segments; flagellum slightly thickened apically; flagellomere 1 about 3.8 times as long as wide; flagellomere 2 about 3.5 times as long as wide; subapical flagellomeres almost square. Head width 1.27 times its height; face width on the level of antennal sockets 1.58 times its height, 0.45 times head width (Fig. 5); eyes large, convex, pubescent, convergent ventrally; frons polished; clypeus small, about 1.8 times as wide as high, convex near the base and otherwise almost flat, apical margin of clypeus almost truncate, basal margin separated from face by shallow groove; mandibles slender, bidentate, twisted inwards, upper tooth longer than lower tooth; malar space somewhat granulated, 0.87 times as long as basal width of mandible; occipital carina complete; ocelli small, OOL 2.2 times Od; temple polished, weakly convex.

Mesosoma 1.5 times as long as high, matt except polished on speculum; epomia present, mesoscutum setose, coriaceous; notauli deep, extending to the middle of mesoscutum; prepectal carina well developed, not interrupted ventrally; sternauli short, but distinct; propodeum rugose, with complete carinae, areola well defined, apophyses not developed. Fore wing with small petiolate areolet; second recurrent vein with 2 bullae. Nervulus slightly antefurcal; nervellus indistinctly intercepted below its middle (not intercepted in paratypes), discoidella undeveloped. Hind coxae coriaceous; hind femur 5.6 times as long as wide; hind basitarsus 0.38 times as long as hind tibia.

First metasomal segment coriaceous, with strong dorsal carinae, its length 1.76 times width; sternite and tergite fused, no glymma present. Spiracle situated at the middle, apex of first sternite situated at 0.56 of tergite; second segment 0.69 times as long as its width; second and base of third tergites coriaceous with indistinct longitudinal striation; remaining tergites subpolished; laterotergites 2 and 3 separated by a crease; ovipositor almost as long as hind tibia, its sheath 0.52 times as long as hind tibia; tip of ovipositor strongly tapered and slightly curved downwards.

Colour. Black; apical margins of tergites 2 and 3 (rarely 4) brown; flagellum brownish, clypeus, palpi and legs light brown except fuscous coxae and trochanters. Wings hyaline, pterostigma light brown.

Male. Body length 4.5–5.2 mm; fore wing length 4.2–4.6 mm. Antennae with 21 flagellar segments, tyloids present on flagellomeres 6–9 (Fig. 8); eyes not so strongly convergent to the clypeus; parameres and aedeagus slender. Other characters as in female.

Material. Holotype: ♀ Russia, Yakutia, Tiksi, observatory, tundra, 31 VII 1990 (Kasparyan). Paratypes. 1 ♀, 3 ♂, with label as in holotype.

3. *Eusterinx (Holomeristus) minima* (Strobl, 1903).

Diagnosis. This species is recognizable by the narrow areola of the propodeum, the pubescent and convergent ventrally eyes, the tyloids present on flagellomeres 6–9, and the coriaceous tergites.

Material. 4 ♀, 12 ♂, Russia: Murmansk and Leningradskaya Prov., Western Siberia (Taz and Sob' Rivers), Buryatia, Chita Prov., Yakutia; Finland, Germany, Austria.

Distribution. Palaearctic: Germany, Austria, Finland, Russia.

4. *Eusterinx (Holomeristus) permiranda* Rossem, 1988.

Remarks. The study of additional material and comparison with representatives of other subgenera resulted in the conclusion that *E. permiranda* does not belong to the subgenus *Ischyra*. Characters such as the flat clypeus, presence of an areolet in the fore wing and tyloids on flagellomeres 6–10 indicate a closer relationship with the subgenus *Holomeristus*, where this species should be placed. The male of this species was previously unknown and its description is given below.

Description. Male. Body length 3.1 mm; fore wing length 2.9 mm. Antennae with 26 flagellar segments, tyloids present on segments 6–10; flagellomere 1 almost 4.0 times as long as wide; flagellomere 2 about 3.7 times as long as wide; head width 1.1 times its height; inner orbits of eyes subparallel; face width 1.24 times its height, 0.51 times head width, polished; eyes pubescent; malar space with subocular granulate strip, as long as base of mandible; clypeus convex near basal margin, the rest almost flat, width about twice its height; mandibles slender, bidentate, twisted inwards, upper tooth longer than lower tooth; ocelli of moderate size, OOL 2.2 times Od; occipital carina present.

Mesosoma 1.61 times as long as high; epomia present; mesoscutum polished, notauli deep, meeting in the middle of mesoscutum; prepectal carina well developed, complete; sternauli short and shallow; mesopleuron polished; propodeum

with complete carinae, apophyses small, areola well defined. Fore wing with petiolate and parallel-sided areolet; second recurrent vein with 2 bullae; nervulus slightly antefurcal; nervellus not intercepted, discoidella absent. Hind coxae coriaceous; hind femur 4.3 times as long as wide; hind basitarsus 0.35 times as long as hind tibia.

First metasomal segment striate, 3.2 times as long as wide; sternite and tergite fused, no glymma present, spiracle situated at 0.45 of tergite, apex of first sternite situated at 0.67 of segment length; second segment 0.97 times as long as wide; tergites 2 and 3 aciculate, with polished apical margins; epipleurae of tergites 2–4 separated by a crease; remaining tergites almost smooth.

Colour. Fuscous; clypeus, palpi, mandibles, base of antennae, fore and mid legs (except for brownish coxae) and apical margins of tergites 2–6 yellow; rest of antennae and tegulae light brown; hind femora and tibiae fuscous; hind coxae dark brown. Wings hyaline, pterostigma light brown.

Material. Russia, 4 ♀, 1 ♂: Khabarovsk Terr., Khekhtsir, Korfovskoe forestry, 22 VII 1981 (Kasparyan); Primorskiy Terr., Ussuriysk Nature Reserve, 26 VII 1972 (Kozlov); Kamenushka, 30 km SE Ussuriysk, 14 VII 1981 (Kasparyan); 10 km SW Sokolchi, Lazo Nature Reserve, 22–24 VII 1993 (Belokobylskij); “Kedrovaya Pad” Nature Reserve, 29 VIII 1995 (Belokobylskij).

Distribution. Palaearctic: Russian Far East.

5. *Eusterinx (Holomeristus) refractaria* Rossem, 1982.

Diagnosis. This species is recognizable by the upcurved ovipositor, the wide malar space, the well developed notauli, the presence of apophyses on the propodeum, and the stout hind femora.

Material. 5 ♀, 6 ♂, Finland, Sweden, Germany, Italy.

Distribution. Holarctic: USA (Ohio), Sweden, Germany, Czech Republic, Italy, Finland, Lithuania.

6. *Eusterinx (Holomeristus) similis* Rossem, 1991.

Diagnosis. According to the description this species differs from other members of the subgenus in the short flagellum, the mandible with a single tooth, the convex and pubescent eyes convergent ventrally, the short notauli, the absence of apophyses, and the coriaceous tergites.

Material. Known only from the holotype from Yakutia (Ust'-Lensk Nature Reserve).

Distribution. Palaearctic: Russia.

7. *Eusterinx (Holomeristus) tenuicincta* (Förster, 1871).

Diagnosis. This species is recognizable by the broad face, the wide and somewhat impressed clypeus, the upcurved ovipositor, the well-developed notauli, the lower part of mesopleuron with longitudinal striation, the female antenna with 16 flagellar segments and its apical flagellomere swollen.

Material. 66 ♀, 54 ♂, Russia: Karelia, Leningradskaya Prov., Komi, Western Siberia (Taz River), the Urals, North Caucasus, Khabarovsk and Primorskiy Terr., Kamchatka, Kurile Is; Ukraine (Carpathians), Bulgaria, Finland, Netherlands, Germany.

Distribution. Holarctic: Canada, USA (including Alaska), England, Sweden, Netherlands, Germany, Finland, Bulgaria, Ukraine, Russia, Japan.

8. *Eusterinx (Holomeristus) truculenta* Rossem, 1991.

Diagnosis. According to the description this species differs in the short flagellum, the convex and pubescent eyes convergent ventrally, the well-developed notauli, the absence of an areolet and apophyses, and the coriaceous tergites.

Material. Known only from the holotype from Yakutia (Kumachsurt).

Distribution. Palaearctic: Russia.

Subgenus *Eusterinx* Förster, 1868

Type species: *Eusterinx oligomera* Förster, 1871.

Remarks. The species of this subgenus are characterized by the eyes bare and with parallel inner orbits, the absence of an areolet and apophyses. Tyloids in the members of this subgenus are absent or

present on flagellar segments 6 and (rarely) 7. The subgenus is not treated in detail in this paper because it is in need of revision. One new species is described below.

***Eusterinx (Eusterinx) tobiasi* Humala, sp. n.** (Figs 6, 7).

Diagnosis. This new species differs from the all other species of the subgenus *Eusterinx* lacking tyloids in the considerably inflated temples and long subcylindrical scapus.

Description. Male. Body length 3.2 mm; fore wing length 3.0 mm. Antennae with 19 flagellar segments, tyloids absent; flagellomere 1 3.6 times as long as wide; flagellomere 2 2.8 times as long as wide; scapus rather long, subcylindrical (Fig. 7). Head width 1.12 times its height; face width 1.6 times its height, 0.55 times of head width. Eyes bare, with parallel inner orbits; temples wide, convex, flattened (Fig. 6); clypeus small, 1.67 times as wide as long, convex near base, otherwise almost flat, apical margin nearly truncate, separated from face by groove; mandibles slender, bidentate, twisted inwards, upper tooth longer than lower tooth; malar space 1.4 times as long as mandible base, subocular granulated strip present; occipital carina complete; head polished, with sparse long hairs; ocelli small, OOL 2.3 times Od.

Mesosoma 1.73 times as long as high, mesopleuron finely punctuate, except polished on speculum; epomia present, mesoscutum coriaceous; notauli present, shallow, extending to the middle of mesoscutum; prepectal carina well developed, not reaching anterior margin of mesopleuron; sternauli distinct; propodeum granulate, carinae complete. Fore wing without areolet; nervulus situated opposite basal vein, second recurrent vein with 2 bullae; first subdiscal cell widened apically; hind wing narrow, nervellus reclivous, not intercepted, discoidella absent. Hind coxae coriaceous; hind femur 4.0 times as long as high; hind basitarsus 0.30 times as long as hind tibia.

First metasomal segment coriaceous, with dorsal carinae developed, 3.3 times as long as wide; sternite and tergite fused, no glymma present; spiracle situated at 0.53 of tergite, apex of first sternite situated at 0.64 of tergite; second segment slender, 1.27 times as long as wide, thyridium conspicuous; second tergite coriaceous, remaining tergites subpolished; laterotergites 2 and 3 separated by a crease.

Colour. Black, apical margin of tergite 2 and tergites 3 and 4 entirely brownish; antennae, clypeus, palpi and legs light brown excluding infusate base of hind coxae. Wings hyaline, pterostigma light brown.

Female. Unknown.

Material. Holotype: ♂, Russia, Western Siberia, 50 km ESE Ratta, Taz River, sandy spits, 30 VII 1992 (Kasparyan).

Etymology. This species is named in honour of Prof. V.I. Tobias.

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