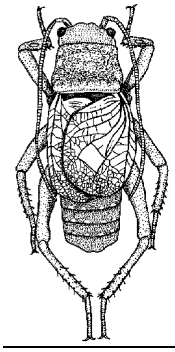

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A NEW TAXA OF GALL MIDGES FROM THE TRIBES CLINODIPLOSINI AND HYPOPRODIPLOSINI TRIB. N. (DIPTERA, CECIDOMYIIDAE, CLINODIPLOSIDI) FROM THE RUSSIAN FAR EAST

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Three new subtribes of the tribe Clinodiplosini (Emarginatodiplosina Fedotova et Sidorenko, **subtrib. n.**, Ovillidiplosina Fedotova et Sidorenko, **subtrib. n.** and Xenodiplosina Fedotova et Sidorenko, **subtrib. n.)** and tribe Hypoprodiplosini **trib. n.** are described. Four new genera and seven new species are described: *Clinodiplosis donatrix* Fedotova et Sidorenko, **sp. n.**, *Ovillidiplosis otiosa* Fedotova et Sidorenko, **gen.** et **sp. n.,** *Linterodiplosis navalia* Fedotova et Sidorenko, **gen.** et **sp. n.,** *Plectadiplosis pressa* Fedotova et Sidorenko, **gen.** et **sp. n.,** *Orodiplosis nomas* Fedotova et Sidorenko, **gen.** et **sp. n.,** *O. nutrix* Fedotova et Sidorenko, **sp. n.,** *O. opis* Fedotova et Sidorenko, **sp. n.** Keys to the subtribes, genera et species of the tribe Clinodiplosini from the Russian Far East are given.

KEY WORDS: Diptera, Cecidomyiidae, new taxa, Russian Far East.

З.А. Федотова, В.С. Сидоренко. Новые таксоны галлиц из триб Clinodiplosini и Hypoprodiplosini trib. n. (Diptera, Cecidomyiidae, Clinodiplosidi) с Дальнего Востока России // Дальневосточный энтомолог. 2010. N 213. С. 1-28.

Описаны три новых подтрибы трибы Clinodiplosini (Emarginatodiplosina Fedotova et Sidorenko, **subtrib. n.**, Ovillidiplosina Fedotova et Sidorenko, **subtrib. n.** and Xenodiplosina Fedotova et Sidorenko, **subtrib. n.)** и триба Hypoprodiplosini **trib. n.** Описываются как новые для науки 4 рода и 7 видов: *Clinodiplosis donatrix* Fedotova et Sidorenko, **sp. n.,** *Ovillidiplosis otiosa* Fedotova et Sidorenko, **gen.** et **sp. n.,** *Linterodiplosis navalia* Fedotova et Sidorenko, **gen.** et **sp. n.,** *Plectadiplosis pressa* Fedotova et Sidorenko, **gen.** et **sp. n.,** *Orodiplosis nomas* Fedotova et Sidorenko, **gen.** et **sp. n.,** *O. nutrix* Fedotova et Sidorenko, **sp. n.,** *O. opis* Fedotova et Sidorenko, **sp. n.** Приводятся определительные таблицы подтриб, родов и видов Clinodiplosini Дальнего Востока России.

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INTRODUCTION

Recently the status of the tribe Clinodiplosini was elevated to the supertribe rank (Fedotova, Sidorenko, 2009). New tribe Inclinatidiplosini with three subtribes: Inclinatidiplosina s. str., Pedetentiina and Glomerulidiplosina was described. At present this supertribe included tribes Clinodiplosini, Ametrodiplosini and Inclinatidiplosini. The supertribe Clinodiplosidi is most numerous heterogeneous group. According to Skuhravá (1997, 2006), tribe includes 242 species in 26 genera. Gagné (2004) numbers in Clinodiplosini 156 species of 15 genera (without tribe Mycodiplosini with 87 species of six genera). Taxonomy of tribe Clinodiplosini still wait additional examination.

Most important character of the tribe Clinodiplosini is narrow hypoproct, densely covered by dark microtrichiae. This character absent in Inclinatidiplosini and new tribe Hypoprodiplosini.

Based on material from the Russian Far East a new tribe Hypoprodiplosini trib. n. and three subtribes of tribe Clinodiplosini (Emarginatodiplosina subtrib. n., Ovillidiplosina subtrib. n. and Xenodiplosina subtrib. n.) are described in this paper. Diagnosis of the tribe Clinodiplosini and genera *Clinodiplosis* Kieffer and *Xenodiplosis* Rübsaamen are enlarged.

The gall midges (Diptera, Cecidomyiidae) were collected during 2001-2007 in Lazovskii Reserve and near Ussurijskii Reserve (Primorskii krai, Russia).

Holotypes and some paratypes of the new species are deposited in the Zoological Institute of Russian Academy of Sciences, St.-Petersburg, Russia, other paratypes – in the collection of Samara Academy of Agriculture, Ust-Kinelskii, Samarskaya oblast and Instittute of Biology and Soil Science, Far Eastern Division of the Russian Academy of Sciences, Vladivostok, Russia. The abbreviations used in the descriptions and figure legends are as follows: F1, F2, … F12 – length of flagellomeres 1, 2, …12; MT – Malaise trap.

SUPERTRIBE CLINODIPLOSIDI RÜBSAAMEN ET HEDICKE, 1926

Clinodiplosini Rübsaamen & Hedicke, 1926: 78

DIAGNOSIS. Eyes very large, occupied nearly entire head capsule. Body covered by scales, femurs with long setae ventrally. Head with small occipital process. Body and legs usually pale-yellow or white, antennae darker than body and legs. Legs more than 2.5-3.0 times longer than body. Male flagellomeres with two nodes and three whorls of loop-formed sensorial filae and two whorls of setae; elongated distal node usually pyre-formed with narrowing near middle (Figs 4, 9). Proximal node almost rounded. Rarely distal node divided on two nodes (Figs 11, 31-33). Male flagellomere of the tribe Ametrodiplosini with two whorls of short sensorial filae, some apical flagellomeres not divided on nodes. Female flagellomeres with long neck, basal enlargement with sensorial filae as two rings and two longitudinal connectives or reticulated. F12 usually with long narrow projection (Figs 22, 33, 42), rarely without it (Fig. 3). Palpi 4-segmented (Figs 25, 29, 44), sometimes with palpiger (Fig. 5), not longer than length of face. All tarsal claw usually simple (Figs 2, 12, 18), sometimes with denticles on hind tarsi (Fig. 8), rarely all claws denticled (*Ovillidiplosis, Emarginatodiplosis, Spiculatidiplosis*). Wing widely rounded apically and posteriorly, usually developed *C*, R_{4+5}, *Rs*, *Cu* with fork Cu_1 and Cu_2, rarely additionally present vein M_{3+4} and *Cup* (Figs 27, 37, 56) or fork of *Cu* absent (Fig. 7). Vein R_{4+5} usually strongly curved distally, joining with *C* far beyond apex of wing. Vein R_{1+2} joining with *C* far before mid of wing or near mid. Male of the tribe Ametrodoplosini with swollen *C* near base.

Genitalia usually elongated (Figs 10, 28, 38) or rounded (Figs 13, 14), rarely – transversal (Figs 57, 73), without additional strongly sclerotized structure (parameres), rarely with slightly sclerotized hypoproct (Figs 28) or aedeagus. Gonocoxites strongly swollen, wide oval or almost parallel-sided, usually with medial triangular or rounded outgrowth (Figs 13, 73) or lobe (Figs 1, 10, 14). Gonostylus with apical claw, long and thin, slightly curved medially or basally, with microtrichiae only near base, distally or near claw stronger sclerotized. Cerci bilobed, usually lobes straightly or obliquely truncated apically (Fig. 1). If cerci widely rounded, hypoproct with pointed or dentated apical lobes or strongly forked (Figs 28, 38), rarely truncated (Fig. 46). Hypoproct whole or with deep excision, much longer than cerci and gonocoxites (Figs 1, 10, 19, 38). If hypoproct with short triangular or rounded lobes, it completely densely covered by microtrichiae (Figs 10, 14, 20, 28, 38), without of lateral spines. Usually lateral side of hypoproct basally with slightly sclerotized strips in mid part (Figs 1, 13, 19, 20, 28, 46, 47). Aedeagus usually conical and thick (Figs 1, 10, 13, 14, 19, 28, 38, 73), rarely parallel-sided (Figs 20, 46, 57, 69), much longer than hypoproct and gonocoxites, usually with apical (Fig. 10) or subapical swollen, rarely truncated (Fig. 57) or narrowed apically (Fig. 73). Aedeagus near apex with small fossae or pore (Figs 28, 57, 64, 69), laterally waved (Figs 73, 75).

Ovipositor short, not fully retractile and with a pair of well developed terminal lobes (Figs 6, 17).

Tribe Hypoprodiplosini Fedotova et Sidorenko, trib. n.

DIAGNOSIS. Head rounded, occipital process with setae. Body very dark, densely covered by scales, especially legs, femurs ventrally with row of long black setae. Scape, pedicel and F1 sclerotized, only F2 and next flagellomeres without sclerotization, white, almost transparent. F12 wide rounded, without apical projection. Palpi sclerotized, legs and genitalia white. Male flagellomeres with two nodes, three whorls of short sensorial filae and two whorls of setae, distal node with deep narrowing on all segments (Fig. 4). Female flagellomeres with very long neck, basal outgrowth with simple rounded sensorial fila. Palpus 4-segmented, not longer than length of face (Fig. 8), with palpiger. Tarsal claw simple, dark, basally light, empodium shorter than claw (Fig. 2). Wing long, all veins very thin, pale, slightly visible (Fig. 7). Vein R_{4+5} joining costa far behind of wing apex, curved apically; with wide cell. M_{3+4} and Cu_{1+2} invisible. Abdomen swollen. Abdominal tergites and sternites strongly sclerotized, tergites with pair of lateral lacunes. Gonocoxites with denticle medially on inner side (Fig. 1). Gonostylus very narrow, almost parallel-sided, distally near claw – slightly darker, claw dark. Aedeagus conical, shorter than hypoproct and gonocoxites. Cerci short, emarginated, with straightly truncated lobes. Hypoproct longer than gonocoxites, whole, apically without concavity, laterally with curved dark stripe, covered by short, sparse, transparent microtrichiae. Aedeagus and cerci unsclerotized. Ovipositor very short, curved dorso-caudally (Fig. 6), with two large dorsal plates and small ventral plate.

RELATIONSHIPS. New tribe differs from the tribe Clinodiplosini s. str. by presence of strongly sclerotized abdominal tergites and sternites, by unsclerotized flagellomeres, by elongated, very wide whole hypoproct, not covered by dense black microtrichiae and by conical aedeagus, much shorter than hypoproct (aedeagus in Ametrodiplosini and Inclinatidiplosini much longer than hypoproct); by truncated lobes of cerci; by presence of denticle medially on inner side of gonocoxites; by undeveloped fork of *Cu*; by short ovipositor, curved dorso-caudally.

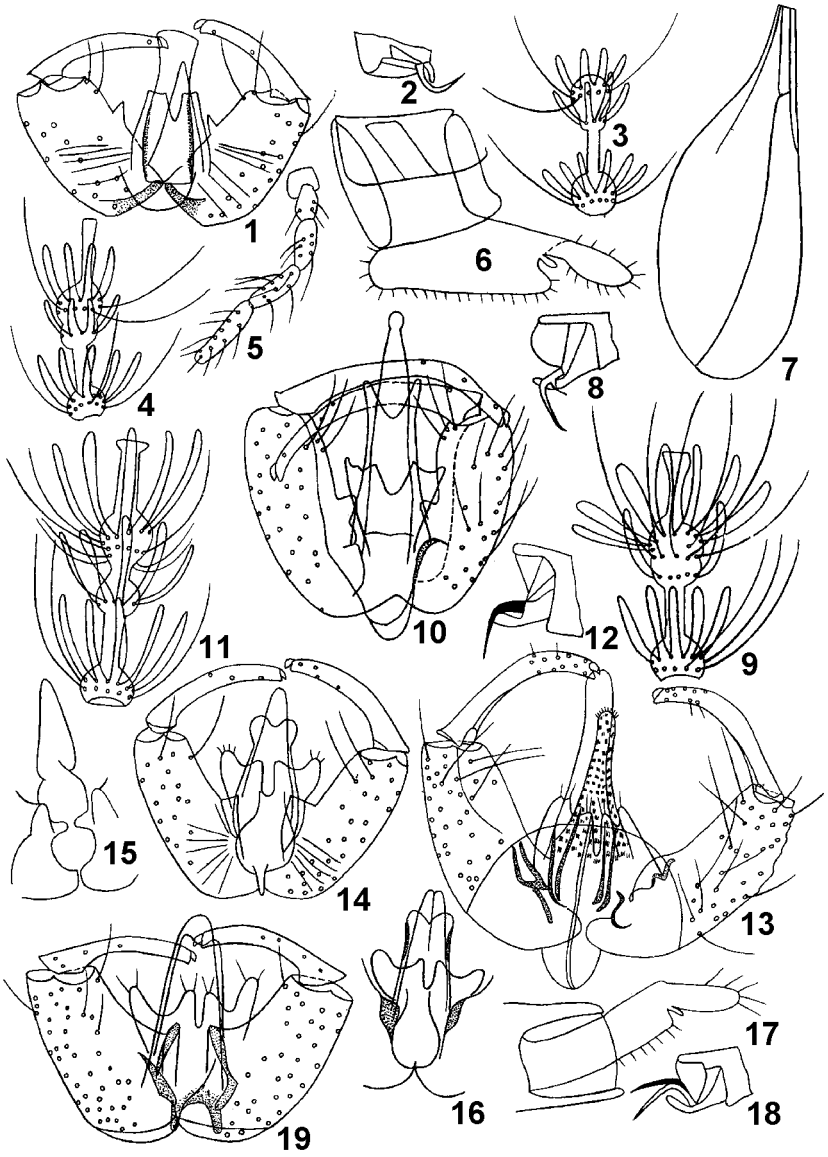
GENERA INCLUDED. *Hypoprodiplosis* Fedotova, 2004.

BIOLOGY. Type species *H. universalis* Fedotova, 2004 developed in flower galls of *Dasineura storozhenkoi* Fedotova, 2003 on *Vicia cracca* and in flower of *Lactuca sibirica.*

DISTRIBUTION. Russia: Primorskii krai.

Tribe Clinodiplosini Rübsaamen et Hedicke, 1926

DIAGNOSIS. Body and legs usually pale-yellow or white, rarely dark-brown, antennae darker than legs. Flagellomeres with long sensorial filae, filae of medial whorls shorter than basal and apical ones (Figs 9, 23). Distal node usually with slight narrowing (Figs 9, 23, 40, 60, 76), rarely with strong constriction (Fig. 49) or medial neck (Figs 11, 31). Tarsal claw usually simple (Figs 2, 12, 18), rarely with basal denticles on all legs (Fig. 8) or one pair of tarsi with denticles, empodium almost as long as claw. Vein R_{4+5} usually strongly curved distally (Figs 27, 45, 56). Vein R_{1+2} joining with *C* far before mid.



Figs 1-19. *Hypoprodiplosis universalis* Fedotova (1-7); *Spiculatidiplosis longistyla* Fedotova (8-10); *Xenodiplosis lonicerae* Fedotova (11-13); *Clinodiplosis phalacrolomae* Fedotova (14-18); *C. vitidis* Fedotova (19): 1, 10, 13, 14, 19 – genitalia; 2, 8, 12, 18 – tarsal claw; 3 – F12; 4, 9, 11 – F5; 5 – palpi; 6, 17 – ovipositor; 15 – aedeagus (ventral); 16 – cerci, hypoproct and aedeagus (variations of shape) (after Fedotova, 2003; Fedotova & Sidorenko, 2004).

Genitalia elongated (*Clinodiplosis*, *Spiculatidiplosis*, *Ovillidiplosis*) (Figs 10, 14, 20, 28, 38), almost rounded or transversal. Gonocoxites slender or thin, usually with basal or medial triangular enlargement (Figs 13, 20) or lobe (Figs 10, 46, 57, 64, 69). Gonostylus long and thin, longer (Fig. 10) or shorter than gonocoxites, slightly curved basally. Cerci bilobed, usually lobes oblique truncated, quadrate (Figs 10, 14) and emarginated apically (Figs 13, 19, 20, 69). If cerci widely rounded (*Ovillidiplosina*) (Figs 28, 38, 46) hypoproct narrow, forked or slightly excavated. Hypoproct densely covered by dark microtrichiae, with deep excision (Figs 10, 38, 57, 64, 69), slightly emarginated (Figs 14, 19, 20, 28 46, 47) or whole (Fig. 13). Aedeagus usually thick conical (*Clinodiplosis, Ovillidiplosis,* gen. n.), parallel-sided (*Orodiplosis* gen. n.), or narrowed distally or apically, rarely with apical swelling (Figs 10, 28) or truncated (*Orodiplosis* gen. n.) (Fig. 57). Genitalia of Emarginatodiplosina subtr. n. and Xenodiplosina subtr. n. with tegmen (Figs 13, 57, 64, 69), Ovillidiplosina subtr. n. and Clinodiplosina without tegmen.

GENERA INCLUDED. Tribe includes 13 genera from three subtribes: Clinodiplosina (*Clinodiplosis* Kieffer, *Spiculatidiplosis* Fedotova, *Mycetodiplosis* Kieffer, *Camptodiplosis* Kieffer, *Cleitodiplosis* Tavares), Emarginatodiplosina subtrib. n. (*Emarginatodiplosis* Fedotova*, Orodiplosis* Fedotova et Sidorenko**,** gen. n.), Ovillidiplosina subtrib. n. (*Ovillidiplosis* Fedotova et Sidorenko**,** gen. n., *Linterodiplosis* Fedotova et Sidorenko**,** gen. n., *Plectadiplosis* Fedotova et Sidorenko**,** gen. n.), Xenodiplosina subtrib. n. (*Xenodiplosis* Kieffer, *Dichodiplosis* Rübsaamen, *Parallelodiplosis* Rübsaamen).

Key to the subtribes and genera of tribe Clinodiplosini from the Russian Far East (males)

1. Cerci with rounded lobes (Figs 28, 38, 46). Hypoproct strongly sclerotized, narrow, with triangular lobes or slightly excavated apically (Figs 46, 47), much shoter than gonocoxites. Gonocoxites with rectangular mediobasal lobe. Body very dark. Genitalia without tegmen. **(Ovillidiplosina Fedotova et Sidorenko, subtrib. n.)** ……..…… 2
– Cerci with oblique truncated (Figs 57, 64, 73) or double excavated lobes (Figs 10, 13, 14, 19, 20, 69). Hypoproct unsclerotized, emarginated or whole (Fig. 13), longer or shorter than gonocoxites. Gonocoxites with basal or mediobasal swelling or acuted basal lobe. Distal node of middle flagellomeres slightly narrowing medially (Figs 9, 23, 60, 76). If distal node dissected on two nodes (Fig. 11), hypoproct whole (Fig. 13). Genitalia usually with tegmen (Figs 13, 57, 64, 69) (except antithese 5) ……..… 4
2. Apical flagellomeres consist of three nodes (Figs 32-34), distal node of middle flagellomeres deeply narrowed (Fig. 31). Gonocoxites enlarged distally (Fig. 28). Aedeagus very wide (Fig. 28), longer than gonocoxites. Cerci short. Hypoproct small, with short triangular lobes and long medial stem, much narrower than aedeagus (Fig. 28). Tarsal claw with basal denticle (Fig. 36) …… ……...…..… ***Ovillidiplosis*** **Fedotova et Sidorenko, gen. n.**

– Apical flagellomeres usual form, consist of two nodes (Figs 41, 42), middle flagellomeres without narrowing (Fig. 40) or with deep narrowing (Fig. 49). Gonocoxites enlarged basally (Figs 38, 46, 47). Aedeagus enlarged basally, strongly narrowed apically, almost as long as gonocoxites, Hypoproct wider than aedeagus (Figs 38, 46, 47, 55), narrowed medially and strongly enlarged basally …… 3

3. Hypoproct forked apically (Fig. 38), with thin long lobes. Aedeagus spiniform apically, strongly enlarged basally. Tarsal claw with basal denticle (Fig. 43) ……. ***Linterodiplosis*** **Fedotova et Sidorenko, gen. n.**

– Hypoproct apically slightly excavated (Fig.s 46, 47), without lobes. Aedeagus thin, gradually narrowed apically. Tarsal claw simple (Fig. 54) …….. ..…… ***Plectadiplosis*** **Fedotova et Sidorenko, gen. n.**

4. Distal node of middle flagellomeres dissected on two nodes (Fig. 11). Hypoproct whole, conical (Fig. 13). Body dark. Gonocoxites enlarged basally or with basal triangular lobe. Genitalia with tegmen. (**Xenodiplosina Fedotova et Sidorenko, subtrib. n.**) …….. ***Xenodiplosis*** **Felt**

– Distal node of middle flagellomeres not dissected on two nodes (Figs 9, 23). Hypoproct emarginated (Figs 10, 14, 19, 20), rarely straightly truncated …….. 5

5. Gonocoxites enlarged basally, in view of swollen or triangular lobe (Figs 57, 64, 69, 73). Aedeagus very thin, narrower than hypoproct, with numerous deep fossae and waved lateral sides. Cerci very wide, with oblique truncated lobes or lobes strongly excavated. Hypoproct narrowed basally (Figs 57, 64, 69) or enlarged (Fig. 73), forked, as long as or slightly longer than cerci, much shorter than gonocoxites. Genitalia transversal, tegmen developed. Tarsal claw dentated or claw on all tarsi. (**Emarginatodiplosina Fedotova et Sidorenko, subtrib. n.)** …..……..……. 6

– Gonocoxites enlarged medially, in view of triangular enlargement (Figs 19, 20) or lobe (Figs 10, 14). Aedeagus as wide as hypoproct (Fig. 19) or slightly narrower (Fig. 10), without pores, rarely with usual pores and straight lateral sides. Cerci narrow, with quadrate lobes, emarginated apically. Hypoproct narrowed apically or parallel-sided, almost truncated or slightly excavated apically, longer than gonocoxites. Genitalia elongated, tegmen undeveloped Tarsal claw dentated on all legs or only fore or hind tarsi. **(Clinodiplosina)** ……..…..……..... 7

6. Gonocoxites enlarged basally (Fig. 73), without lobe, as long as gonostylus. Aedeagus short, conical, slightly longer than gonocoxites. Hypoproct enlarged basally. Tarsal claw with basal denticle, empodium shorter than claw (Fig. 17). Tegmen undeveloped …….. ***Emarginatodiplosis*** **Fedotova**

– Gonocoxites with basal lobe, longer than gonostylus (Figs 57, 64, 69). Aedeagus long, thin, almost cylindrical, truncated (Fig. 57) or swollen apically (Figs 64, 69), sometimes swollen near base. Hypoproct narrowed basally or with basal stem. Tarsal claw simple, empodium as long as or longer than claw (Fig. 17). Wide tegmen developed ……...……..…… ……... ***Orodiplosis*** **Fedotova et Sidorenko, gen. n.**

7. Genitalia elongated (Fig. 10). Gonostylus longer than gonocoxites. Gonocoxites with small triangular lobe. Aedeagus much longer than hypoproct, swollen apically. Hypoproct almost parallel-sided, deeply emarginated …… ……..…... ***Spiculatidiplosis* Fedotova**

– Genitalia almost rounded (Fig. 14) or slightly transversal (Fig. 19). Gonostylus shorter than gonocoxites. Gonocoxites with medial square enlargement (Fig. 20) or with large triangular lobe (Fig. 14, 19). Aedeahus as long as hypoproct or slightly longer, not swollen apically. Hypoproct narrowed apically, almost as wide as aedeagus or slightly narrowed or wider, slightly excavated apically or truncated ……...……...…….... ***Clinodiplosis* Kieffer**

Subtribe Clinodiplosina

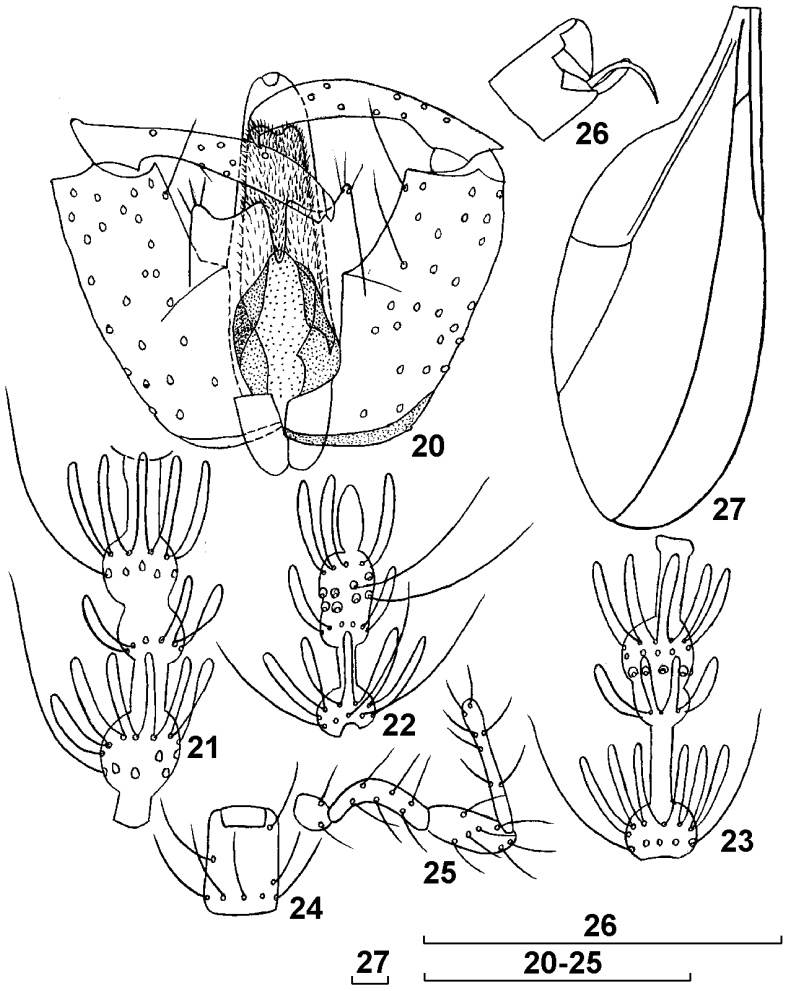
DIAGNOSIS. Genitalia elongated (*Clinodiplosis*, *Spiculatidiplosis*) (Figs 10, 20) or almost rounded (Figs 14, 19). Gonocoxites with mesobasal enlargement (Figs 19, 20) or triangular lobe (Figs 10, 14). Gonostylus long and thin, longer (Fig. 10) or shorter (Figs 14, 19, 20) than gonocoxites, slightly curved basally. Cerci bilobed, usually lobes quadrate and emarginated apically. Hypoproct narrowed distally or parallel-sided, slightly emarginated or almost straight truncated. Aedeagus usually thick, enlarged basally, rarely strongly narrowed apically (*Spiculatidiplosis*.), almost as wide as hypoproct, rarely with apical swelling (Fig. 10).

GENERA INCLUDED. Palaearctic genera: *Clinodiplosis* Kieffer, 1894 (about 100 species), *Spiculatidiplosis* Fedotova, 2003 (1 species), *Mycetodiplosis* Kieffer, 1912 (1 species), *Camptodiplosis* Kieffer (2 species) and probably Neotropic genus *Cleitodiplosis* Tavares, 1921 (according to redescription and figures given by Gagné, 1994).

Clinodiplosis Kieffer, 1894

Type species: *Clinodiplosis cilicrus* Kieffer, 1894, by monotypy.

DIAGNOSIS. Occipital process short, often with very long apical setae. Palpi 4-segmented. Claws strongly bent near the basal third (Fig. 18) and longer than empodium, or claws rounded and as long as empodium (Fig. 26) sometimes with basal denticle at the base of claw. Gonocoxites strong, with a square mesobasal lobe or small triangular lobe (Figs 14, 19, 20). Gonostylus elongate, thin, rarely enlarged distally (Fig. 20). Cerci quadrate, with quadrate lobes, excavated apically. Hypoproct excavated apically, almost parallel-sided (Fig. 20), completely narrowed to apex (Fig. 19) or slightly narrowed near apex and than enlarged above narrowing (Fig. 14, 16), much longer than cerci, densely covered by black microtrichiae. Aedeagus cylindrical (Fig. 20) or conical (Figs 14, 19), widely rounded apically, slightly longer than hypoproct, almost as wide as hypoproct. Ovipositor slightly protractible with pair of apical large cerci (Fig. 17).



Figs 20-27. *Clinodiplosis donatrix* sp. n., male: 20 – genitalia; 21 – F1; 22 – F12; 23 – F5; 24 – pedicel; 25 – palpi; 26 – tarsal claw; 27 – wing. Scale line – 0.1 mm.

SPECIES INCLUDED. Cosmopolitan genus with 93 species (Gagné, 2004). Recently 4 species were described from the Russian Far East: *Clinodiplosis vitidis* Fedotova, 2004, *C. phalacrolomae* Fedotova, 2004, *C. skuhravae* Fedotova, 2004, *C. infrequens* Fedotova, 2003.

BIOLOGY. According to Harris (1966) and Skuhravá (1973) species of the genus *Clinodiplosis* may be collected from a large number of plant species. Species of *Clinodiplosis* to be primary feeders on flowering plants, gall inducers, inquilines, phytosaprophagous and mycetophagous midges (Roskam, 1979). Skuravá (1973) treated *Clinodiplosis* only, reported all these feeding habits and added even zoophagy.

Clinodiplosis donatrix **Fedotova et Sidorenko, sp. n.**
Figs 20-27

MATERIAL. Holotype – ♂ (slide 477/8150): Russia, Primorskii krai, Lazovskii Reserve, America, MT, forest, 7-8.VII 2007 (V. Sidorenko).

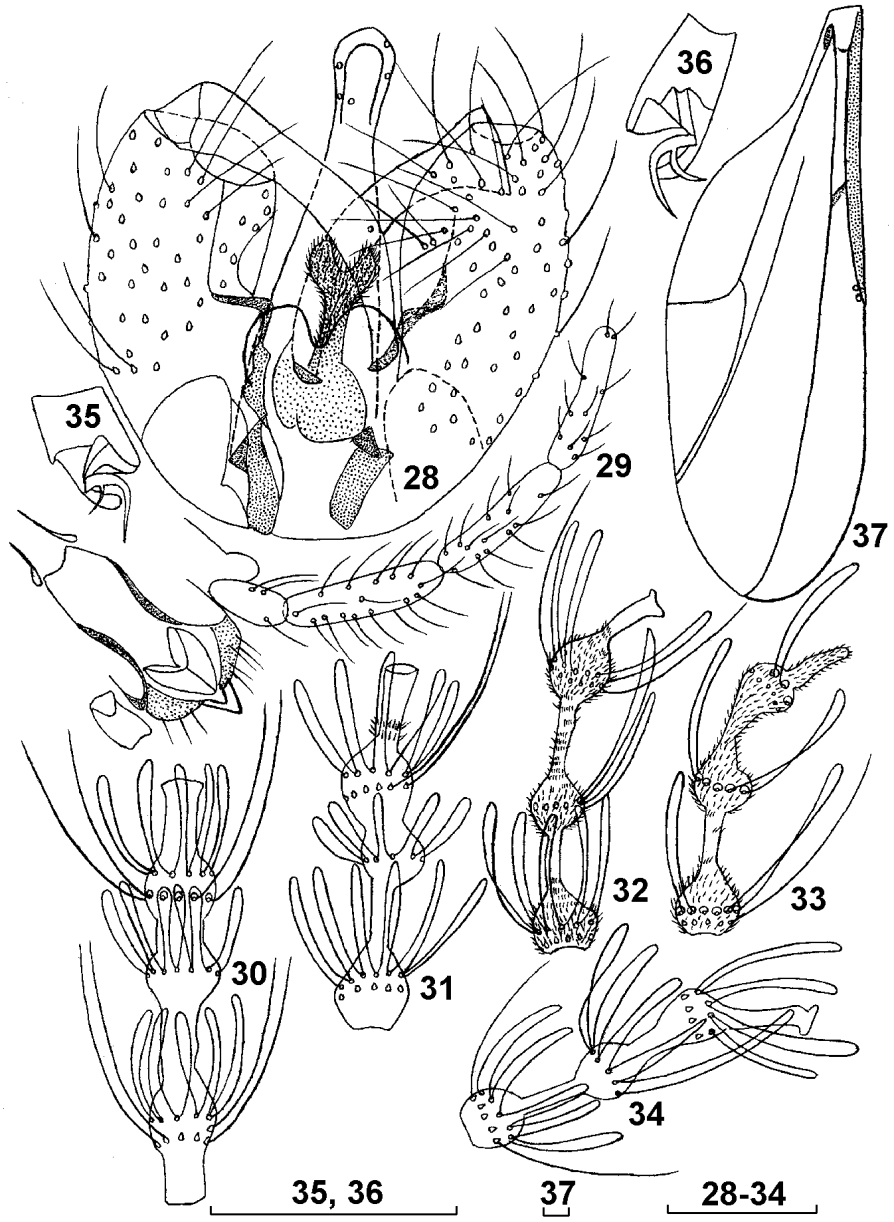
DESCRIPTION. MALE. Body yellow-brown, densely covered by scales. Antennae dark brown. Notum with 3 dark brown stripes. Body length 1.0 mm, wing length 1.7 mm, wing width 0.7 mm, antennae 1.6 mm, hind leg 2.6 mm. Scape light, pedicel dark, as flagellomeres, almost cylindrical. F1 1.1 times as long as F2, 4.8 times as long as wide, with long basal neck, almost round proximal node together with basal neck 2.5 times longer than proximal neck; distal node with deep medial constriction, 1.1 times longer than proximal node together with basal neck; proximal neck 2.8 times shorter than distal node and 1.6 times shorter than distal neck. Sensorial filae in medial whorls shorter than basal and apical ones, basal and apical files elongated before base of next node. F5 4.4 times as long as wide, distal node 1.3 times as long as distal neck and 1.5 times longer than proximal neck, 2.0 times as long as proximal node, proximal node 1.4 times shorter than proximal neck, distal node with slight constriction. F12 with long swollen projection. Palpi 4-segmented, its ratio 1:2.5:2.5:3.7, segment 4th thin, almost parallel-sided. Tarsal claw on all legs simple, empodium as long as claw. Wing 2.5 times as long as wide. Vein R_{4+5} joining beyond apex of wing, R_{1+2} 2.5 times shorter than wing, point of joining R_{1+2} with *C* situated on more short distance to base of wing than fork *Cu*. Part of R_{1+2} from apex to point of joining it with *Rs* 1.7 times shorter than R_{1+2}, vein *Cup* developed.

Gonocoxites 2.4 times as long as wide, almost parallel-sided, medially with obtuse enlargement, truncated apically. Gonostylus slightly sclerotized near apex, 1.2 times shorter than gonocoxites, slightly enlarged distally, slightly bent and strongly narrowed basally, 6.8 times as long as wide. Cerci quadrate, lobes strongly caved apically, dissected by long narrow excision. Hypoproct densely covered by microtrichiae, slightly longer than gonocoxites, much longer than cerci, slightly excavated apically, slightly enlarged basally. Sclerotized stripes at base of hypoproct developed. Aedeagus thick, slightly wider than hypoproct, rounded apically and enlarged at base as hypoproct.

Female unknown.

RELATIONSHIPS. New species closely related to *C. vitidis* Fedotova from flat glabrous leaf galls of *Vitisiella vesicula* Fedotova et O. Kovalev on *Vitis amurensis* (Fedotova, 2003), but differs from it by more wide flagellomeres with elongated proximal neck; by more long gonocoxites and gonostylus with distal enlargement (gonocoxites of *C. vitidis* 1.5 times as long as wide, gonostylus 6.4 times as long as wide, Fig. 19); by presence of more slight apical excision on lobes of cerci; by wide aedeagus (aedeagus of *C. vitidis* as wide as hypoproct); by small medial lobe of gonocoxites; by more long apical segment of palpi and other form of sclerotized parts at the base of genitalia and small body size.

ETYMOLOGY. A specific name originates from the Latin noun *donatrix*.



Figs 28-37. *Ovillidiplosis otiosa,* sp. n., male: 28 – genitalia; 29 – mouthparts and palpi; 30 – F1; 31 – F5; 32 – F11; 33 – F12; 34 – F8; 35, 36 – tarsal claw (variation of shape); 37 – wing. Scale line – 0.1 mm.

Subtribe Ovillidiplosina Fedotova et Sidorenko, subtrib. n.

DIAGNOSIS. Head with short sclerotized occipital process. Male flagellomeres with two nodes: elongated distal node and conical or transversal proximal one. Sometimes last flagellomeres curved distally (Figs 32-34). Male flagellomeres with three whorls of sensorial filae and two whorls of setae. Sensorial filae of flagellomeres with long loops, reached or almost reached to the next node, loops of middle whorl shorter than basal and distal whorls. Palpi 4-segmented, labrum pointed. Tarsal claws strongly curved, with long basal dent (Figs 35, 36, 43), or simple (Fig. 54), empodium almost as long as claw. Wing elongated, almost parallel-sided, or slightly enlarged near middle. Vein R_{1+2} joining *C* in wing middle or near it, R_{4+5} almost straight, curving near apex, joining *C* beyond wing apex. Veins M_{3+4} and forked *Cu* present. Male genitalia strongly sclerotized, with stout, very slender gonocoxites and gonostylus (Figs 28, 38, 46). Gonocoxites slightly narrowed (Figs 28, 38) or enlarged (Fig. 46) basally, with triangular medial or basal outgrowths, covered by numerous pores and long setae. Gonostylus slightly curved, medially or apically, shorter than gonocoxites, with black small claw. Cerci and hypoproct much shorter than gonocoxites. Cerci very short with rounded lobes and oval excision. Hypoproct slightly longer than cerci, forked or slightly excavated apically (Fig. 46), proximally (Fig. 28) or medially (Figs 38, 46, 47, 55) narrowed. Hypoproct densely covered by black microtrichiae, with deep or small excision, dissected basally on two projections. Aedeagus much longer than gonocoxites or almost equal length, basally slightly narrower than cerci, apically widely rounded (Fig. 28), spine-form (Fig. 38) or narrowed (Fig. 46). Genitalia with two basal sclerotized stripes.

RELATIONSHIPS. New tribe differs from the tribe Inclinatidiplosini by strongly sclerotized body; by long antennae with curved last segments; by narrow cerci, by presence of large medio-basal or basal outgrowths: by very long thin gonostylus not swollen basally; by sclerotized short small hypoproct, strongly narrowed basally or medially; by presence of wide sclerotized stripes in the base of genitalia; by relatively narrow and short aedeagus (except *Ovillidiplosis* gen. n.), by strongly narrowed distal node of mid flagellomeres.

Tribes includes three genera: *Ovillidiplosis* Fedotova et Sidorenko, gen. n., *Plectadiplosis* Fedotova et Sidorenko, gen. n., and *Linterodiplosis* Fedotova et Sidorenko, gen. n.

Ovillidiplosis Fedotova et Sidorenko, gen. n.

Type species: *Ovillidiplosis otiosa* Fedotova et Sidorenko, sp. n., here disignated.

DIAGNOSIS. Male flagellomeres with elongated asymmetrical distal node with strong narrowing on all segments (include 12th) and rounded proximal one. Distal nodes of last flagellomeres asymmetrical, divided on two nodes, neck between it very long and covered by microtrichiae (Fig. 32, 33, 34). Distal node consists of two distal

nodes, inclined. Antennae ventrally twisted, each next distal node curved stronger than previous one. Sensorial filae of flagellomeres with long loops, reached to the next node, loops of middle whorl slightly shorter than basal and apical ones (Figs 30, 31). Palpi 4-segmented, labrum pointed (Fig. 29). Tarsal claws strongly curved, with long basal denticle, empodium almost as long as claw (Figs 35, 36). Wing elongated, 3.0 times as long as width, almost parallel-sided, maximally enlarged near middle (Fig. 37). Vein R_{1+2} joining *C* in wing middle, cell of R_{1+2} slightly sclerotized, R_{4+5} almost straight, joining *C* beyond wing apex. R_{1+2} with dark sclerotized aura. Fork of *Cu* situated on equal distance from the base of wing, as point of joining R_{1+2} to *C*. Male genitalia with stout, very slender gonocoxites and gonostylus (Fig. 28). Gonocoxites slightly narrowed basally, with triangular medio-basal outgrowth, slightly enlarged distally, covered by numerous pores and long apical setae. Gonostylus slightly curved, shorter gonocoxites, gradually narrowing from base to apex, with black small claw. Cerci very short with rounded lobes and oval excision. Hypoproct slightly longer than cerci, sclerotized, forked, consists of swollen base, long stem and apical horseshoe dilation. Cerci and hypoproct much shorter than gonocoxites. Aedeagus much longer than gonocoxites, basally slightly narrower than cerci, apically almost as wide as gonostylus, apically widely rounded. Genitalia with two wide sclerotized stripes.

SPECIES INCLUDED. Only type species.

RELATIONSHIPS. New genus differs from other known genera by presence of asymmetrical distal nodes of flagellomeres, by ventrally twisted antennae, by small cerci and hypoproct and by very long and wide aedeagus, by enlarged distally gonocoxites and by long curved gonostylus. Form of flagellomeres of new genus is similar with *Xenodiplosis* Kieffer (Fig. 11-13) but differs from it by rounded lobes of cerci, by emarginated (not whole) hypoproct, by very long and wide aedeagus and by narrow wing.

ETYMOLOGY. Name of genus originates from the Latin adjective *ovillus* – sheep's pertained from twisted flagellomeres, and from traditional ending (*-diplosis*) for genera of subfamily Cecidomyiinae.

Ovillidiplosis otiosa **Fedotova et Sidorenko, sp. n.**
Figs 28-37

MATERIAL. Holotype – ♂ (slide 442/8149): Russia, Primorskii krai, Lazovskii Reserve, Korpad', MT, forest 2, 9-10.VII 2007 (V. Sidorenko).

DESCRIPTION. MALE. Body length 2.0 mm, length of wing 2.75 mm, width 0.93 mm. Scape of antennae very small, 1.5 times shorter than pedicel. F1 5.5 times as long as wide, distal neck 2.1 times shorter than distal node. Distal node of F1 2.1 time longer than proximal one and 2.1 times longer than proximal neck. F2 1.1 times longer than F1. Palpi 4-segmented, its ratio 1.0:1.9:1.8:1.8, all segments parallel-sided, segment 4th rounded apically. Wing 3.0 times as long as wide. Vein R_{1+2} straight, 2.0 times shorter than length of wing. Gonocoxites with small medial

outgrowths, widely rounded laterally and apically. Gonocoxites 2.1 times as long as wide. Gonostylus 1.1 times shorter than gonocoxites, sligthly enlarged basally. Gonostylus about 4.3 times as long as wide, curved near apex. Cerci shorter than triangular lobes of gonocoxites, narrower than width of gonocoxites, with widely rounded lobes. Hypoproct 2.5 times narrower than cerci and longer than cerci. Aedeagus unsclerotized, slightly swollen apically, with apical marginal groove.

FEMALE unknown.

ETYMOLOGY. A specific name originates from the Latin adjective *otiosus*.

Linterodiplosis **Fedotova et Sidorenko, gen. n.**

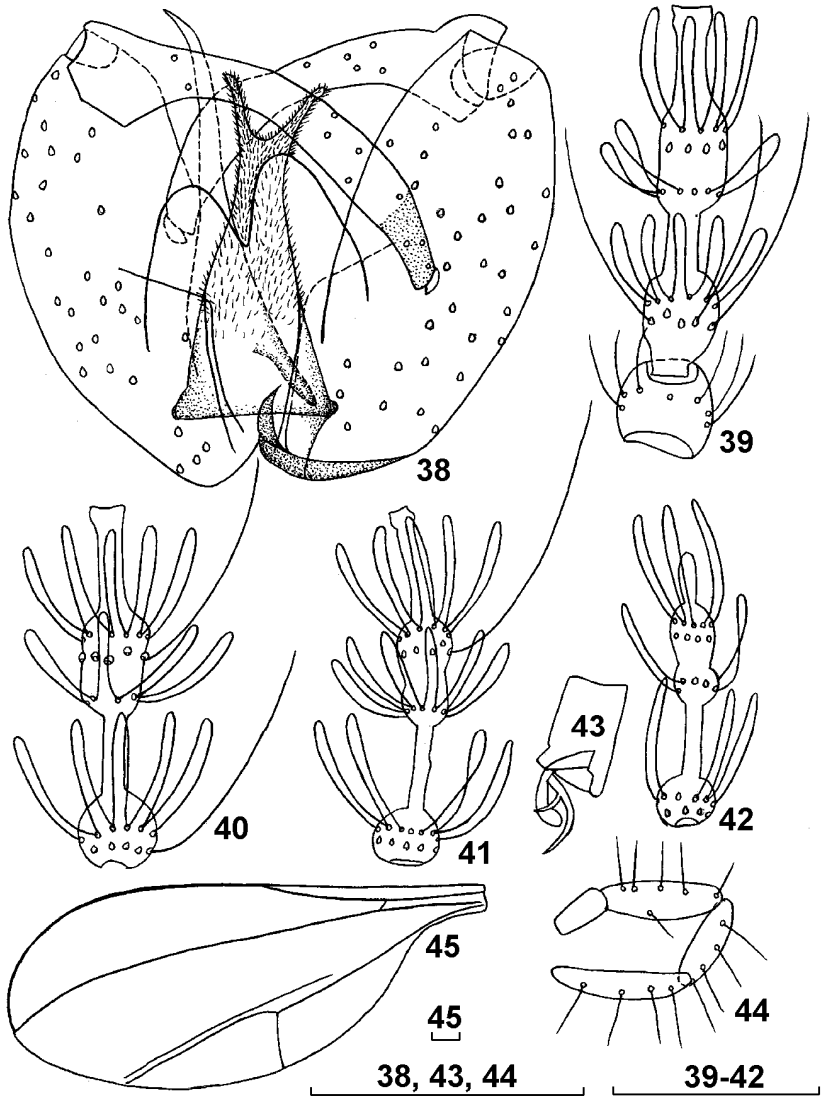
Type species: *Linterodiplosis navalia* Fedotova et Sidorenko, sp. n., here designated.

DIAGNOSIS. Male flagellomeres with elongated distal node without narrowing on proximal segments (Figs 39, 40) and with strong narrowing on distal segments, including 12th one (Figs 41, 42), and rounded or transversal proximal one. Sensorial filae of flagellomeres with long loops, slightly not reached to the next node in apical whorl, loops of middle whorl slightly shorter than basal and apical ones. F12 with long apical projection (Fig. 42). Palpi 4-segmented (Fig. 44). Tarsal claws semicircular, with long basal denticle, empodium shorter than claw (Fig. 43). Wing widely rounded, 2.5 times as long as wide, maximally enlarged near middle (Fig. 45). Vein R_{1+2} joining with *C* before of wing middle, R_{4+5} almost straight, joining *C* beyond wing apex. Fork of *Cu* situated almost on equal distance from the base of wing, as point of joining R_{1+2} with *C*. Vein M_{3+4} developed. Male genitalia elongated, with stout, very slender gonocoxites and gonostylus (Fig. 38). Gonocoxites wide oval, with triangular medial lobe, covered by numerous pores. Gonostylus strongly sclerotized near apex. Cerci large, with rounded lobes and triangular excision. Hypoproct much longer than cerci, slightly sclerotized, forked apically, strongly enlarged basally. Cerci and hypoproct shorter than gonocoxites. Gonostylus slightly curved basally, shorter than gonocoxites, gradually narrowed from base to apex, with small black claw. Aedeagus slightly longer than gonocoxites, basally slightly narrower than cerci, apically pointed and slightly curved, apically spiniform. Genitalia without sclerotized wide stripes.

SPECIES INCLUDED. Only type species.

RELATIONSHIPS. New genus differs from the *Ovillidiplosis* gen. n. by usual flagellomeres, not twisted ventrally; by absence of narrowing on proximal distal nodes of flagellomeres; by more long proximal and distal necks of flagellomeres; by form of more wide and long cerci and strongly elongated hypoproct, by form of aedeagus, pointed apically and strongly enlarged basally; by absence of genital sclerotized stripes basally; by less long wing without additional sclerotization along veins and small body size.

ETYMOLOGY. Name of genus originates from the Latin noun *linter* – boat, and from traditional ending (*-diplosis*) for genera of subfamily Cecidomyiinae.



Figs 38-45. *Linterodiplosis navalia* sp. n., male: 38 – genitalia; 39 – pedicel and F1; 40 – F5; 41 – F11; 42 – F12; 43 – tarsal claw; 44 – palpi. Scale line – 0.1 mm.

Linterodiplosis navalia **Fedotova et Sidorenko, sp. n.**
Figs 38-45

MATERIAL. Holotype – ♂ (slide 490/8123): Russia, Primorskii krai, Lazovskii Reserve, Korpad', MT, river shore, 8-9.VII 2007 (V. Sidorenko).

DESCRIPTION. MALE. Body, palpi, veins of wing, legs and genitalia dark-brown. Notum brown, without three stripes. Scape, pedicel and F1 and F2 dark-brown, other flagellomeres pale-brown. Body length 1.4 mm, wing length 2.2 mm, wing width 0.8 mm, length of antennae 2.6 mm. Pedicel transversal. F1 5.4 times as long as wide, distal neck 1.3 times shorter than distal node. Distal node of F1 1.1 times longer than proximal one and 2.0 times longer than proximal neck. F2 almost as long as F1. F5 4.5 times as long as wide, distal neck 1.1 times longer than distal node. Distal node of F5 1.4 time longer than proximal one and 1.2 times longer than proximal neck. F11 5.0 times as long as wide (Fig. 41), distal node and neck together 2.0 times longer than proximal node and neck. F12 1.3 times shorter than F11. Palpi ratio 1:1.2:1.6:2.3, all segments slightly enlarged laterally, segment 4th rounded apically. Wing 2.5 times as long as wide. Vein R_{1+2} straight, 2.2 times shorter than length of wing. Apical fragment of R_{1+2} from *Rs* to point of joining with *C* 1.7 times shorter than R_{1+2}. Tarsal claw near base and basal denticle almost white. Gonocoxites with large medial lobe, widely rounded laterally. Gonocoxites 2.6 times as long as wide. Gonostylus 1.1 times shorter than gonocoxites, strongly enlarged basally. Gonostylus about 4.0 times as long as wide, curved near base. Cerci longer than triangular lobes of gonocoxites, wider than width of gonocoxites, with wide rounded lobes. Hypoproct 2.3 times narrower than cerci and much longer than it. Aedeagus unsclerotized, strongly enlarged proximally and pointed apically. Abdominal tergites and sternites with distal stripe of sclerotization.

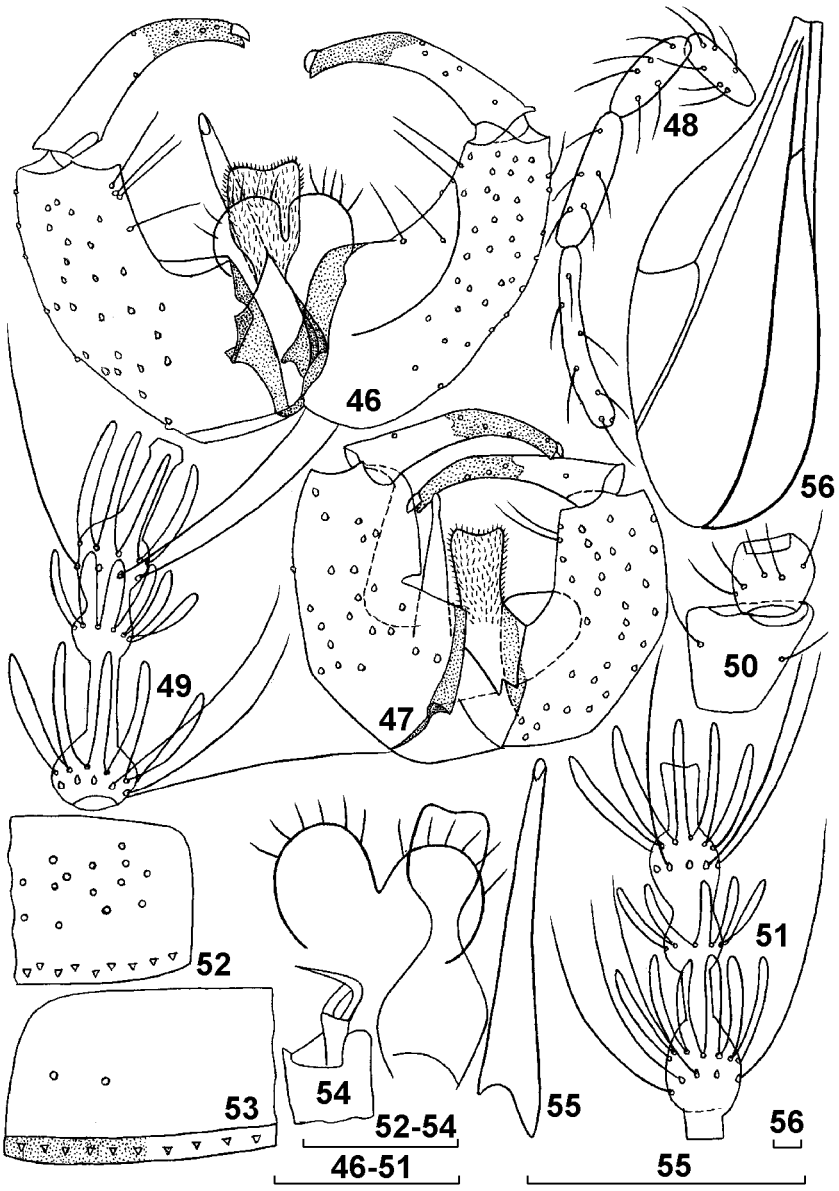
FEMALE unknown.

ETYMOLOGY. A specific name originates from the Latin noun *navalia.*

Plectadiplosis **Fedotova et Sidorenko, gen. n.**

Type species: *Plectadiplosis pressa* Fedotova et Sidorenko, sp. n., here designated.

DIAGNOSIS. Body very dark, notum with three stripes. Pedicel narrower than scape (Fig. 50). Male flagellomeres with elongated distal node, strongly narrowed medially on all segments (Figs 49, 51) and transversal proximal one. Distal nodes of last flagellomeres asymmetrical, not divided on two nodes, distal nodes of last flagellomeres slightly inclined. Sensorial filae of flagellomeres with long loops, in basal and apical whorls loops reached to the next node, loops of middle whorl much shorter than basal and apical whorls. Palpi 4-segmented (Fig. 48). Tarsal claws simple, strongly rectangular curved, empodium almost as long as claw. Wing elongated, 2.7 times as long as wide maximally enlarged near middle (Fig. 56). Vein R_{1+2} joining *C* in wing far before middle, R_{4+5} curved before joining with *C*. Fork of *Cu* situated on more distance from the base of wing than point of joining R_{1+2} to *C*. Vein M_{3+4} present. Tergites and sternites with distal sclerotized stripe. Male genitalia with medio-basal almost acutangular outgrowth of gonocoxites and thin curved gonostylus (Figs 46, 47). Gonocoxites widely rounded basally and almost parallel-sided distally. Gonostylus distally strongly narrowed and stronger sclerotized, shorter than gonocoxites. Cerci very short with rounded lobes and narrow or train-



Figs 46-56. *Plectadiplosis pressa* sp. n., male: 46, 47 – genitalia; 48 – palpi; 49 – F5; 50 – scape and pedicel; 51 – F1; 52 – sternite; 53 – tergite; 54 – tarsal claw; 55 – cerci, hypoproct and aedeagus (variations of shape); 56 – wing. Scale line – 0.1 mm.

gular excision. Hypoproct densely covered by thick black microtrichiae, slightly longer than cerci, sclerotized, excavated apically, narrowed medially and dissected basally on two band-form stripes (Figs 46, 47, 55). Cerci and hypoproct much shorter than gonocoxites. Aedeagus as long as gonocoxites or shorter one, basally slightly narrower than hypoproct, apically very thin without swelling but with narrow slightly sclerotized plate. Inner side of gonocoxites with sclerotized curved bands.

RELATIONSHIPS. New genus differs from the *Ovillidiplosis* sp. n. by less asymmetrical distal nodes of flagellomeres; by small excavated hypoproct and by very thin and short aedeagus; by not enlarged distally gonocoxites and by short stronger curved gonostylus; by simple tarsal claw and by short enlarged wing.

ETYMOLOGY. Name of genus originates from the Latin noun *plecta* and from traditional ending (*-diplosis*) for genera of subfamily Cecidomyiinae.

Plectadiplosis pressa **Fedotova et Sidorenko, sp. n.**
Figs 46-56

MATERIAL. Holotype – ♂ (slide 459/8083/1): Russia, Primorskii krai, Lazovskii Reserve, Korpad', MT, river shore, 17-18.VI 2005 (V. Sidorenko). Paratypes – ♂ (slide 459/8083/2): same date and locality; ♂ (slide 459/8089/3): same date and locality (V. Sidorenko).

DESCRIPTION. MALE. Body very dark, length 1.4-1.9 mm, wing length 2.2-2.8 mm, wing width 0.9-1.0 mm, leg 4.3-5.1 mm. Scape of antennae very small, rounded, 1.4 times shorter than pedicel. F1 with short basal neck, 4.9 times as long as wide, distal neck 1.2 times shorter than distal node. Distal node of F1 1.2 time longer than proximal one and 3.2 times longer than proximal neck. F2 as long as F1. F5 4.5 times as long as wide, distal neck 1.3 times shorter than distal node. Distal node of F5 1.7 time longer than proximal one and 1.6 times longer than proximal neck. Palpi 4-segmented, its ratio 1.0:1.1:1.5:2.0, segment 4th almost parallel-sided. Wing 2.7 times as long as wide. Vein R_{1+2} straight, 2.2 times shorter than length of wing; part of R_{1+2} from *Rs* to point of joining with C 2.2 times shorter than R_{1+2}. Gonocoxites with sclerotized margin on medio-basal outgrowth. Gonocoxites 1.8-1.9 times as long as wide. Gonostylus 1.4 times shorter than gonocoxites, sligthly enlarged basally. Gonostylus about 3.6-5.1 times as long as wide, curved near apex. Cerci shorter than excavated hypoproct, narrower than width of gonocoxites, with widely rounded lobes. Hypoproct 1.9-2.0 times narrower than cerci and slightly longer than cerci. Aedeagus unsclerotized, straight, slightly enlarged basally.

FEMALE unknown.

ETYMOLOGY. A specific name originates from the Latin adjective *pressus.*

Subtribe Emarginatodiplosina Fedotova et Sidorenko, subtrib. n.

MALE. Scape and pedicel elongated (Fig. 59). Flagellomeres with rounded proximal and pyriform distal nodes with slight narrowing (Figs 60, 65, 76). Distal and

proximal necks long, sensorial loops of basal and apical whorl almost reached to or far not reached to next nodes. F12 with elongated projection (Fig. 61). Vein R_{1+2} running into anterior wing margin before its middle, R_{4+5} not strongly curved and joined with *C* distinctly beyond wing apex (Figs 63, 68, 72). Fork of *Cu* and M_{3+4} developed or M_{3+4} undeveloped. Tarsal claws simple (Fig. 62, 67, 71) or dentated (Fig. 77), empodium slightly shorter or longer than claw. Genitalia large, transversal (Figs 57, 64, 69, 73), with long and wide gonocoxites and long slender gonostylus. Gonocoxites with small basal swelling. Gonostylus not enlarged basally, slightly curved. Cerci short, with small triangular excision and strongly obliqued lobes, each lobe with lateral piercing projection: with elongated outer angle (Figs 57, 64, 75) or lateral thin projection (Fig. 69). Hypoproct slightly sclerotized, forked, X-formed (*Emarginatodiplosis*), Y- or V-formed (*Orodiplosis* gen. n.), slightly longer than cerci and shorter than gonocoxites; with deep excision, wider than aedeagus, very narrow basally (Figs 64, 69) or enlarged laterally (Fig. 57) or basally (Fig. 73). Aedeagus narrow, with waved lateral sides and numerous fossae distally.

FEMALE unknown.

RELATIONSHIPS. New subtribe differs from the subtribe Clinodiplosina by dark body; by large size of transversal genitalia; by very long and wide gonocoxites and by presence of basal lobe or swelling (not medio-basal enlargement or lobe as in Clinodiplosina); by form of short cerci; by slightly sclerotized hypoproct slightly longer than cerci and shorter than gonocoxites.

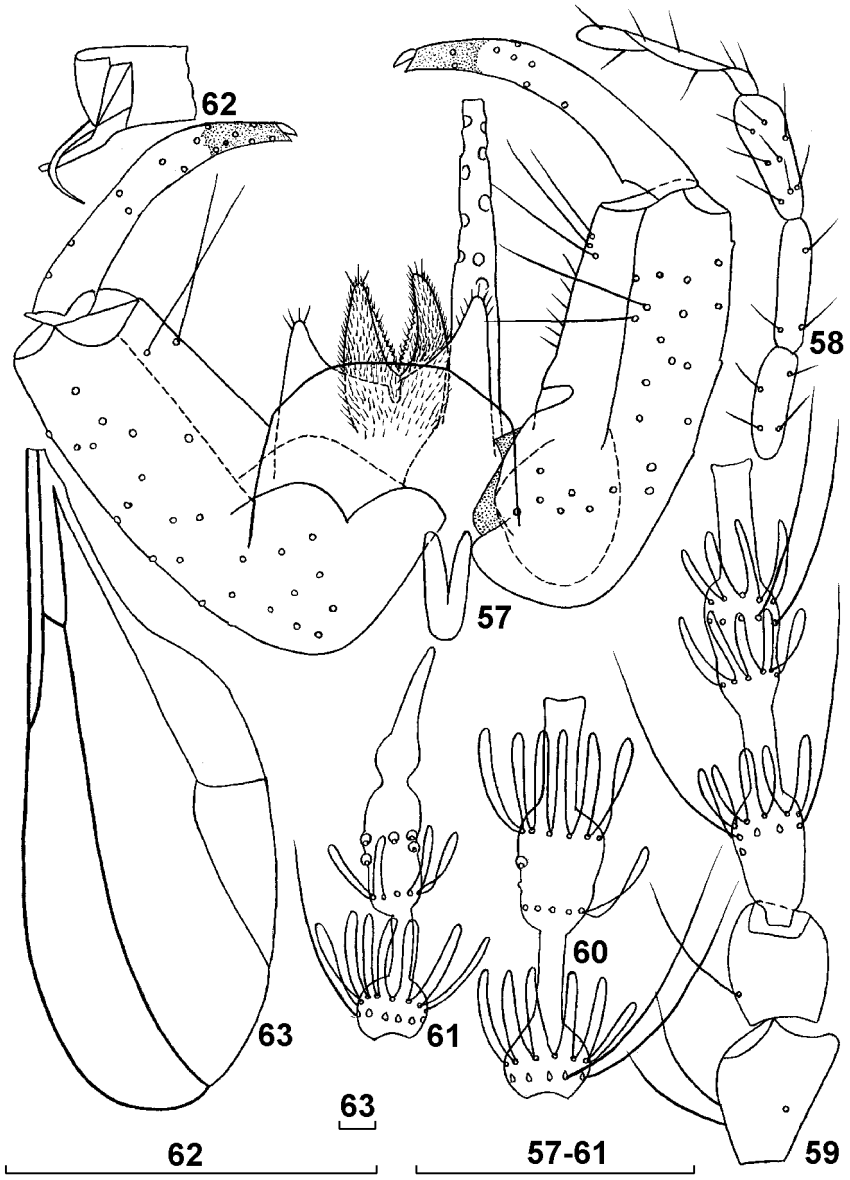
GENERA INCLUDED. *Emarginatodiplosis* Fedotova, 2003 (1 species), *Orodiplosis* Fedotova et Sidorenko, gen. n. (3 species).

Orodiplosis **Fedotova et Sidorenko, gen. n.**

Type species: *Orodiplosis nomas* Fedotova et Sidorenko, sp. n., here designated.

DESCRIPTION. MALE. Body length 2.0 times shorter than legs and 2.0 times shorter than wing. F1 with short basal neck, elongated proximal and distal nodes (Fig. 59), proximal and distal necks shorter than nodes. F5 with more long necks and swollen nodes. Distal node with constriction. Sensorial filae long, in basal, medial and apical whorls equal length, sensorial filae basal and apical filae elongated behind middle of next neck. Palpi 4-segmented (Figs 58, 66, 70). Tarsal claw simple on all legs (Fig. 62, 67, 71), empodium as long as claw or slightly longer. Wing maximally enlarged medially, 2.5-2.7 times as long as wide (Figs 63, 68, 72). Vein R_{4+5} not strongly curved distally, joining with *C* far beyond of apex of wing, R_{1+2} 2.1-2.3 times shorter than wing. Part of R_{1+2} from apex to point of joining it with *Rs* 1.8-2.3 times shorter than R_{1+2}, vein M_{3+4} developed or slightly visible.

Gonocoxites 2.1-2.4 times as long as wide (Figs 57, 64, 69, 73), almost parallel-sided distally and proximally with triangular basal outgrowth, truncated apically. Gonostylus sclerotized near apex, 1.2-1.4 times shorter than gonocoxites, slightly enlarged basally, bent apically or distally, 3.0-5.1 times as long as wide. Cerci and



Figs 57-63. *Orodiplosis nomas* sp. n., male: 57 – genitalia,; 58 – palpi; 59 – scape, pedicel and F1; 60 – F5; 61 – F12; 63 – wing. Scale line – 0.1 mm.

hypoproct much shorter than gonocoxites or hypoproct as long as gonocoxites. Cerci very wide, with narrow triangular excision between obliqued lobes and elongated lateral sides with apical projection. Hypoproct V- or Y-formed, narrowed proximally, or V-formed apically and slightly swollen laterally or parallel-sided, medially with thin membranous transparent stripes or apical lobes curved to aedeagus and situated around it. Hypoproct with thin pointed or narrow lobes divided by U-formed or V-formed emargination, sometimes lobes dentated apically. Aedeagus thin, much longer than gonocoxites, slightly enlarged basally, covered by numerous round or semicircular deep fossae, sometimes with apical oval projection. IX tegmen situated above cerci (Fig. 57).

FEMALE unknown.

RELATIONSHIPS. New genus differs from other genera of Clinodiplosini by transversal genitalia, by short cerci and hypoproct and by thin aedeagus covered by fossae. New genus closely related to the genus *Emarginatodiplosis* Fedotova, 2003, but differs from it by long aedeagus, by basally narrowed hypoproct, by presence of basal lobe of gonocoxites, by almost equal length of sensorial filae in all whorls of flagellomeres (not shorter in medial whorl in *Emarginatodiplosis*), by simple tarsal claw, less transversal genitalia.

ETYMOLOGY. Name of the new genus originates from the Latin noun *ora*, and from the traditional ending (*–diplosis*) for genera of the subfamily Cecidomyiinae.

Orodiplosis nomas **Fedotova et Sidorenko, sp. n.**
Figs 57-63

MATERIAL. Holotype – ♂ (slide 462/8092): Russia, Primorskii krai, near Vladivostok, 25.V 2005 (V. Sidorenko).

DESCRIPTION. MALE. Body length 2.3 mm, wing length 2.6 mm, wing width 0.8 mm, antennae 1.9 mm, hind leg 3.4 mm. Scape, pedicel as light as flagellomeres. Pedicel elongated, scape trapezoidal, slighter than pedicel and flagellomeres. F1 1.1 times as long as F2, 6.4 times as long as wide, with short basal neck, elongated proximal node 1.6 times longer than proximal neck, distal node with slight medial constriction, almost as long as proximal node, proximal neck 1.6 times shorter than distal node and 1.4 times shorter than distal neck. Sensorial filae almost equal size in basal, medial and apical whorls, basal and apical filae elongated before mid of next neck. F5 5.0 times as long as wide, distal node 1.1 times as long as distal neck and 1.4 times longer than proximal neck, 1.7 times as long as proximal node, proximal node 1.2 times shorter than proximal neck, distal node with slight constriction. F12 with long swollen projection. Palpi 4-segmented, its ratio 1:1.1:1.2:1.7, segment 4th thin, almost parallel-sided. Simple tarsal claw on all legs, empodium longer than claw. Wing 2.7 times as long as wide. Vein R_{4+5} joining beyond apex of wing, R_{1+2} 2.3 times shorter than wing, point of joining R_{1+2} with *C* situated on more short distance to base of wing than fork *Cu*. Part of R_{1+2} from apex to point of joining it with *Rs* 2.3 times shorter than R_{1+2}, vein M_{3+4} very slightly developed, almost invisible.

Gonocoxites 2.1-2.4 times as long as wide, almost parallel-sided distally, proximally with triangular outgrowth, truncated apically. Gonostylus sclerotized near apex, 1.4 times shorter than gonocoxites, slightly enlarged basally, slightly bent and strongly narrowed apically, 5.1 times as long as wide. Cerci and hypoproct much shorter than gonocoxites. Cerci enlarged basally, very wide, with narrow triangular excision between obliqued lobes and elongated lateral side. Hypoproct slightly longer than cerci, V-form apically and slightly swollen laterally, apically pointed, medially with thin membranous transparent stripes. Aedeagus thin, much longer than gonocoxites, slightly enlarged basally, covered by numerous rounded deep fossae. Transparent tegmen slightly wider and shorter than cerci.

FEMALE unknown.

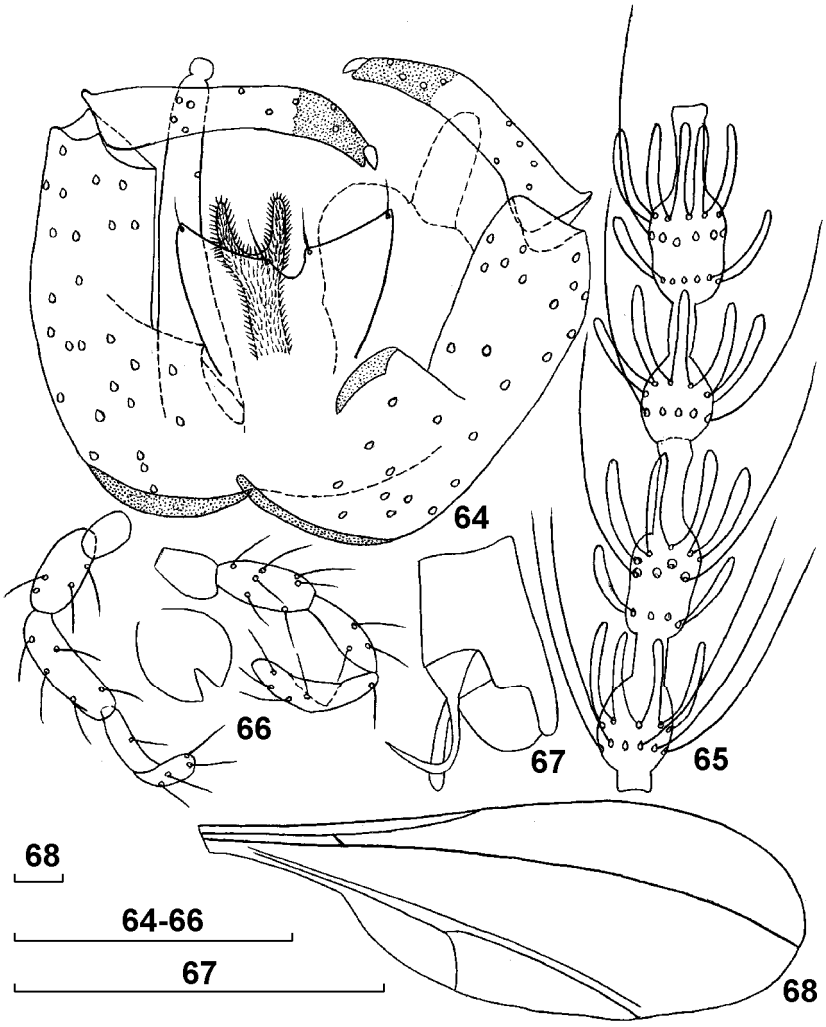
ETYMOLOGY. A specific name originates from the Greeck noun *nomas*.

***Orodiplosis nutrix* Fedotova et Sidorenko, sp. n.**
Figs 64-68

MATERIAL. Holotype – ♂ (slide 494/8099): Russia, Primorskii krai, Lazovskii Reserve, America, MT, river shore, 4-5.IX 2005 (V. Sidorenko).

DESCRIPTION. MALE. Body pale-yellow, antennae, palpi and legs darker than body, covered by dark scales. Notum slightly darker than body, without stripes, thorax laterally unsclerotized, genitalia darker than body. Body length 2.1 mm, wing length 2.7 mm, wing width 1.0 mm. Scape, pedicel as light as flagellomeres. F1 as long as F2, 4.5 times as long as wide, rounded proximal node together with short basal neck 2.5 times longer than proximal neck, distal node without medial constriction, 1.1 times shorter than proximal node with basal neck, proximal neck 2.3 times shorter than distal node and 1.9 times shorter than distal neck. Sensorial filae almost equal size in basal, medial and apical whorls, basal and apical files elongated before next node. F5 4.3 times as long as wide, distal node 1.3 times as long as distal neck and 1.8 times longer than proximal neck, 1.4 times as long as proximal node, proximal node 1.3 times longer than proximal neck, distal node without constriction. Palpi 4-segmented, its ratio 1:1.7:1.7:2.5, segment 4th slightly enlarged laterally. Tarsal claw hook-like on all legs simple, empodium longer than claw. Wing 2.8 times as long as wide. Vein R_{4+5} joining almost in apex of wing, R_{1+2} 2.3 times shorter than wing, point of joining R_{1+2} with *C* situated on equal distance to base of wing as fork *Cu*. Part of R_{1+2} from apex to point of joining it with *Rs* 2.0 times shorter than R_{1+2}, vein M_{3+4} developed.

Gonocoxites 2.5 times as long as wide, almost parallel-sided distally, proximally with large triangular lobe, truncated apically. Gonostylus slightly sclerotized near apex, 1.4 times shorter than gonocoxites, slightly enlarged basally, almost straight, 4.7 times as long as wide, slightly narrowed near apex. Cerci and hypoproct much shorter than gonocoxites. Cerci very wide, enlarged distally, with small semicircular excision between obliqued lobes and pointed outer angles. Hypoproct slightly longer than cerci, forked, Y-formed, with thin proximal stem, with narrow apical lobes. Aedeagus thin, much longer than gonocoxites, slightly enlarged basally, covered by numerous rounded deep fossae, with rounded apical swelling. Transparent tegmen almost as long as cerci.



Figs 64-68. *Orodiplosis nutrix* sp. n., male: 64 –genitalia; 65 – F1 and F2; 66 – mouthparts and palpi; 67 – tarsal claw; 68 – wing. Scale line – 0.1 mm. By dotted line on Fig. 64 shown deformed tegmen.

FEMALE unknown.

RELATIONSHIPS. New species is closely related to *O. nomas* sp. n. but differs from it by presence of very small basal lobes of gonocoxites, by presence of basal swelling of aedeagus, by distally enlarged gonostylus near apex, by form of more narrow hypoproct and cerci, by narrow cell *Cu*.

ETYMOLOGY. A specific name originates from the Latin noun *nutrix*.

***Orodiplosis opis* Fedotova et Sidorenko, sp. n.**
Figs 69-77

MATERIAL. Holotype – ♂ (slide 491/8113): Russia, Primorskii krai, Lazovskii Reserve, Proselochnaya bay, MT, river shore, 4-5.VII 2007 (V. Sidorenko).

DESCRIPTION. MALE. Body completely white, antennae, palpi and legs pale-brown. Notum without stripes, genitalia white. Body length 1.1 mm, wing length 1.6 mm, wing width 0.7 mm. Palpi 4-segmented, its ratio 1:1.7:1.7:2.2; segment 4th slightly enlarged distally, rounded apically. Tarsal claw hook-like, empodium as long as claw. Wing 2.8 times as long as wide. Vein R_{4+5} joining almost in apex of wing, R_{1+2} 2.0 times shorter than wing, point of joining R_{1+2} with *C* situated almost on equal distance to base of wing as fork *Cu*. Cell *Cu* narrow. Part of R_{1+2} from apex to point of joining it with *Rs* 2.8 times shorter than R_{1+2}, vein M_{3+4} undeveloped.

Gonocoxites 2.7 times as long as wide, almost parallel-sided distally, proximally with small triangular lobe, triangular apically. Gonostylus slightly sclerotized in apical 1/3, 1.4 times shorter than gonocoxites, slightly enlarged basally, enlarged distally, 5.7 times as long as wide. Cerci and hypoproct much shorter than gonocoxites. Cerci very wide, enlarged laterally, with small semicircular excision between strongly excavated lobes, with long and thin lateral projections. Hypoproct as long as cerci, forked, Y-formed, with thin proximal stem and deep wide excision between thin lobes. Aedeagus very thin, much longer than gonocoxites, strongly enlarged basally, covered by numerous rounded deep fossae, with rounded apical swelling.

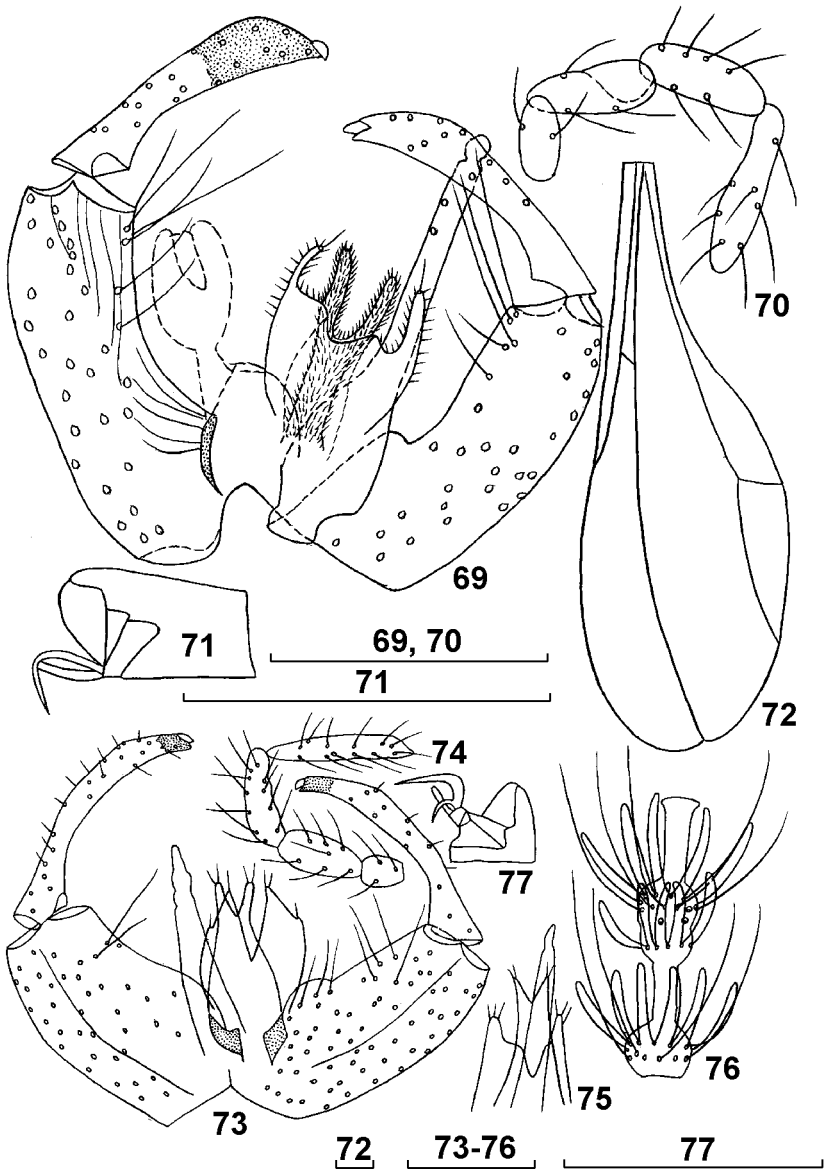
FEMALE unknown.

RELATIONSHIPS. New species is closely related to *O. nomas* sp. n. but differs from it by presence of very large basal lobes of gonocoxites, by presence of apical swelling of aedeagus, by more enlarged gonostylus near apex, by form of strongly excavated cerci, by more long vein R_{1+2} and by joining R_{4+5} almost in apex of wing.

ETYMOLOGY. A specific name originates from the Latin noun *opis*.

Key to species of the genus *Orodiplosis* (males)

1. Aedeagus without apical swelling (Fig. 57). Hypoproct V-formed, slightly enlarged laterally. Gonocoxites with slight basal outgrowth. Gonostylus almost parallel-sided, strongly thinned apically, 5.1 times as long as wide. Vein R_{4+5} joining with *C* far behind wing apex (Fig. 63). Body length 2.3 mm, wing length 2.6 mm …….…… ***O. nomas* sp. n.**
– Aedeagus with apical swelling (Figs 64, 69). Hypoproct Y-formed, enlarged distally. Gonocoxites with basal triangular lobe. Gonostylus enlarged or slightly narrowed apically, 4.7 or 5.7 times as long as wide. Vein R_{4+5} joining with *C* near wing apex (Figs 68, 72) ……..…….…… 2



Figs 69-77. *Orodiplosis opis* sp. n., male (69-72); *Emarginatodiplosis libera* Fedotova (73-77), male: 69, 73 – genitalia; 70, 74 – palpi; 71, 77 – tarsal claw; 72 – wing; 75 – cerci, hypoproct and aedeaguus; 76 – F5. Scale line – 0.1 mm (after Fedotova, 2003). By dotted line on Fig. 69 shown deformed tegmen.

2. Gonostylus slightly narrowed apically (Figs 64), 4.7 times as long as wide. Cerci with obliqued lobes. Body large, length 2.1 mm, wing length 2.7 mm …… ……..……. ***O. nutrix* sp. n.**
– Gonostylus slightly enlarged apically (Fig. 69), 5.7 times as long as wide. Cerci with deeply excavated lobes. Body small, length 1.1 mm, wing length 1.6 mm ……..… ***O. opis* sp. n.**

Subtribe Xenodiplosina Fedotova et Sidorenko, subtrib. n.

DIAGNOSIS. Each flagellomere (Fig. 11) with distal node greatly constricted middle part that flagellomere looks to be divided into three nodes, each node with one whorl of circumfilar loops. Sometimes distal node elongated with slight constriction. Gonocoxites with small rounded basal lobe (Fig. 13). Gonostylus thin, smaller than gonocoxites, not swollen basally. Cerci with obtuse lobes, each secondary slightly emarginated or lobes whole. Hypoproct whole, very thin, very strongly covered by dense microtrichiae, parallel-sided or slightly enlarged basally. Aedeagus wider than hypoproct. Wide rounded tegmen developed.

RELATIONSHIPS. New subtribe differs from the subtribe Clinodiplosina s. str. by whole thin hypoproct, covered by long dense microtrichiae; by deeply divided distal node of flagellomeres; by presence of basal lobe of gonocoxites (not medial lobe or enlargement as in Clinodiplosina); by not swollen base of gonostylus.

GENERA INCLUDED. Palaearctic genus *Xenodiplosis* Felt, 1911 (2 species); *Dichodiplosis* Rübsaamen, 1910 (4 species) and widely distributed but mainly Holarctic *Parallelodiplosis* Rübsaamen, 1910 (22 species).

***Xenodiplosis* Felt, 1911**

Allodiplosis Rübsaamen 1910: 287, preoccupied by Kieffer & Jorgensen, 1910.
Xenodiplosis Felt, 1911: 61, new name for *Allodiplosis* Rübsaamen.

Type species: *Allodiplosis laeviusculi* Rübsaamen, 1910, by original designation.

MALE. Body very dark. Eye bridge 8 to 10 facets long medially. Circumfilar loops of basal and apical whorl of flagellomeres long (Fig. 11), reached to next node, loops of middle whorl shorter ones; or circumfilar of all whorls short. Proximal neck long, without microtrichiae, or covered by microtrichiae. F12 with long projection. Palpi 4-segmented, segments slightly enlarged laterally. Tarsal claw simple, curved almost rectangular, empodium slightly shorter than claw. Wing 2.6 times as long as wide. Vein R_{1+2} joining C far before its middle, R_{4+5} joining costa far behind wing apex. Gonocoxites slightly enlarged basally, almost parallel-sided. Gonostylus almost straight or strongly bent distally. Cerci short, with narrow deep excision between excavated lobes. Hypoproct whole, rounded apically, longer than cerci and gonocoxites, narrowed distally, strongly sclerotized, very densely covered by long microtrichiae. Aedeagus longer than gonocoxites, rounded apically. Genital base narrow, rounded, weakly sclerotized.

FEMALE unknown.

BIOLOGY. Larvae of *X. laeviusculi* (Rübsaamen, 1910) are inquilines in galls of *Neuropterus albipes* (Schenk) on leaves of *Quercus robur* in Europe (Skuhravá, 1997). Larvae of *X. lonicerae* Fedotova, 2004 are inquilines in fruit galls on *Lonicera maackii* together with *Mycodiplosis loniceraecarpae* Fedotova in Far East of Russia (Fedotova, Sidorenko, 2004).

Key to species of the genus *Xenodiplosis* (males)

1. Proximal neck of middle flagellomeres very long, not covered by microtrichiae, circumfilar of whorls long (Fig. 11). Gonostylus strongly curved distally (Fig. 13). Cerci strongly enlarged basally …..... ***X. lonicerae* Fedotova**
– Proximal neck of middle flagellomeres very short, covered by microtrichiae, circumfilar of whorls very short. Gonostylus almost straight. Cerci parallelsided ……..... ***X. laeviusculi* (Rübsaamen)**

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