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## NEW DATA ON SUBFAMILY OPIINAE (HYMENOPTERA, BRACONIDAE) FROM THE RUSSIAN FAR EAST

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Diagnoses of the genera *Biosteres* s. str. (17 Far Eastern species), *Fopius* (4), *Diachasmimorpha* (16), *Psytalia* (9), and *Utetes* (25), formerly included in *Biosteres* s. l. and *Opius* s. l. are given. The generic rank of the genus *Nipponopius* **stat. ressur.** is restored. *Fopius kotenkoi* **sp. n.**, *Opius sycophanta* **sp. n.**, *Diachasmimorpha kasparyani* **sp. n.** are described; and *D. budrysi* Acht. is redescribed. *Opius maculimembris* Tobias, **nom. n.** is proposed for *O. maculipennis* Tobias, 1998 (nom. praeocc., non Enderlein, 1912). New synonymy is proposed: *Diachasmimorpha paeoniae* (Tobias, 1980) = *Biosteres flavocapitis* Tobias, 1998, **syn. n.** New generic combinations are proposed for 40 species. New distribution data of the nineteen Far Eastern species are given.

KEY WORDS: Russian Far East, Braconidae, taxonomy, new records.

**В. И. Тобиас. Новые данные по подсемейству Опиінае (Нуменоптера, Браконідае) Дальнего Востока России // Дальневосточный энтомолог. 2000. N 83. С. 1-16.**

Приведены диагнозы родов *Biosteres* s. str. (17 видов с Дальнего Востока), *Fopius* (4), *Diachasmimorpha* (16), *Psytalia* (9) и *Utetes* (25), включавшихся ранее в рода *Biosteres* s. l. и *Opius* s. l. Восстановлен статус рода *Nipponopius* **stat. ressur.** Описаны: *Opius sycophanta* **sp. n.**, *Fopius kotenkoi* **sp. n.** и

*Diachasmimorpha kaspariyani* **sp. n.**; переописан *D. budrysi* Acht. Предложено новое название *Opius maculimembris* Tobias, **nom. n.** для *O. maculipennis* Tobias, 1998 (nom. praecox., non Enderlein, 1912). Установлена новая синонимия: *Diachasmimorpha paeoniae* (Tobias, 1980) = *Biosteres flavocapitis* Tobias, 1998, **syn. n.** Для 40 видов предложено новое родовое сочетание. Приведены новые сведения о распространении 19 видов на Дальнем Востоке.

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## INTRODUCTION

A key to the Russian Far East Opiinae has been published recently (Tobias, 1998). R. Wharton (1997) in his last paper divided the genus *Biosteres* s. l. in three genera (*Diachasmimorpha*, *Fopius* and *Biosteres* s. str.) and the subgenus *Utetes* from the genus *Opius* raised to the generic rank. Later a taxonomic position of *Psytalia* and *Utetes* was discussed also and the subgenus *Aulonotus* from the genus *Opius* was ranged to generic level (Fischer, 1998). The most of the Far Eastern species were not discussed by R. Wharton and M. Fischer. Therefore the diagnoses of these genera as well as systematic position of the Far Eastern species are given below. Three new species are found, new combinations and new name instead of preoccupied one are proposed here. The status of the genus *Nipponopius* is restored. Moreover a key to the Far Eastern species of *Diachasmimorpha* is given.

The holotypes and paratypes of new species are deposited in the Zoological Institute (St. Petersburg). The terms of wing venation used here follow Tobias (1986). Next abbreviations are used in the text: Od - diameter of hind ocellus, OOL - ocular-ocellar line, POL - postocellar line, AL - A. Lelej, SS - S. Storozhenko. New distribution data are asterisked (\*).

## TAXONOMY

### Genus *Opius* Wesmael, 1859

Type species: *Opius pallipes* Wesmael, 1835

NOTES. Reexamination of some *Utetes* species revealed, that three specimens from large series identified earlier as *Opius rotundiventris* belong to a new species of *Opius*. New species is very similar to *U. rotundiventris*, but differs by absence of basal hind tibia carina by larger body, by longer ovipositor, by darker head and metasoma. A description of a new species and a new name for preoccupied one are given below.

***Ophius maculimembris* Tobias, nom. n.**

*Ophius maculipennis* Tobias, 1998: 573 [holotype - ♀, Primorskii krai: 20 km SE Ussuriysk, on light, 5.VIII 1991 (S. Belokobylskij), in Zoological Institute, St. Petersburg, examined; nom. praeocc., non Enderlein, 1912].

DISTRIBUTION. Russia: Primorskii krai.

REMARK. *O. maculipennis* Enderlein has been described from Taiwan and redescribed by Fischer (1987).

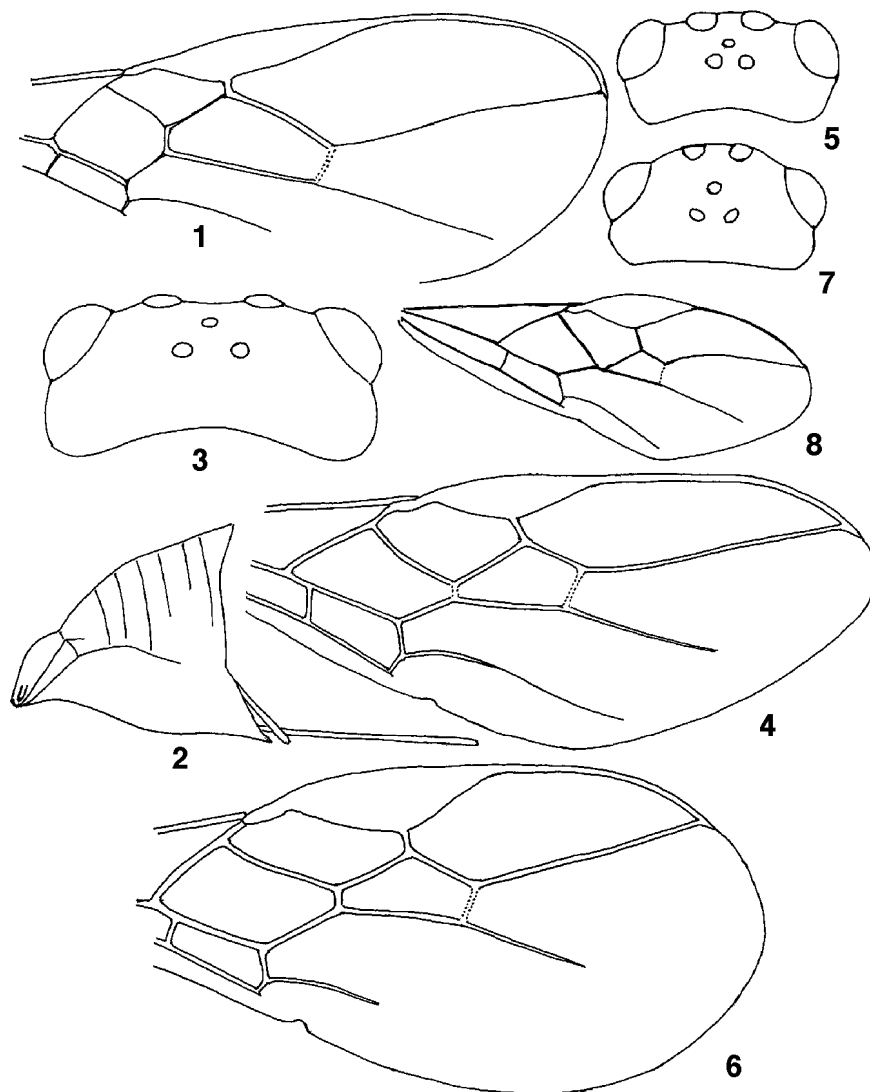
***Opius (Apodesmia) sycophanta* Tobias, sp. n.**

Figs 1, 2

MATERIAL. Holotype: ♀, Primorskii krai: Vladivostok, Morskoe cemetery, oak forest, 8.IX 1982 (Belokobylskij). Paratypes: 1 ♀ with the same label as holotype; 1 ♀, De Friz peninsula, 20 km NNW Vladivostok, forest, 5.IX 1988 (Belokobylskij).

DESCRIPTION. FEMALE. Head behind eye roundly narrowed, 1.8× as broad as long. Transversal diameter of eye 1.8× length of temple. Ocellar triangle without groves laterally. OOL : Od : POL = 2 : 1 : 1. Longitudinal diameter of eye 4× malar space. Malar space 0.9× basal width of mandible. Labrum broadly exposed beneath clypeus. Clypeus evenly protruding, ventral margin evenly convex, 3× as broad as high. Mandible without basal tooth ventrally. Face 2.2× as broad as high. Antenna with 37 segments; first flagellar segment 2×, middles - 1.5×, behind middle - 1.3×, penultimate - 2× as long as broad. Mesosoma 1.5× as long as high. Pronotum without pronope. Propleuron with excavate posterior flange, without oblique carina. Notauli deep anteriorly, undeveloped posteriorly. Prescutellar pit deep, rounded. Lateral margin of mesonotum between notaulus and tegula without carina, behind tegula with carina. Postpectal carina absent. Fore wing (Fig. 1) 1.2× body length. Pterostigma wedgeformig. First abscissa of radial vein short; second abscissa : third abscissa : first radiomedial vein = 6 : 11 : 4. Recurrent vein postfurcal. Distance from basal vein to nervulus 0.5× nervulus length. Hind femur 4.5× as long as broad. Hind tibia without basal carina. Hind tarsus 1.1× as long as hind tibia. Length of basitarsus : second segment : apical segment of hind tarsus = 2 : 1 : 1. First metasomal tergite 1.7× as long as apical wide, with deep laterope (Fig. 2), without pit-like dorsope, spiracle located near its middle. Ovipositor (Fig. 2) with weak preapical node, straight, 2× as long as first metasomal tergite; sheath 1.5× first metasomal segment.

Body smooth. Pronotum medially sculptured. Sternauli narrow, crenulate. Propodeum rugoso-punctate, with short middle carina apically. Body black or dark brown. Mandible, cheek, scape of antenna ventrally, palpi and legs yellowish-brown. Hind tibia brown. Tegula yellow. Wings faintly infuscate, pterostigma and veins brown. MALE. Unknown.



Figs 1-8. Subfamily Opiinae. 1,2) *Opius sycophanta* sp. n.: 1) fore wing, 2) metasoma, lateral view; 3,4) *Diachasmimorpha budrysi*: 3) head, dorsal view, 4) fore wing; 5,6) *D. kasparyani* sp. n.: 5) head, dorsal view, 6) fore wing; 7,8) *Fopius kotenkoi* sp. n.: 7) head, dorsal view, 8) fore wing.

DISCUSSION. *O. sycophanta* is closed to *O. hilaris* Fischer and differs by second abscissa of radial vein  $1.5\times$  first radiomedial vein (in *hilaris* second abscissa of radial vein  $2\times$  first radiomedial vein), by long and straight ovipositor

(in *O. hilaris* ovipositor curved and a little longer than first metasomal tergite), and by larger body.

DISTRIBUTION. Russia: Primorskii krai.

### **Genus *Diachasmimorpha* Viereck, 1913**

Type species: *Diachasmimorpha comperei* Viereck, 1913.

DIAGNOSIS. Occipital carina present laterally. Ventral margin of mandible without basal tooth. Labrum completely or almost completely concealed by clypeus, ventral margin of clypeus usually evenly convex. Propleuron without oblique carina dorsally of pleural flange. Pronotum dorsally usually with pronope varying from completely absent to deep round pit. Notauli smooth. Lateral margin between notaulus and tegula without carina, neither impressed nor crenulate. Postpectal carina absent. Second radiomedial cell of fore wing shortened, second abscissa of radial vein not longer than first radiomedial vein. Recurrent vein of fore wing postfurcal. Recurrent vein of hind wing long, almost reaching wing margin. Hind tibia dorso-posteriorly without basal carina. First metasomal segment with spiracles located near its middle. Hypopygium attenuate and produced from weakly to strongly postero-medially. Ovipositor long to very long.

Frons weakly to distinctly punctate, never strongly sculptured. Propodeum varying from extensively rugose to smooth with only a trace of carinae. Second metasomal segment often striate or costate.

HOST. Parasites of Tephritidae.

FAR EASTERN SPECIES INCLUDED: 17 species which are keyed below.

NOTES. Achterberg (1999) divided Palearctic species of *Diachasmimorpha* in the subgenera *Parasteres* Fischer (species with smooth second metasomal tergite) and *Diachasmimorpha* s.str. (species with "second metasomal tergite coarsely striate or costate medially"). Subgenus *Parasteres* includes three Far Eastern species: *D. aino*, *D. budrysi* and *D. longicauda*. The main character of this subgenus is present in *D. flavoflagellaris*, *D. irkutensis*, *D. rubrosoma* and *D. rubroniger* also. It is necessary to stress out that the sculpture of second metasomal tergite is variable sometimes, for example in *D. olgae*, where the second tergite is fine and only basally striate.

### ***Diachasmimorpha budrysi* Achterberg, 1999**

Figs 3, 4

MATERIAL. 2 ♀, Sakhalin Island: Aniva District, 9 km near estuary of Lutoga River, forest, 30.VII 1988 (A. Kotenko).

REDESCRIPTION. FEMALE. Body length 3.9-4.1 mm. Head 2× as broad as long (Fig. 3). Temple somewhat inflated, length 1.3× transversal diameter of eye. Ocellar triangle rather large, OOL : Od : POL = 10 : 2.5 : 3. Face 1.7× as broad as

high. Malar space 1.1× basal width of mandible, 0.65× longitudinal eye diameter. Clypeus evenly convex ventrally. First flagellar segment slightly longer than second, 2× as long as wide; third and following flagellar segments 1.5×, preapical segments 1.3× as long as wide, penultimate segment 2× as long as wide. Maxillary palpi 0.9× as long as height of head. Mesosoma 1.3× as long as height. Pronotum with deep transversal pronope. Propleuron with narrow posterior flange. Notauli deep anteriorly, shallow posteriorly, prescutellar pit deep. Fore wing (Fig. 4) with second abscissa of radial vein 0.7× as long as first radiomedial vein, third abscissa 5× second abscissa. Distance from basal vein to nervulus 1-1.2× nervulus length. Hind femur 4.5× as long as wide. Apical width of first metasomal tergite almost 2× its basal width. Ovipositor 1.2× body length, with subapical node dorsally.

Body smooth. Face and clypeus punctate. Sternauli faintly crenulate or almost smooth. Propodeum transversally rugose, with unclear areola. First metasomal tergite longitudinally rugose. Head brown, with yellowish face, clypeus and malar space. Mesosoma, fore and middle legs dark brown. Hind legs and metasoma black. Wings very faintly infuscate, pterostigma and veins dark brown.

DISCUSSION. Species was described from Primorskii krai (Achterberg, 1999). *D. budrysi* is similar to *D. nigroruber* (Tobias) and differs by somewhat inflated and shorter temple (in *D. nigroruber* transversal diameter of eye 1.6× temple length), larger ocellar triangle (in *D. nigroruber* OOL : Od : POL = 8 : 2 : 2), dark brown (or with brownish-yellow pronotum anteriorly and mesoscutum partly: see Achterberg, 1999) mesosoma (in *D. nigroruber* mesosoma brownish-yellow).

DISTRIBUTION. Russia: Primorskii krai, \*Sakhalin.

#### ***Diachasmimorpha kasparyani* Tobias, sp. n.**

Figs 5, 6

MATERIAL. Holotype: ♀, Khabarovskii krai: Shevki River, 15 km N Bikin, 1.VI 1983 (D. Kasparyan).

DESCRIPTION. FEMALE. Body length 4.0 mm. Head 2× as broad as long, roundly narrowed behind eye (Fig. 5). OOL : Od : POL = 12 : 3 : 3. Longitudinal diameter of eye 1.5× malar space, 0.6× face width. Face 2× as broad as high. Clypeus evenly convex ventrally. Antenna with 44 segments, first flagellar segment 2× as long as broad, 1.1× as long as second segment; length of greater part of segments 1.3×, penultimate 1.5× their width. Length of maxillary palpi 0.8× height of head. Mesosoma 1.3× as long as high. Pronotum with pit-like pronope, crenulated along middle. Propleuron with flange posteriorly. Notauli wide and impressed anteriorly only, absent medially. Prescutellar pit deep. Sternauli wide, transversally striate. Radial cell of fore wing (Fig. 6) slightly shortened, third abscissa of radial vein 3.5× second abscissa. First radiomedial vein somewhat longer than second abscissa of radial vein. Recurrent vein postfurcal. Nervulus 1.2× distance from that to basal

vein. Hind femur 3.5× as long as wide. First metasomal tergite with pair of lateral carinae and with medial carina; laterope developed, pit-like dorsope absent. Length of first metasomal tergite 0.7× apical width. Ovipositor with minute preapical protuberance dorsally, sheath as long as metasoma with propodeum.

Frons and face punctate. Propodeum rugose. First and second tergites longitudinally costate. Head and mesosoma brownish-yellow, antenna, legs and metasoma black.

MALE. Unknown.

DISCUSSION. *D. kasparyani* sp. n. is closed to *D. rubroniger* (Tobias) and differs by head roundly narrowed behind eye, by rugose sternauli, by more developed malar space, and by completely brownish-yellow mesosoma.

DISTRIBUTION. Russia: Khabarovskii krai.

ETYMOLOGY. Specific name is dedicated to my colleague D. R. Kasparyan, who collected the holotype.

### ***Diachasmimorpha longicauda* (Shestakov, 1940)**

NOTES. *Biosteres shestakovi* Fischer has been proposed for the secondary homonym *B. longicauda* Shestakov (Fischer, 1973). Because of *B. shestakovi* now is transferred to the genus *Diachasmimorpha* the name *D. longicauda* Shestakov has been resurrected (Wharton, 1997).

### ***Diachasmimorpha paeoniae* (Tobias, 1980)**

*Opius* (*Biosteres*) *paeoniae* Tobias in: Ermolaev et al., 1980: 901 [holotype - ♀, Vladivostok, botanical garden, 10-20.VI 1978 (V. Ermolaev); in Zoological Institute, St. Petersburg, examined].

*Biosteres flavocapitis* Tobias, 1998: 645 [holotype - ♀, Primorskii krai, 15 km S Partizansk, 19.VI 1990 (S. Belokobylskij), in Zoological Institute, St. Petersburg, examined], **syn. n.**

NOTES. The ovipositor of *D. paeoniae* is situated apically, but in the hidden state it looks like straight. It was a reason why *B. flavocapitis* has been described as distinct species (Tobias, 1998).

### **Key to the Far Eastern species of *Diachasmimorpha***

1. Sternauli unsculptured. Second metasomal tergite smooth . . . . . 2
- Sternauli sculptured . . . . . 3
2. Pterostigma elongate, radial vein arising before its middle part. Head distinctly enlarged behind eye, length of temple 1.5× transversal diameter of eye. Longitudinal diameter of eye 2× malar space. Antenna yellowish-brown. 4.3 mm. - Kuril Is. . . . . ***D. flavoflagellaris* (Tobias), comb. n.**

- Pterostigma shorter, radial vein arising from its middle part. Head faintly enlarged behind eye, transversal diameter of eye 1.5× length of temple. Longitudinal diameter of eye 1.5× malar space. Antenna black. 3.9-4.5 mm. - Primorskii krai, Sakhalin. (See couplet 15 also) . . . . . ***D. budrysi* Acht.**
- 3. Radial cell shortened, ended before apical part of fore wing, third abscissa of radial vein curved outwards radial cell. Second abscissa of radial vein 1.1× first radiomedial vein. Hind femur 3× as long as wide. Second metasomal tergite smooth. Body black, legs yellowish-brown. 3.5 mm. - Transbaikalia . . . . . ***D. irkutensis* (Tobias), comb. n.**
- Radial cell not shortened or slightly shortened, reaching apical part of fore wing, third abscissa of radial vein straight or curved inwards radial cell. Second abscissa of radial vein not longer, usually shorter than first radiomedial vein . . . . . 4
- 4. Metasoma yellowish behind first tergite . . . . . 5
- Metasoma dark colored . . . . . 6
- 5. Head, mesosoma and legs yellowish-brown. Second metasomal tergite smooth. Second abscissa of radial vein distinctly shorter than first radiomedial vein. 3.5 mm. - Japan . . . . . ***D. aino* (Watanabe)**
- Head, mesosoma and legs dark colored. Second metasomal tergite striate basally. Second abscissa of radial vein almost as long as first radiomedial vein. 2.5-3.1 mm. - Primorskii krai . . . . . ***D. olgae* (Tobias), comb. n.**
- 6. Second metasomal tergite longitudinally striate (costate) . . . . . 7
- Second metasomal tergite smooth . . . . . 15
- 7. Body entirely dark colored. Ovipositor 1.2× as long as body, situated apically. 4.5-6.5 mm. - Primorskii krai . . . . . ***D. paeoniae* (Tobias)**
- Body yellowish partly . . . . . 8
- 8. Hind femur 3× as long as wide. Ovipositor 1.1-1.2× as long as metasoma . . . 9
- Hind femur 4-4.5× as long as wide. Ovipositor 0.8-1.0× as long as body . . . . 11
- 9. Longitudinal diameter of eye 1.4× malar space. Sternauli transversally striate. Mesosoma entirely brownish-yellow. Head behind eye roundly narrowed, transversal diameter of eye 1.5× temple length . . . . . ***D. kasparyani* sp. n.**
- Longitudinal diameter of eye 2-3× malar space. Sternauli rugose. Mesosoma partly dark colored . . . . . 10
- 10. Head roundly narrowed behind eye, transversal diameter of eye 2× temple length; longitudinal diameter of eye 3× malar space. Second metasomal tergite striate. Lower half of mesopleura, metapleura, propodeum and legs brown. 3.0 mm. - Primorskii krai . . . . . ***D. semibrunneus* (Tobias), comb. n.**
- Head slightly enlarged behind eye, transversal diameter of eye 1.5× temple length; longitudinal diameter of eye twice malar space. Second metasomal tergite costate. Mesosoma brownish-yellow, metapleura and propodeum black. 3.5 mm. - Primorskii krai . . . . . ***D. rubroniger* (Tobias), comb. n.**
- 11. Longitudinal diameter of eye 3× malar space. Ovipositor 1.2× as long as body. Mesosoma brownish-yellow, lower part of mesopleura and propodeum brown.



- First radiomedial vein  $1.1\times$  second abscissa of radial vein. 2.5 mm. - Primorskii krai . . . . . ***D. terebrator* (Tobias), comb. n.**
- Longitudinal diameter of eye  $1.5-2\times$  malar space . . . . . 12
12. Ovipositor widely sinuated medially. Longitudinal diameter of eye  $2\times$  malar space. Body black, head and propleuron brownish-yellow, pronotum yellowish-brown. 3.8 mm. - Primorskii krai . . . . . ***D. sinuatus* (Tobias), comb. n.**
- Ovipositor straight or sinuated apically . . . . . 13
13. Longitudinal diameter of eye  $1.5\times$  malar space. Ovipositor straight. Mesosoma brownish-yellow, propodeum and metapleura black. 5.5 mm. - Kuril Is. . . . . ***D. kerzhneri* (Tobias), comb. n.**
- Longitudinal diameter of eye  $2\times$  malar space. Ovipositor sinuated apically. Mesosoma black, promesosoma and mesonotum brownish-yellow. 2.7 mm. - Transbaikalia . . . . . ***D. kalgae* (Tobias), comb. n.**
14. Ovipositor slightly longer than metasoma. Head slightly enlarged behind eye, temple somewhat shorter than transversal diameter of eye. Head and mesosoma brownish-yellow, metasoma and legs black. 3.1-4.4 mm. - Primorskii krai . . . . . ***D. longicauda* (Shestakov)**
- Ovipositor as long as body . . . . . 15
15. Upper part of head, mesosoma and legs black or dark brown. Longitudinal diameter of eye  $1.6\times$  malar space. Hind femur  $4\times$  as long as wide. First radiomedial vein  $1.3\times$  second abscissa of radial vein. (See couplet 2 also) . . . . . ***D. budrysi* Acht.**
- Head and mesosoma brownish-yellow, legs yellowish-brown or brown. Longitudinal diameter of eye  $2\times$  malar space. Hind femur  $3.5\times$  as long as wide . . . 16
16. First radiomedial vein almost as long as second abscissa of radial vein. Metasoma brown, legs yellowish-brown. 3.2-4.0 mm. - Primorskii krai . . . . . ***D. rubrosoma* (Tobias), comb. n.**
- First radiomedial vein  $1.2\times$  second abscissa of radial vein. Metasoma black, legs brown. 2.8 mm. - Primorskii krai . . . . . ***D. nigroruber* (Tobias), comb. n.**

**Genus *Fopius* Wharton, 1987**

Type species: *Rhynchosteres (Fopius) silvestrii* Wharton, 1987.

DIAGNOSIS. Occipital carina present laterally. Ventral margin of mandible without basal tooth. Labrum completely to almost completely concealed by clypeus, ventral margin of clypeus evenly convex, sometimes protruding medially, sometimes looks like a distinct tooth. Propleuron with oblique carina dorsally of pleural flange. Pronotum dorsally with transverse groove, distinct pronope absent. Notauli deep, crenulate throughout. Lateral margin of mesonotum between notaulus and tegula usually carinate, impressed. Postpectal carina present. Fore wing with

second radiomedial cell short, second abscissa of radial vein not longer than first radiomedial vein. Recurrent vein of fore wing antefurcal or interstitial. Recurrent vein of hind wing well-developed. Hind tibia without basal carina dorso-posteriorly. First metasomal segment with spiracle near its middle. Hypopygium attenuate, weakly to strongly produced postero-medially. Ovipositor usually not shorter than metasoma.

Frons strongly sculptured, distinctly and often densely punctate. Lateral margin of mesonotum sculptured. Propodeum densely rugose, median carina distinct on anterior third in some species. Metasoma often with second and rarely third tergites striate (costate) or unsculptured.

HOST. Parasite of Tephritidae.

FAR EASTERN SPECIES INCLUDED: *F. alternatae* (Tobias), *F. myolejae* (Tobias), *F. kotenkoi* Tobias, **sp. n.**, *F. subalternatae* (Tobias), **comb. n.**

REMARK. Probably *Biosteres rectinotaulis* described from Kuril Is. (Kunashir) in male (Fischer, 1998) belongs to *Fopius* (mandible without basal tooth, notauli deep, complete and sculptured, mesoscutum densely punctulate) and differs from other Far Eastern species by unsculptured second tergite.

### ***Fopius kotenkoi* Tobias, sp. n.**

Figs 7, 8

MATERIAL. Holotype: ♀, Kuril Islands: Kunashir, Golovnina volcano, Ozer-naya River, forest, 20.VIII 1988 (A. Kotenko).

DESCRIPTION. FEMALE. Body length 5.0 mm. Head width 1.7 its length (Fig. 7). Transversal diameter of eye 1.6× temple in dorsal view. OOL : Od : POL = 10 : 3.5 : 2.5. Ocellar triangle with smooth grooves laterally and longitudinal groove behind it. Frons and face with median carina between antennal fossae. Face 1.6× as wide as high. Clypeus angulate, protruding ventrally. Malar space 1.2× basal width of mandible. Antennal segments 46 (left) and 47 (right); first flagellar segment 3×, second 2×, middles 1.5×, penultimate 2× their width. Length of maxillary palp 1.1× height of head. Mesosoma 1.3× as long as high. Propleuron flattened and with flange posteriorly. Side of pronotum medially and notauli completely impressed and crenulate. Mesoscutal lobes rather convex. Sternauli crenulate, directed downwards posteriorly and not reaching postero-ventral corners of mesopleuron. Propodeum without longitudinal carina. Propodeal spiracles small. Fore wing (Fig. 8) with basal vein slightly curved basally. Second abscissa of radial vein : third abscissa : first radiomedial vein = 0.7 : 3 : 1; third abscissa of radial vein sinuate. Recurrent vein antefurcal. Recurrent vein of hind wing long, inclivous, desclerotised in external half. Hind femur 4.5× as long as wide. Second segment of hind tarsus : third segment : apical segment = 1 : 0.8 : 1. First metasomal tergite 1.2× as long as apical width, concave basally, dorsal carinae distinctly developed; laterope deep, pit-like dorsope absent. Ovipositor 1.3× body length.

Body smooth. Frons and face punctate, clypeus smooth. Lobes of mesonotum and mesopleuron sparsely punctulate. Propodeum reticulate-rugose, with pentagonal median areola. First metasomal tergite longitudinally rugose. Body black. Frons and face laterally, clypeus, mandibles, scape of antennae, palpi, tegulae, legs and metasoma ventrally yellowish. Wing membrane subhyaline, pterostigma and veins dark brown.

MALE. Unknown.

DISCUSSION. *F. kotenkoi* sp. n. is closed to *F. denticulifer* described from Japan (Achterberg & Maeto, 1990), and differs by propodeum without long median carina, but with median areola, by mesosoma without yellowish coloration.

DISTRIBUTION. Russia: Kuril Is. (Kunashir).

ETYMOLOGY. New species is dedicated to Ukrainian braconologist Anatolij Kotenko, who collected the holotype.

### **Genus *Biosteres* Förster, 1862**

Type species: *Bracon carbonarius* Wesmael, 1835.

DIAGNOSIS. Occipital carina present laterally. Ventral margin of mandible with basal tooth or lobe (except *B. blandus*). Labrum concealed by clypeus, its ventral margin usually convex. Pronotum dorsally with pronope. Propleuron with or without oblique carina. Notauli variable, often present by depressions only at anterior-lateral margin of mesoscutum. Postpectal carina absent. Second radiomedial cell short, second abscissa of radial vein not longer or hardly longer than first radiomedial vein. Recurrent vein of fore wing postfurcal in most species. Recurrent vein of hind wing usually long, almost reaching wing margin, but unpigmented or finely pigmented. Dorsople of first metasomal tergite developed. Hypopygium short, with distal margin more or less truncate. Ovipositor often shorter than metasoma.

Frons smooth, rarely rugulose medially behind antennal sockets. Mesoscutum usually smooth. Propodeum rugose in most species. Metasoma beyond first tergite unsculptured.

HOST. Usually parasites of leafminning Anthomyiidae.

FAR EASTERN SPECIES INCLUDED: *B. arenarius* (Stelfox), *B. blandus* (Haliday), *B. brevisculus* (Thomson), *B. carbonarius* (Nees), *B. colorativentris* Fischer, *B. dudichi* Papp, *B. haemorrhoeus* (Haliday), *B. impressus* (Wesmael), *B. kurilicus* Fischer, *B. longicauda* (Thomson), *B. micans* (Stelfox), *B. placidus* (Haliday), *B. punctiscuta* (Thomson), *B. rusticus* (Haliday), *B. sibiricus* Tobias, *B. subxantippe* Tobias, *B. wesmaelii* (Haliday).

REMARK. *B. kurilicus* Fischer described from Kuril Is. (Kunashir) is closed to *B. carbonarius* and differs by dense punctuation of upper part of head and mesoscutum (Fischer, 1998).

### Genus *Psytalia* Walker, 1860

Type species: *Psytalia testacea* Walker, 1860.

DIAGNOSIS. Occipital carina present laterally. Labrum broadly exposed beneath short, truncate or crescent clypeus. Ventral margin of mandible without basal tooth. Pronotum without distinct pronope. Propleuron without oblique carina. Notauli often developed, but unsculptured. Mesoscutal pit before scutellum absent. Propodeum with median longitudinal carina divergent near apex (sometimes obscured by rugose sculpture). Second radiomedial cell of fore wing long to very long, second abscissa of radial vein longer than first radiomedial vein. Recurrent vein ante- or postfurcal, sometimes interstitial. Recurrent vein of hind wing absent. Hind tibia without basal carina dorso-posteriorly. First segment of metasoma without pit-like dorsope. Second abdominal tergite shortened, shorter than third tergite. Hypopygium attenuate, strongly produced postero-medially. Ovipositor more or less long. Sculpture of body varied.

HOST. Parasites of Tephritidae.

FAR EASTERN SPECIES INCLUDED: *P. brevitemporalis* (Tobias), **comb. n.**, *P. cyclogastroides* (Tobias), **comb. n.**, *P. darasunica* (Tobias), **comb. n.**, *P. mediocarinata* (Fischer), **comb. n.**, *P. ophthalmica* (Tobias), *P. rhagoleticola* (Sachtleben), *P. romani* (Fahringer), **comb. n.**, *P. sakhalinica* (Tobias), **comb. n.**, *P. subcyclogaster* (Tobias), **comb. n.**

### Genus *Utetes* Förster, 1862

Type species: *Opius testaceus* Wesmael, 1838.

DIAGNOSIS. Occipital carina present laterally. Labrum broadly exposed by truncate or crescent clypeus. Clypeus without basal tooth. Pronotum dorsally with pronope. Propleuron without oblique carina. Notauli short, never complete to prescutellar pit; this pit often long and deep. Lateral margin between notaulus and tegula lacking carina, neither impressed nor crenulate. Postpectal carina absent. Fore wing with second radiomedial cell relatively long, second abscissa of radial vein longer than first radiomedial vein. Recurrent vein postfurcal. Recurrent vein of hind wing absent. Hind tibia with basal carina dorso-posteriorly. Pit-like dorsope of first metasomal segment absent. Hypopygium relatively short, pointed postero-medially. Ovipositor shorter, rarely somewhat longer than metasoma.

Frons smooth or finely punctate laterally and posteriorly. Propodeum rugose. Second metasomal tergite unsculptured.

HOST. Parasites of Tephritidae, sometimes Anthomyiidae.

FAR EASTERN SPECIES INCLUDED: *U. aemulator* (Tobias), **comb. n.**, *U. annularis* (Tobias), **comb. n.**, *U. caudatus* (Wesmael), **comb. n.**, *U. fasciatus* (Thomson), **comb. n.**, *U. fulvicollis* (Thomson), **comb. n.**, *U. iturupi* (Tobias), **comb. n.**, *U. kurentzovi* (Tobias), *U. magnus* (Fischer), *U. mediosulcatus* (Tobias), **comb. n.**, *U. nocturnus* (Tobias), **comb. n.**, *U. obvious* (Tobias), **comb. n.**, *U. ochrosoma* (Tobias), **comb. n.**, *U. orbiculiventris* (Tobias), **comb. n.**, *U. precursorius* (Tobias), **comb. n.**, *U. propodealis* (Fischer), **comb. n.**, *U. rosae* (Tobias), *U. rotundiventris* (Thomson), **comb. n.**, *U. ruficeps* (Wesmael), **comb. n.**, *U. semifusus* (Tobias), **comb. n.**, *U. subochrosoma* (Tobias), **comb. n.**, *U. trisulcatus* (Tobias),

**comb. n.**, *U. trisulcus* (Thomson), **comb. n.**, *U. truncatus* (Wesmael), **comb. n.**, *U. ussuriensis* (Tobias), *U. zelotes* (Marshall), **comb. n.**

**Genus *Aulonotus* Ashmead, 1900**

Type species: *Opius comatus* Wesmael, 1835.

NOTES. Besides *Psytalia* and *Utetes* the taxonomic position of the subgenus *Aulonotus* Ashmead, was ranged to generic level (Fischer, 1998). M. Fischer (1998) added two species from Kuril Is. (Kunashir) to 21 *Aulonotus* species in my key to the Far Eastern *Opius* (Tobias, 1998): *A. kotenkoi* Fischer, 1998 [closely related to *A. tenuicornis* (Thomson) and differs by shorter mesosoma and sculptured propodeum] and *A. kunashiricus* Fischer, 1998 [closely related to *A. subcomatus* (Tobias) and differs by sculptured mesopleuron].

**Genus *Nipponopius* Fischer, 1963, nom. resurr.**

Type species: *Nipponopius incisus* Fischer, 1963

NOTES. Wharton (1977) synonymized the genus *Nipponopius* with *Utetes*. Here I prefer to regard *Nipponopius* as distinct genus with some very essential autapomorphies. *N. incisus* Fischer, 1963 was described from Japan and recorded from Kuril Is. also (Tobias, 1998).

**NEW DISTRIBUTION DATA**

***Opius aciculatus* Thomson, 1895**

MATERIAL. Sakhalin Island: Makarov District, Pugachevo, 6.IX 1988, 2 ♀ (A. Basarukin).

DISTRIBUTION. Russia: center of European part, Primorskii krai, \*Sakhalin; Western Europe.

***Opius aureliae* Fischer, 1957**

MATERIAL. Kuril Islands: Paramushir, Bay Krasheninnikova, 14. VIII 1997, 1 ♂ (AL & SS); Vasil'eva Bay, 16.VIII 1997, 1 ♂ (AL & SS); Makanrushi, 18. VIII 1997, 2 ♂ (AL & SS).

DISTRIBUTION. Russia: center of European part, Kamchatka, Khabarovskii krai, Primorskii krai, Sakhalin, Kuril Is. (Paramushir, \*Makanrushi); Central Europe, North America.

***Opius austriacus* Fischer, 1958**

MATERIAL. Kuril Islands: Iturup, 5 km N Reydovo, 30.VII 1997, 1 ♂ (AL & SS).

DISTRIBUTION. Russia: Kamchatka, Primorskii krai, \*Kuril Is. (Iturup); Austria, Hungary.

***Opius circulator* Nees, 1834**

MATERIAL. Primorskii krai: 42 km S Plastun, forest, 24. VI 1979, 1 ♀ (S. Belokobylskij); Khanka District, Novokachalinsk, forest, 2.IX 1986, 1 ♀ (A. Kotenko).

DISTRIBUTION. Russia: \*Primorskii krai, North-West and center of the European part; Korea, Western Europe.

***Opius discreparius* Fischer, 1963**

MATERIAL. Sakhalin Island: Yuzhno-Sakhalinsk, alder-birch forest, 16.IX 1988, 1 ♀ (A. Basarukin).

DISTRIBUTION. Russia: Primorskii krai, \*Sakhalin; Korea, Japan.

***Opius geniculatus* Thomson, 1895**

MATERIAL. Sakhalin Island: Novo-Aleksandrovsk, valley forest, 29. VII 1988, 1 ♀ (A. Kotenko); Kuril Islands: Kunashir, meadow near stream, 12.VII 1988, 1 ♂ (A. Kotenko).

DISTRIBUTION. Russia: North-West of the European part, Chitinskaya oblast', Primorskii krai, \*Sakhalin, \*Kuril Is. (Kunashir); Japan, Western Europe.

***Opius insularis* Tobias, 1998**

MATERIAL. Kuril Islands: Iturup, 7 km W Reydovo, 29.VII 1997, 1 ♀, 1 ♂ (AL); 5 km N Reydovo, 30.VII 1997, 1 ♀ (AL & SS).

DISTRIBUTION. Russia: Chitinskaya oblast', Primorskii krai, Sakhalin, Kuril Is. (Kunashir, \*Iturup).

***Opius laetabilis* Tobias, 1998**

MATERIAL. Kuril Islands: Kunashir, 3 km N Lagunnoe Lake, meadow, fringes of forest, 9.VIII 1988, 9 ♀, 1 ♂ (A. Basarukin); Alekhino, fringes of forest, high herbs, 11.VIII 1988, 1 ♀ (A. Kotenko), Alekhino, fringes of forest, grades, 15.VIII 1988, 1 ♀ (A. Kotenko).

DISTRIBUTION. Russia: Primorskii krai, \*Kuril Is. (Kunashir).

NOTES. Second metasomal tergite of one female from Kunashir almost smooth (differs from *O. superlativus* Tobias by longer ovipositor and by darker body coloration); all metasomal tergites of another female are black.

***Opius pallipes* Wesmael, 1835**

MATERIAL. Kuril Islands: Iturup, 7 km W Reydovo, 29.VII 1997, 1 ♀ (AL); 5 km N Reydovo, 30.VII 1997, 1 ♀ (AL & SS).

DISTRIBUTION. Russia: European part, Buryatia, Irkutskaya oblast', Chitinskaya oblast', Khabarovskii krai, Primorskii krai, Kamchatka, \*Kuril Is. (Iturup); Caucasus, Kazakhstan, Middle Asia, Korea, Mongolia, Western Europe, North America.

***Opius similoides* Fischer, 1962**

MATERIAL. Sakhalin Island: 8 km SW Shebunino, meadow, 11.VIII 1978, 1 ♀ (S. Belokobylskij).

DISTRIBUTION. Russia: North-West European part, South Ural, Primorskii krai, \*Sakhalin, Kuril Is.; Central and South Europe.

***Opius saevulus* Fischer, 1958**

MATERIAL. Kuril Islands: Iturup, 7 km W Reydovo, 29.VII 1997, 1 ♀ (AL).

DISTRIBUTION. Russia: Chitinskaya oblast', Primorskii krai, \*Kuril Is. (Iturup); England, Central Europe.

***Opius subcomatus* Tobias, 1998**

MATERIAL. Kuril Islands: Kunashir, 3 km N Lagunnoe Lake, fringes of forest, grade, 9.VIII 1988, 1 ♀ (A. Kotenko); Alekhino, foliage forest, 12. VIII 1988, 1 ♀ (A. Kotenko).

DISTRIBUTION. Russia: Primorskii krai, \*Kuril Is. (Kunashir).

***Opius tuberculatus* Fischer, 1959**

MATERIAL. Kuril Islands: Paramushir, Vasil'ieva Bay, 16.VIII 1997, 1 ♀ (AL & SS).

DISTRIBUTION. Russia: Primorskii krai, \*Kuril Is. (Paramushir); Central and South Europe, Turkey.

***Opius turneri* Gahan, 1919**

MATERIAL. Primorskii krai: Anisimovka, glades, 12.VII 1984, 1 ♀ (S. Belokobylskij); Vladivostok, Sedanka, forest, 31.VII 1984, 1 ♀ (S. Belokobylskij); 20 km SW Kamen'-Rybolov, oak forest, 1.VIII 1986, 1 ♀ (N. Storozheva).

DISTRIBUTION. \*Russia: Primorskii krai; Korea, North America.

***Opius vacuus* Tobias, 1998**

MATERIAL. Japan, Kyushu: Fukuoka Pref., Ominami Pass, 500-600 m, Mt. Hikosan, 17.VII 1992, 1 ♂ (V. Makarkin).

DISTRIBUTION. Russia: Primorskii krai, \*Japan (Kyushu).

***Utetes caudatus* (Wesmael, 1835)**

MATERIAL. Sakhalin Island, Chekhova Mt., on willow, 28.VII 1988, 1 ♀ (A. Kotenko); Kuril Islands: Kunashir, Vinaj River, 24.VIII 1988, 2 ♀ (A. Basarukin).

DISTRIBUTION. Russia: center of European part, Primorskii krai, \*Sakhalin Kuril Is.; Western Europe.

***Utetes ussuriensis* (Tobias, 1977)**

MATERIAL. Sakhalin Island, Novo-Aleksandrovsk, forest along river, 27.VII 1988, 1 ♀ (A. Kotenko).

DISTRIBUTION. Russia: Buryatia, Primorskii krai, \*Sakhalin.

***Diachasma semistriatum* Tobias, 1998**

MATERIAL. Sakhalin Island, Aniva District, 8 km near estuary of Lutoga River, forest, 30.VII 1988, 3 ♀ (A. Kotenko).

DISTRIBUTION. Russia: Primorskii krai, \*Sakhalin.

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