

Two new genera of the tribe Cryptini (Hymenoptera: Ichneumonidae: Cryptinae) from Mexico

Два новых рода трибы Cryptini (Hymenoptera: Ichneumonidae: Cryptinae) из Мексики

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КЛЮЧЕВЫЕ СЛОВА: Cryptini, Tsimpision, Tessaloridon, Goryphina, новый род, новый вид, Мексика, Неотропическая область, Северная Америка.

ABSTRACT. Two new monotypic genera are described in the tribe Cryptini from Mexico: *Tsimpision* **gen.n.** (type species *Tsimpision fulvus* **sp.n.**) and *Tessaloridon* **gen.n.** (type species *Diapetimorpha quadrilineata* Kasparyan et Ruíz-Cancino, 2005). *Diapetimorpha quadrilineata* Kasparyan et Ruíz-Cancino, 2005 is transferred to the genus *Tessaloridon* (**comb.n.**). The both new genera are considered in the large subtribe Goryphina. A key to eight Neotropical genera of the Goryphina is proposed.

РЕЗЮМЕ. В трибе Cryptini описаны два новых монотипных рода из Мексики: *Tsimpision* **gen.n.** (типовой вид *Tsimpision fulvus* **sp.n.**) и *Tessaloridon* **gen.n.** (типовой вид *Diapetimorpha quadrilineata* Kasparyan et Ruíz-Cancino, 2005). Вид *Diapetimorpha quadrilineata* Kasparyan et Ruíz-Cancino, 2005 помещен в род *Tessaloridon* (**comb.n.**). Оба новых рода входят в большую подтрибу Goryphina. Предложен определительный ключ для восьми неотропических родов подтрибы Goryphina.

Introduction

Cryptini is one of the largest tribes within the family Ichneumonidae that comprises over 250 genera and 15 subtribes [Townes, 1970; Yu *et al.*, 2016]. The fauna of Cryptini of America north of Mexico was revised by Townes [Townes, Townes, 1962] who recorded in this region 41 genera and 223 species. The Mexican fauna of Cryptini was monographically revised by Kasparyan & Ruíz-Cancino [2005, 2008]. Subsequently, D. Kasparyan with co-authors described several new

taxa and provided new faunistic records of Cryptini from Mexico (papers 2007–2013 listed in Ruíz-Cancino *et al.* [2014]; Kasparyan [2017, 2021a, b, 2022a, b]; Kasparyan, López-Ortega [2017, 2021]; Khalaim *et al.* [2018]). Thus, about 60 genera and 300 species of Cryptini are known to occur in Mexico at present day.

Goryphina is a largest subtribe of Cryptini that is distributed almost worldwide and includes 41 genera and over 540 species [Townes, 1970; Yu *et al.*, 2016]. Most genera of the subtribe are distributed in the tropics of the Old World. Six genera of Goryphina are known from American continent (mainly from the Neotropical region).

However, the arrangement of the Cryptini genera in subtribes provided by Townes [1970] is often considered to be highly artificial in recent taxonomic papers (e.g. Laurene *et al.* [2006]; Santos, Aguiar [2008]). In the phylogenetic study of the tribe Cryptini covering 182 of its 250 genera, Santos [2017] identified a number of relatively stable clades, but noted that building a subtribal classification based on these clades would be problematic, and proposed to arrange most Cryptini genera in the informal 11 genera groups [Santos, 2017: 657].

Host range for the subtribe Gabuniina includes xylophagous larvae of Coleoptera (Cerambycidae, Buprestidae, Curculionidae, etc.) and less commonly Lepidoptera (Cossidae, Sesiidae, Pyralidae) and Hymenoptera (Cephalidae, Eumenidae, Sphecidae) [Yu *et al.*, 2016].

The aim of this work is to describe two new genera of Goryphina from Mexico and discuss taxonomical status of these genera within the subtribe Goryphina.

Material and Methods

Type and comparative material of Mexican Cryptinae from the Universidad Autónoma de Tamaulipas, Cd. Victoria, Tamaulipas, Mexico (UAT) and Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia (ZISP) was examined. The holotype of the new species is deposited in the Universidad Nacional Autónoma de México, D.F., Mexico (UNAM). Morphological terminology mainly follows that of Townes [1969, 1970]. Taxonomy follows the catalogue TaxaPad [Yu *et al.*, 2016]. Layer photographs were taken in ZISP with a Canon EOS 70D digital camera attached to an Olympus SZX10 stereomicroscope, and partially focused images were assembled with Helicon Focus Pro (ver. 7.6.6) software.

Data on the morphology of genera of Gabuniina for the Table 1 was taken from the monograph by Townes [1970] and other publications on American [Porter, 1977; Gupta, 1982, 1983; Gupta, 1984; Aguiar, 2005; Kasparyan, Ruiz-Cancino, 2005; Santos, Aguiar, 2008; Aguiar, Ramos, 2011; Santos, Aguiar, 2012, 2015; Santos, 2017; Supeleto *et al.*, 2021], Oriental [Gupta, Jonathan, 1970, 1971; Gupta, 1983; Gupta, 1987; Jonathan, 2006; Sheng, Sun, 2009] and Australian [Gauld, 1984] Cryptinae.

Taxonomy and results

Family Ichneumonidae
Subfamily Cryptinae
Tribe Cryptini
Subtribe Goryphina

Genus *Tsimpision* Kasparyan, **gen.n.**

Type species: *Tsimpision fulvus* Kasparyan, **sp.n.**

COMPARISON AND DISCUSSION. The most notable feature that distinguishes *Tsimpision gen.n.* from most genera of the subtribe Goryphina is location of spiracles of the first metasomal segment near its middle (Fig. 8). Within the subtribe Goryphina, similar first metasomal segment is known only in the monotypic genus *Tsirambia* Seyrig, 1952 (endemic of Madagascar) and the Oriental genus *Kriegeria* Ashmead, 1905. The new genus can be easily distinguished from *Tsirambia* and *Krie-*

geria by its strong ovipositor (Fig. 9) and large areolet in the fore wing (Fig. 10). *Tsirambia* also differs from *Tsimpision gen.n.* in having apical tergites shorter and apical transverse carina of propodeum lacking (see Townes [1970: 253, 468, fig. 218]), and *Kriegeria* differs from *Tsimpision gen.n.* in having lower valve of ovipositor laterally with apical dorsal lobes and dorsal valve without nodus (see Townes [1970: 473, fig. 226]); the latter feature is apomorphy of the subtribe Gabuniina.

First metasomal segment with spiracles situated near its middle is rare within the subfamily Cryptinae but is typical for the subtribe Gabuniina. In addition to the similar structure of the first metasomal segment, *Tsimpision gen.n.* resembles Gabuniina in lack of dorsal longitudinal carinae on first metasomal segment, distinctly elongated metasomal tergites 7 and 8 of female, swollen fore tibia of female, and fourth tarsomeres apically hardly bilobed ventrally and with stout bristles at apex (see Table 1).

All morphological features common for *Tsimpision gen.n.* and subtribe Gabuniina are also known in some species of the genus *Mallochia* Viereck, 1912, subtribe Lymeonina. Notably, *Tsimpision fulvus sp.n.* is very similar morphologically (e.g. in the ovipositor structure) and in color pattern to *Mallochia pyralidis* Wharton, 1985, a parasitoid of a stem borer on maize, *Eoreuma loftini* (Dyar, 1917) (Pyralidae) in southern USA and Mexico [Wharton, 1985; Smith *et al.*, 1990]. Such morphological similarity of *T. fulvus sp.n.* and *M. pyralidis* may indicate that these species have similar hosts. However, *T. fulvus sp.n.* differs from *Mallochia* spp. by having a large areolet in the fore wing (Fig. 10), much longer two basal flagellomeres (1.7 times as long as maximum eye diameter vs 0.9–1.2 times in most *Mallochia* species), anterior slope of propodeal groove with two pairs of tubercles (Figs 6, 8, arrow) and by presence a basolateral tooth on the first metasomal segment (Figs 6, 7). Two latter features are important for distinguishing subtribes Goryphina and Lymeonina.

DESCRIPTION. Body about 9.5 mm long, fore wing about 8.0 mm long, flagellum 7.7 mm long, ovipositor sheath 2.2 mm long. Antenna with 25 flagellomeres; basal flagellomeres strongly elongate, two basal flagellomeres combined 1.7 times as long as maximum diameter of eye. Tip of antenna with corolla of small setiform sensillae with widened apex (Fig. 5). Clypeus strongly convex; maximum height of clypeus in pro-

Table 1. Main differences between *Tsimpision gen.n.* and genera of the subtribe Gabuniina.

Таблица 1. Основные различия между *Tsimpision gen.n.* и родами подтрибы Gabuniina.

Characters	<i>Tsimpision gen. n.</i>	Subtribe Gabuniina
1. Areolet	larger, 0.45 times as long as second recurrent vein, with lateral sides converging anteriorly (Fig. 10)	smaller or with subparallel lateral sides
2. Mandible	with subequal teeth (Fig. 3)	with lower tooth longer
3. Lower margin of clypeus	with a pair of very small tubercles (Fig. 3)	without teeth or tubercles (except some species of <i>Digonocryptus</i>)
4. Vertical furrow from median part of sternaulus to mesopleural fovea (Fig. 8)	present (Fig. 8, arrow)	absent (except some species of <i>Digonocryptus</i>)*
5. Teeth on anterior slope of transverse groove separating postscutellum and propodeum	present (Figs 6, 8, arrows)	absent
6. Ventral valve of ovipositor	without dorsal subapical lobe (Fig. 9)	with dorsal subapical lobe
7. Dorsal valve of ovipositor	with distinct nodus (Fig. 9)	without nodus
8. Lateral tooth at base of tergite 1	present (Fig. 8)	absent (except <i>Distictus</i> and <i>Digonocryptus</i>)*

*The genera *Digonocryptus* Viereck, 1913 and *Distictus* Townes differ from other taxa of Gabuniina (see Table 1). In the recent phylogenetic revision of Cryptini [Santos, 2017], these two genera were considered in the *Lymeon* group of Clade H, and Santos [2017: 669] noted that “the placement of *Digonocryptus* and *Distictus* in this clade is somewhat surprising, as species in the two genera are strikingly similar to the taxa in the Gabunia group”.

file at its lower 0.15, below clypeus sharply descending to widely truncated lower margin; extreme edge of lower margin translucent, with two very small tubercles centrally (Fig. 3). Mandible moderately robust, with lower tooth slightly shorter than upper tooth (Fig. 3). Occipital carina joining hypostomal carina above base of mandible.

Head and body evenly covered with fine granulation and very small setiferous punctures; setae moderately sparse and moderately short (Figs 4, 6, 7); granulation strongly smoothed on temple, speculum and tergites (4)5–8; apical area of propodeum with strong rugosity (Fig. 6).

Epomia entirely absent (Fig. 4). Upper margin of pronotum weakly swollen. Notaulus sharp, extending far behind centre of mesoscutum (Fig. 4). Sternaulus distinct, its anterior half sharp and almost straight, posterior portion weaker, sinuate and reaching base of mid coxa (Fig. 8). Mesopleuron with distinct vertical furrow extending from centre of sternaulus to mesopleural fovea (Fig. 8, arrow); similar furrow is known in some species of *Digonocryptus* Viereck, 1913 in Gabuniina. Mesopleural fovea joining to mesopleural suture by horizontal groove. Median portion of postpectal carina absent. Juxtacoxal carina absent. Submetapleural carina strong (Fig. 8). Pleural carina complete but weak behind basal transverse carina (Fig. 8). Hind edge of metanotum laterad postscutellum weakly widened, with distinct tooth on anterior slope of transverse groove; transverse groove between postscutellum and propodeum polished, moderately deep, with one large tooth on its anterior slope (Figs 6, 8, arrows). Propodeum with rounded spiracle which is separated from anterior margin of propodeum by two its own diameters and from transverse part of basal transverse carina by about two its own diameters (Fig. 8). Basal part of propodeum (between anterior margin of propodeum and basal transverse carina) in dorsal view about 1.5 times as long as median part (between basal and apical transverse carinae) (Fig. 6). Propodeum mediadorsally with longitudinal superficial depression which is widener anteriorly (Fig. 6); apical transverse carina more or less complete, with lateral crests (Figs 6, 8).

Fore tibia of female swollen apically (Fig. 1). Fourth tarsomeres in female ventrally hardly bilobed apically and with stout bristles. Fore wing with areolet large, pentagonal, about 0.45 times as long as of second recurrent vein, slightly longer than width of pterostigma; lateral sides of areolet distinctly convergent anteriorly (Fig. 10). Ramulus absent. Nervulus interstitial. Postnervulus intercepted slightly above middle (in upper 0.45). Hind wing with mediocubitella maximally arched in distal 0.35. Nervellus intercepted slightly below middle. Brachiella short, reaching about 0.3 of distance to edge of hind wing. Tip of axillus converging towards anal margin.

First tergite stout, with lateral flange (tooth) at base, 6.0 times as long as subbasal minimum width and 2.2 times as apical maximum width; dorso-median carinae absent; dorso-lateral carina more or less distinct at base and behind spiracle; ventrolateral carina weak, completely obliterated in median part of tergite; spiracles near its middle (Figs 1, 8). Second tergite in profile widely depressed in basal half and convex in apical half (Fig. 1); thyridium subcircular, separated from tergite base by distance of its own diameter. Epipleura of tergites 2 and 3 narrow, white, separated by crease (Fig. 1). Tergites 1–6 with even fine granulation and very small and dense setiferous punctures; setae moderately short (Fig. 7); granulation of tergites 4–6 strongly smoothed. Tergites 7 and 8 of female strongly elongate (Fig. 1). Ovipositor sheath about 0.75 times as long as hind tibia (Fig. 1); ovipositor stout, with distinct nodus, with ten subvertical teeth on lower valve, without dorsal lobe enclosing lower margin of dorsal lobe (Fig. 9).

ETYMOLOGY. The genus name is a masculine noun composed of the Greek “tsimpima isia” (straight sting), referring to straight ventral valve of the ovipositor.

COMPOSITION. The genus comprises one species, *T. fulvus* Kasparyan, **sp.n.**

Tsimpision fulvus Kasparyan, **sp.n.**

Figs 1–10.

MATERIAL EXAMINED. Holotype: Female (UNAM), Mexico, Chiapas, Cacahoatan, Ejido Benito Juárez el Plan, 1750 m a.s.l., 13°06'2.69"N, 92°08'36.1"W, 7.X–7.XI.2018, coll. R. Cancino, A.M. Luna.

DESCRIPTION. Female. Antenna black with flagellomeres 6–8 entirely white and flagellomeres 5 and 9 partly white; scape white ventrally (Figs 1, 2); about five apical flagellomeres brownish ventrally. Head white; malar space and apical half of mandible black (Fig. 3); palpi brownish with two basal segments yellowish; frons and vertex with longitudinal black band covering ocellar area, on vertex this band partly reddish brown and expanding towards occipital carina (Figs 2, 4); upper half of occiput black, postgenae whitish (Figs 2, 3).

Mesosoma, metasoma and legs predominantly fulvous (Fig. 1); propleura, anterior part of pronotum, basal half of tegula, subtegular ridge, spot above anterior end of sternaulus and epipleura of tergites 2 and 3 white; mid coxa with light yellow dorsal marking at base; fore and mid tarsomeres 5 brown (fore coxae and hind tarsi lacking).

Male. Unknown.

ETYMOLOGY. The species is named from the Latin “fulvus” (yellowish brown), referring to the predominant body colour of the new species.

Tessaloridon Kasparyan, **gen.n.**

Type species: *Tessaloridon quadrilineatus* (Kasparyan et Ruiz-Cancino, 2005), **comb.n.**

COMPARISON AND DISCUSSION. *Tessaloridon* **gen.n.** is similar to *Diapetimorpha* Viereck, 1913 but differs from this genus in having slenderer body, longer antennae (about 1.3 times as long as fore wing), first and second flagellomeres combined 1.7–1.8 times as long as maximum eye diameter (shorter in *Diapetimorpha*), apical flagellomeres slenderer than subapical ones, lateral carinae of scutellum longer, dorso-lateral carina of first tergite distinct (absent in *Diapetimorpha*), apical ventral lobes of fourth hind tarsomere shorter, ovipositor sheath shorter and ovipositor slenderer with reduced nodus (see Table 2).

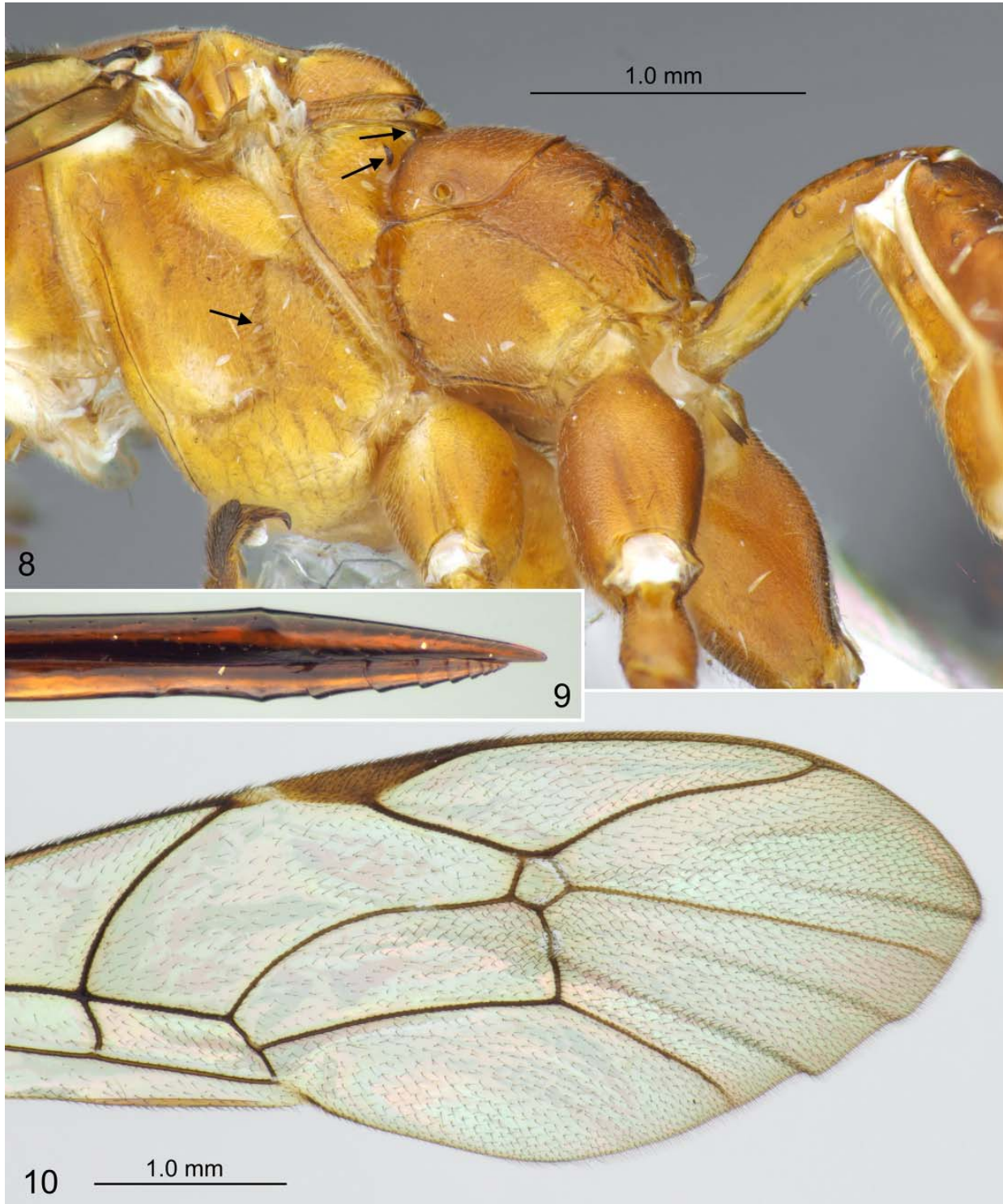
The genus is remarkable by its unusual color pattern of the mesoscutum (Fig. 17). In the Mexican fauna of Cryptini, such color pattern of mesoscutum is rather stable being known only in about ten species: e.g. *Baltazaria servilis* (Cresson, 1874) (Goryphina), two small genera *Camera* Townes, 1962 (Ischnina) and *Epicnemion* Kasparyan et Ruiz-Cancino, 2008 (Lymeonina), some species of *Pachysomoides* Strand, 1917 and *Polycyrtidea* Viereck, 1913 (Lymeonina), and *Ischnus mesonotator* Kasparyan, 2022 (Ischnina).

DESCRIPTION. Fore wing 6.0–8.5 mm long. Antenna with 30–32 flagellomeres; first and second flagellomeres long, combined about 1.8 times as long as maximum diameter of eye in female and about 1.4 times in male; tip of antenna with remarkable thickened sensillae (Fig. 12). Frons mat, with small punctures, polished just above antennal sockets; with short and low vertical carina medially. Clypeus strongly convex,



Figs 1–7. *Tsimpision fulvus* gen. et sp.n., female, holotype: 1 — habitus, lateral view; 2 — head, front view; 3 — lower part of head, front view; 4 — head and mesonotum, dorsal view; 5 — apex of antenna; 6 — propodeum, dorsal view; 7 — base of metasoma, dorsal view.

Рис. 1–7. *Tsimpision fulvus* gen. et sp.n., самка, голотип: 1 — общий вид, сбоку; 2 — голова, спереди; 3 — нижняя часть головы, спереди; 4 — голова и среднеспинка, сверху; 5 — вершина усика; 6 — пропodeум, сверху; 7 — основание метасомы, сверху.



Figs 8–10. *Tsimpision fulvus* gen. et sp.n., female, holotype: 8 — mesosoma and base of metasoma, lateral view; 9 — apex of ovipositor, lateral view; 10 — fore wing.

Рис. 8–10. *Tsimpision fulvus* gen. et sp.n., самка, голотип: 8 — мезосома и основание метасомы, сбоку; 9 — вершина яйцеклада, сбоку; 10 — переднее крыло.

pyramidal in profile, with maximum height at lower 0.35 (Fig. 13); its lower edge broadly truncated and flattened, with neither tooth nor a pair of tubercles centrally (Fig. 14). Occipital carina joining hypostomal carina at acute angle; oral carina 0.6 times as long as basal mandibular width, raised into translucent lobe (Fig. 13). Lower tooth of mandible slightly shorter than the upper.

Collar of pronotum dorsally in central part separated from transverse pronotal groove by weak carina (sometimes carina absent). Epomia long and strong. Sternaulus strong, extending to base of mid coxa (Fig. 11). Basal propodeal groove with two pairs of teeth on its anterior slope (Fig. 17, arrows). Scutellum with lateral carina strong at least in basal 0.65. Basal carina of propodeum complete (Fig. 17). Propodeum in both sexes with long, flattened dorso-ventrally apophyses (Fig. 17). Propodeal spiracle subcircular.

Female with apical lobes of tarsomeres 4 equal by length, short (about 0.2 times as long as ventral length of tarsomeres). Fore wing with areolet small (Figs 11, 15), 0.65 times as long as portion of second recurrent vein above bulla. Distal *rm* weak. Second recurrent vein subvertical, slightly arched. Postnervulus intercepted in its upper 0.4. Basal half of medially weakly arched, apical half distinctly arched. Hind wing with nervellus intercepted near its lower 0.4. Brachiella short, reaching 0.2–0.37 distance to wing margin.

First tergite with strong lateral tooth basally (Fig. 18, arrow); median dorsal longitudinal carinae absent; dorsolateral and ventrolateral carinae weak (ventrolateral carina partly obliterated). Ovipositor sheath about 0.65 times as long as hind tibia (usually about 0.9 times in *Diapetimorpha* spp.). Ovipositor rather slender with nodus hardly discernible (Fig. 19, arrow); upper valve behind nodus about 12 times as long as its height at level of nodus.

ETYMOLOGY. The genus name is a masculine noun composed of the Greek “tessaron loridon” (four stripes), referring to the mesonotum color pattern.

COMPOSITION. The genus comprises one species, *T. quadrilineata* (Kasparyan et Ruiz-Cancino, 2005), **comb.n.**

Tessaloridon quadrilineatus
(Kasparyan et Ruiz-Cancino, 2005), **comb.n.**
Figs 11–20.

Diapetimorpha? quadrilineata Kasparyan, Ruiz-Cancino, 2005: 233 (holotype: female, Mexico, Tamaulipas, Gómez Farías, Alta Cimas, 900 msnm, Malaise trap, 21–28.X.2000, leg. D.R. Kasparyan (UAT); paratypes: 4 females, 3 males, Tamaulipas, env. Cd. Victoria.

MATERIAL EXAMINED. Mexico, Tamaulipas: SW of Cd. Victoria, canyon Los Troncones, Yellow pan traps, 8–14. III.2009, coll. A.I. Khalaim, 1 female, 1 male (ZISP); 15 km SSE of Cd. Victoria, El Madroño, 1400–1450 m, 12.I.2013, coll. A.I. Khalaim, 1 male (ZISP).

DESCRIPTION. Female. Head finely granulate, mat; temple smooth and shining; frons usually distinctly punctate, distance between punctures equal to 1.0–2.0 times diameter of puncture. Malar space very finely granulate, about 0.65 times as long as basal mandibular width. Pronotum laterally in upper 0.4 finely granulate and with fine moderately sparse punctures. Epomia strong and oblique (Fig. 11). Mesonotum finely granulate and mat, usually without distinct punctures (median lobe sometimes finely punctate anteriorly). Mesopleuron in upper half before speculum and metapleuron longitudinally striate (striae weaker on metapleuron); lower part of metapleuron mat, with fine and moderately sparse punctures. Juxtacoxal area short, not separated by carina, more or less smooth except for anterior corner. Proportion of length of hind tarsomeres 1–5 of female 7.5 : 3.2 : 1.9 : 1.0 : 1.5; basitarsus almost as long as tarsomeres 2–5 combined. First metasomal tergite mat, finely granulate except for extreme base and apex, with sparse setae; first tergite 3.0 times as long as its width posteriorly and 5.4 times as long as its width before spiracles. Tergites 2 and 3 with spiracles at basal 0.6 and 0.33. Thyridium of second tergite at basal 0.25, transverse, not enlarged. Tergites 2–8 completely finely granulate, mat, with fine setiferous punctures; setae short and dense (Fig. 18).

Head mainly white with black median parts of frons and vertex, and upper half of occiput. Antenna black,

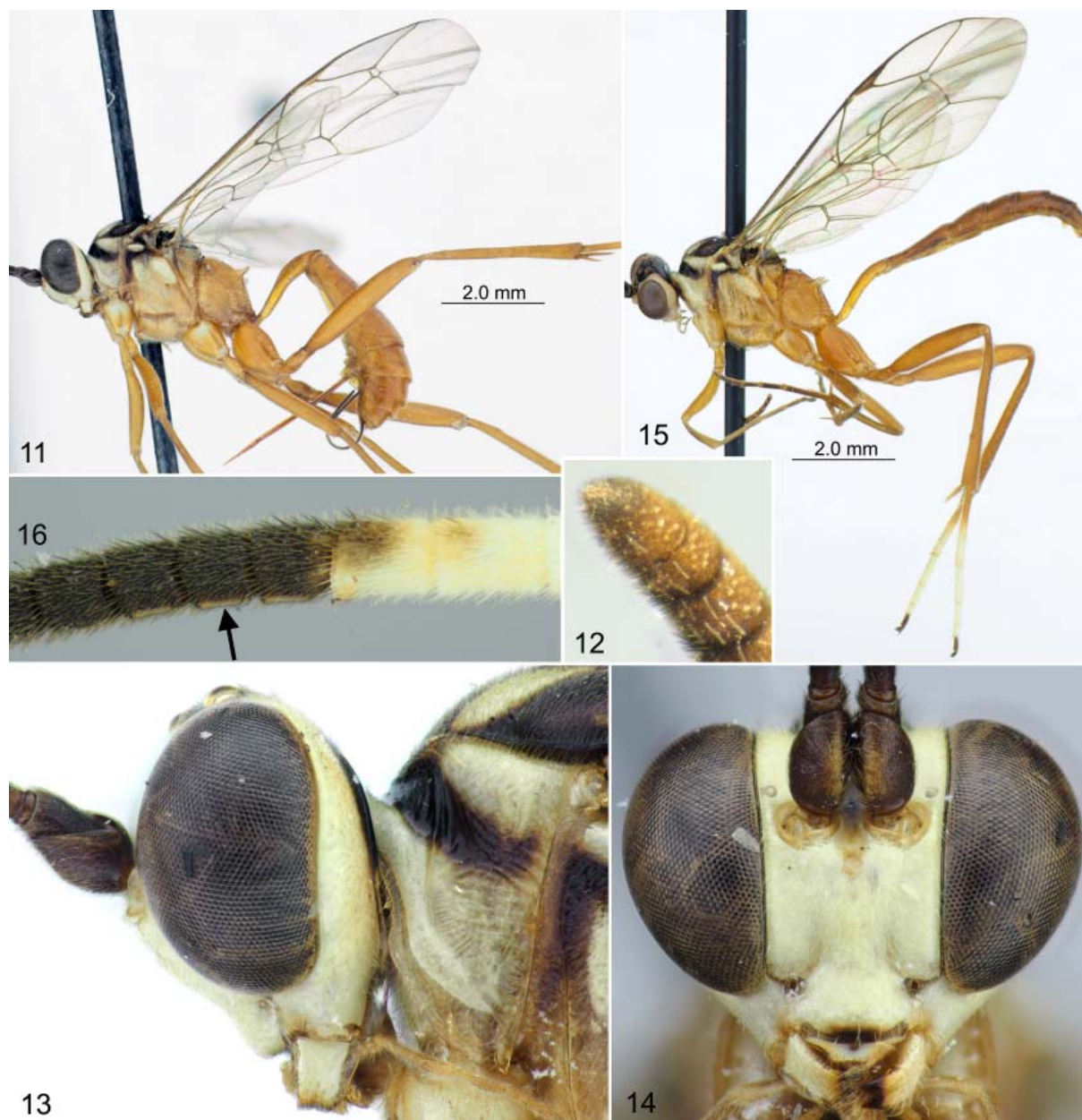
Table 2. Main differences between genera *Tessaloridon* **gen.n.** and *Diapetimorpha*.
Таблица 2. Основные различия между родами *Tessaloridon* **gen.n.** и *Diapetimorpha*.

Characters	<i>Tessaloridon</i> gen.n.	<i>Diapetimorpha</i>
Median lobe of mesoscutum	with a pair of antero-lateral whitish stripes	monochromous
Female:		
1. i. fl.	1.7–1.8	0.8–1.5
2. Collar of pronotum	with postmedian carina	with postlateral carina
3. Epomia	strong and long	weak
4. Lateral carinae if scutellum	0.6–0.8 times length of scutellum	0.2–0.5 times length of scutellum
5. Ratio of lengths of hind tarsomeres 3 and 5	1.3 times (tarsomere 5 short)	usually 0.7–0.9 times (1.3 times in <i>D. aspila</i> Porter, 1977)
6. Apical ventral lobes on hind tarsomere 4	short and equal, about 0.2 times as long as tarsomere 4 (measured ventrally)	about 0.4–0.6 times as long as tarsomere 4 (measured ventrally)
7. Propodeum with apical transverse carina	complete, with apophyses	incomplete, absent on or between apophyses
8. Dorsolateral longitudinal carinae of first tergite	present	absent
9. Ovipositor sheath	0.65 times as long as hind tibia	usually 0.9 times as long as hind tibia
10. Nodus of ovipositor	very weak	distinct
11. Ovipositor from nodus to apex	about 12.0–14.0 times as long as height dorsal valve at level of nodus	usually 5.0–8.0 times (11 times in <i>D. aspila</i>) as long as height dorsal valve at level of nodus
Male		
Tyloides	on flagellomeres 15–16	on flagellomeres 12–13

scape brownish, flagellum with white band from apex of flagellomere 5 to base of flagellomere 10. Prothorax whitish with black stripe on median propleural suture and with broad black stripe above pronotal transverse impression (Fig. 11). Mesopleuron pale yellowish; tegulae, subtegular ridge, speculum and apex of epimeron whitish; small marking before and below subtegular ridge blackish. Mesoscutum blackish (sometimes reddish brown) with longitudinal yellow stripes on median lobe anterolaterally and on lateral lobe along notaulus; lateral prescutellar carinae entirely yellow (Fig. 17). Scutellum whitish yellow dorsally and poste-

riorly except for brownish hind margin. Postscutellum yellow, laterally brown. Metapleuron, propodeum, legs (fore coxae and tarsi partly white) and metasoma more or less uniformly pale reddish (Fig. 11).

Male (Fig. 15). Color pattern similar to female; flagellum with white ring on flagellomeres (8–9)10 to 14(15). Flagellum with linear tyloid on ventral sides of flagellomeres 16–19 (Fig. 16, arrow); flagellomeres 16–19 1.5 times shorter than flagellomeres 13–15 and slightly shorter than flagellomere 20.

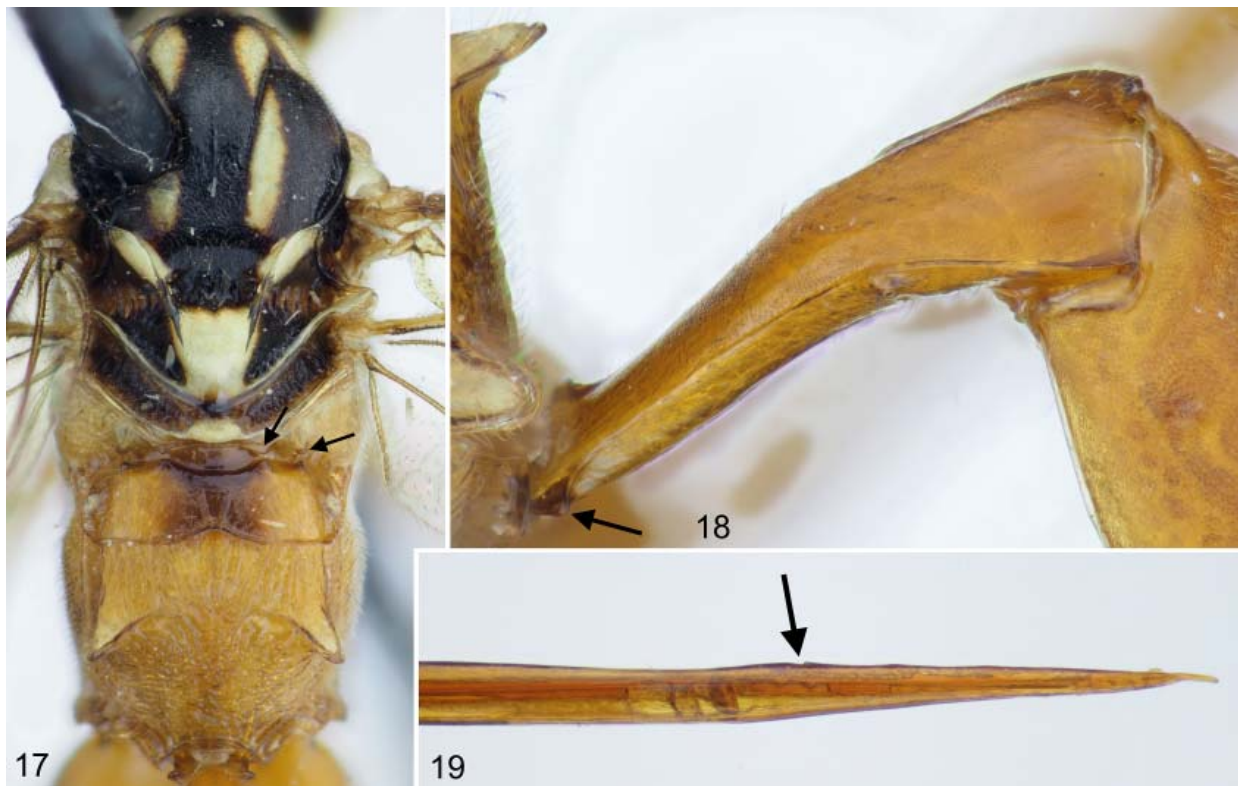


Figs 11–16. *Tessaloridon quadrilineatus*, female, paratype (11–14) and male from El Madroño (15, 16): 11, 15 — habitus, lateral view; 12 — apex of antenna; 13 — head, lateral view; 14 — head, front view; 16 — flagellomeres 13–18.

Рис. 11–16. *Tessaloridon quadrilineatus*, самка, паратип (11–14) и самец из El Madroño (15, 16): 11, 15 — общий вид, сбоку; 12 — вершина усика; 13 — голова, сбоку; 14 — голова, спереди; 16 — членики жгутика с 13-го по 18-й.

KEY TO AMERICAN GENERA OF SUBTRIBE GORYPHINA

1. First tergite without lateral triangular tooth or flange at base 2
- First tergite with lateral triangular tooth or flange at base (tooth sometimes indistinct in male) 3
2. Lower tooth of mandible about half as long as upper tooth. Epomia long and strong. Fore wing with areolet small, open distally. Brachiella long, reaching almost hind wing margin. Basal part of propodeum (in front of basal carina) very long. — Ovipositor tip very long and slender, about 8.0 times as long as deep, its lower valve without teeth except near apex. Head usually entirely black (mandible and clypeus sometimes white). About 30 species in Neotropical region [Scherer, Aguiar, 2012] *Debilos* Townes, 1966
- Lower tooth of mandible slightly shorter than upper tooth. Epomia short and weak. Areolet medium-sized, sometimes as long as portion of second recurrent vein above bulla. Brachiella sometimes absent. Basal part of propodeum (in front of basal carina) not unusually long *Hylophasma* Townes, 1960
3. First tergite with spiracle near its middle (Fig. 1). Clypeus with two small median teeth on lower margin (Fig. 3, arrow). Mesopleuron with vertical furrow extending from centre of sternaulus to mesopleural fovea (Fig. 8, arrow). Fore wing with areolet large, pentagonal, about 0.45 times as long as second recurrent vein and about 1.5 times as long as portion of second recurrent vein above bulla (Fig. 10). Fourth tarsomeres of female ventrally slightly bilobed at apex *Tsimpision* **gen.n.**
- First tergite with spiracle distinctly behind its middle (Fig. 11). Clypeus without teeth, or with one or two small median teeth on lower margin. Mesopleuron without vertical furrow between centre of sternaulus and mesopleural fovea. Fore wing with areolet usually shorter than portion of second recurrent vein above bulla. Fourth tarsomeres of female ventrally weakly or strongly bilobed at apex 4
4. Frons with median horn. — Scutellum with lateral carina present only at its basal corner. Fore wing with areolet small, about 0.7 times as long as portion of second recurrent vein above bulla. First tergite stout; its ventrolateral carinae strong and complete; median dorsal carinae absent. Second tergite with coarse punctures. Three species in Neotropical region (all records from Mexico) *Listrognathus* Tschek, 1870
- Frons without horn. Other characters varied 5
5. Fourth tarsomere of female deeply bilobed ventrally; front lobe at least 1.5 times as long as hind lobe. Lower margin of clypeus laterally projecting as weak or distinct triangular lobes. Apical transverse carina of propodeum without apophyses but forming sublateral weak crest. Brachiella very short or absent *Loxopus* Townes, 1970
- Fourth tarsomere of female weakly emarginate ventrally or with lobes subequal. Lower margin of clypeus laterally sometimes impressed but not forming triangular lobes. Apical transverse carina of propodeum often with apophyses (in female) or forming sublateral weak crest (usually in males). Brachiella short or long 6
6. First tergite without dorsolateral and ventrolateral carinae; median dorsal carinae absent. Hind wing with brachiella



Figs 17–19. *Tessaloridon quadrilineatus*, female, paratype: 17 — mesosoma, dorsal view; 18 — first tergite, dorso-lateral view; 19 — apex of ovipositor, lateral view.

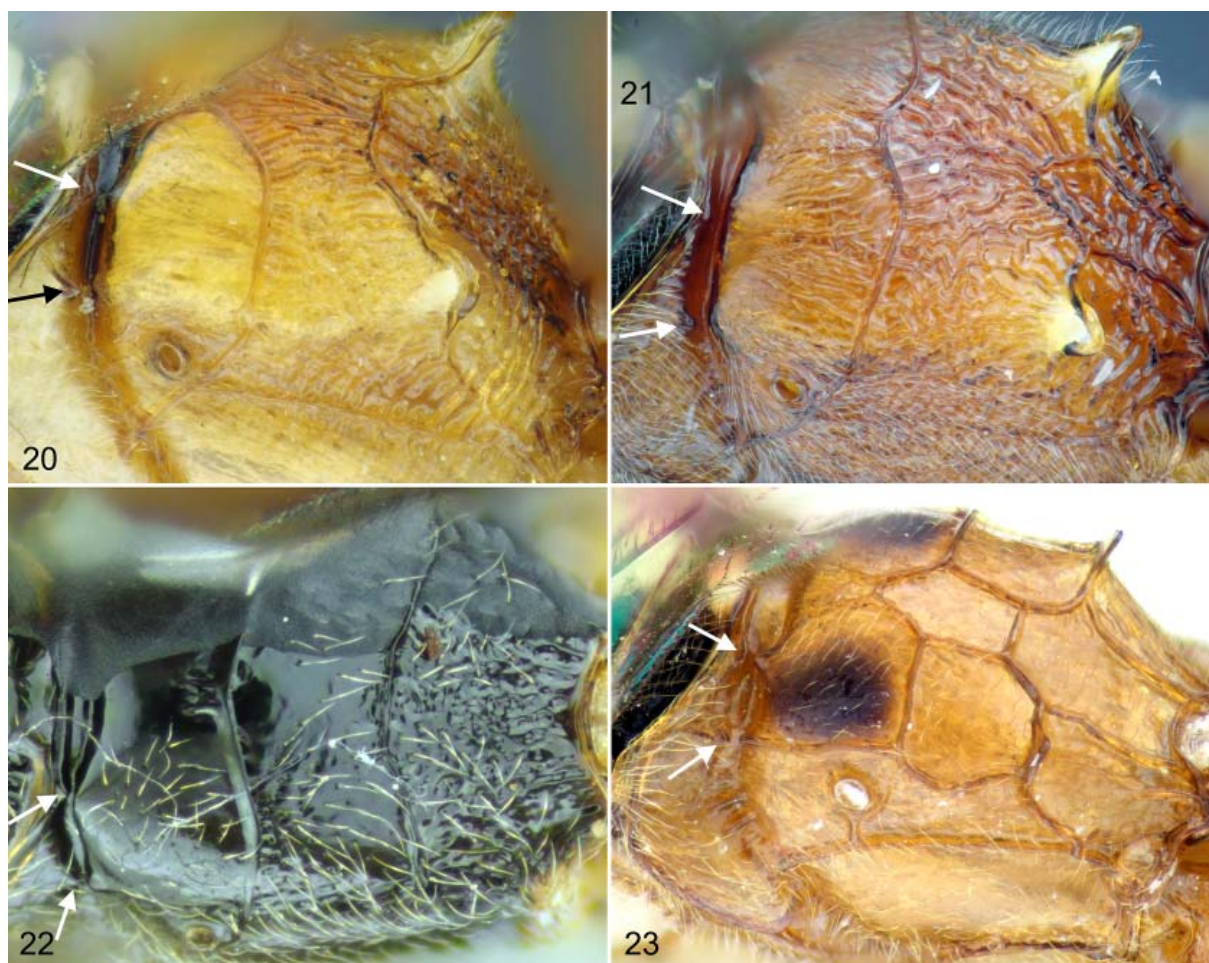
Рис. 17–19. *Tessaloridon quadrilineatus*, самка, паратип: 17 — мезосома, сверху; 18 — первый тергит, сверху и сбоку; 19 — вершина яйцеклада, сбоку.

- present, rather long, reaching at least 0.35 distance to wing margin. Scutellum with lateral carina in its basal 0.2–0.5. Ovipositor sheath about 0.9 times as long as hind tibia ...
 *Diapetimorpha* Viereck, 1913
- First tergite with dorsolateral carinae; ventrolateral carina strong or present at least on postpetiole. Brachiella shorter, reaching about 0.25 distance to wing margin, or entirely absent 7
 - 7. First tergite slender (Figs 11, 18), without distinct median dorsal carinae; ventrolateral carinae weak, partly obliterated. Scutellum with lateral carina at its basal 0.6–0.8. Ovipositor sheath about 0.65 times as long as hind tibia; dorsal valve at nodus not thickened, nodus very weak (Fig. 19) *Tessaloridon* **gen.n.**
 - First tergite stout, with distinct median dorsal carinae and strong ventrolateral carinae. Scutellum with lateral carina at its basal 0.2–0.6, sometimes lateral carina absent. Ovipositor sheath about as long as hind tibia; dorsal valve at nodus distinctly thickened *Baltazaria* Townes, 1961

Discussion

Placement of new genera in current tribe and subtribe system of Cryptinae represents a certain difficulty because of homoplasy, i.e. because these genera share characters of other subtribes. For example, *Tsimpision* **gen.n.** shares many striking features of the subtribe Gabuniina comprising mainly parasitoids of larvae of xylophagous insects. The similarity of *Tsimpision* **gen.n.** and Gabuniina, as well as its similarity with *Mallochia* from the subtribe Lymeonina, is clearly convergent.

Another new genus, *Tessaloridon* **gen.n.**, is described for the previously known species *Diapetimorpha quadrlineata* with unclear taxonomic status. In the original description [Kasparyan, Ruíz-Cancino, 2005], authors noted that this species is clearly isolated from other *Diapetimorpha* species.



Figs 20–23. Propodeum, dorso-lateral view; subtribe Goryphina of tribe Cryptini (20–22) and Hemigastrini (23): 20 — *Baltazaria servilis* (Cresson, 1874) (Veracruz); 21 — *Diapetimorpha macula* (Cameron, 1886); 22 — *Hylophasma* sp. (Veracruz); 23 — *Platymystax mexicanus* Kasparyan et López-Ortega, 2017 (San Luis Potosí).

Рис. 20–23. Проподеум, сверху и сбоку; подтриба Goryphina трибы Cryptini (20–22) и Hemigastrini (23): 20 — *Baltazaria servilis* (Cresson, 1874) (Veracruz); 21 — *Diapetimorpha macula* (Cameron, 1886), 22 — *Hylophasma* sp. (Veracruz); 23 — *Platymystax mexicanus* Kasparyan et López-Ortega, 2017 (San Luis Potosí).

Both new genera possess two pairs of teeth on the anterior slope of propodeal groove (Figs 8, 17). This important morphological feature evident that these new genera belong to the subtribe Goryphina. Such teeth, besides Goryphina, are typical for the primitive tribe Hemigastrini and subtribe Agrothereutina in Cryptini; in these taxa, propodeum possesses tooth-like prominences anteriorly just opposite teeth of the propodeal groove (Fig. 23).

In the subtribe Goryphina, teeth on the anterior slope of propodeal groove (Figs 8, 17, 21, 22) are known in many genera, but these teeth are rudimentary because posterior margin of the metanotum in this subtribe is simplified and longitudinal carinae of propodeum are reduced. Within the Neotropical species of Goryphina, these teeth absent in *Loxopus multicolor* Kasparyan et Ruíz-Cancino, 2008. However, in the reclassification of Cryptini, Santos & Aguiar [2015] noted that "...phylogenetic relationships of the genus [*Loxopus* Townes, 1970] remain essentially unknown", and it was treated separately from typical genera of Goryphina [Santos, 2017].

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