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A new Panurginae genus from Iran: *Gasparinahla* g.nov. described on base of a new species: *Gasparinahla megapalpae* sp.nov. (Hymenoptera: Apidae: Panurginae)

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A b s t r a c t : I found recently two specimens of a very particular bee species in the O.Ö. Landesmuseum (Linz)'s undetermined collections. Beyond any doubt, this taxon belong to a new genus distinct by numerous characters of all the others known from old world. The new genus *Gasparinahla* g.nov. and the type species *Gasparinahla megapalpae* **sp.nov.** are here described.

Introduction

By recently describing (PATINY 2000) the genus *Borgatomelissa*, I intimately believed (on base of my own experience of Palearctic Panurginae) that this would be one of the last, and perhaps the latest, old world genus to be proposed. Consequently, my surprise was high when I discovered the specimens treated here in the Deneš' samples conserved at the Biology Centre Linz (Museum of Upper Austria). Moreover, in contrary to the *Borgatomelissa* description which was in fact the translation in taxonomy of the *Meliturgula brevipennis* (WALKER 1871), morphologic singularity, the present proposition of *Gasparinahla* g.nov. is based on a new very particular species: *Gasparinahla megapalpae* sp.nov.

G. megapalpae is a small long tongued (fig. 1a,b,c) Panurginae. Because the species exhibits three submarginal cells we tend spontaneously to pool it with the Melitturgini-Paramelitturgini (PATINY 1999a,b). Shapes of the genital apparatus and of the relative sclerites (figs. 2,3 a,b,c) may be easily compared with the *Meliturgula*'s ones. We consider therefore, at this state of the description, that the species proposed belong to the Paramelitturgini. The phylogenetic relationships among this tribe will be treated soon in an independant work.

Description

Gasparinahla g.nov.

T y p e s p e c i e s : *Gasparinahla megapalpae* sp.nov. - Description below.

L o c u s t y p i c u s and original labelling: Bandar-e Bušehr; Iran south, Bandar-e Bušehr, 11.5.1999, K. Deneš sen. lgt.

E t y m o l o g y . The genus name *Gasparinahla* is dedicated to Prof. Charles Gaspar, Zoology professor of the Gembloux Agronomical Faculty's Pure and Applied Zoology service. The Name is composed by contraction of "Gaspar" and "nahla", translation of bee in arabic.

D i a g n o s i s . Small species (<6,7mm). Glossa quite longer than face (ratio L_{glossa}/L_{face} = 1,27). Galea unusually reduced, shorter than paraglossa. Cuticule partly yellow on face, legs and metasomal sclerites. Clypeus strongly protruding. Genae ventral part backward angulously enlarged. Eyes large constituting about one third of the head volume. Three submarginal cells, the median apically narrow. T 7 dorsally flattened. Gonocoxites with an apical angulous emargination. Sagittae complex distally acute. St 7 spandrel like with a median terminal emargination.

F e m a l e s : Unknown.

M a l e s : H e a d (figs. 1a,b,c). Clypeus yellow, quite enlarged ($L_{clypeus}/l_{clypeus}$ = 0,45) and strongly protruding. Outer subantennal suture much longer than the inner and convex. Face cuticule mainly yellow (whitish), except two small black zones beyond scapes, front, vertex and genae. Whole body cuticule smooth and less punctured. Face pilosity reduced, mainly abundant on front and vertex. A3 short (A3/A4 = 0,8); funicule about twice as long as scapes. Paraoccular guts small and straight but distinct. Ocelli positionned relatively far from the antennal sockets. Compouned eyes very large (probably larger than by correspondant females), not convergent dorsaly. Genae ventral part angulously enlarged (fig. 1a). Mandibules single toothed, yellow, the top blackish; ventral edge with a simple weak hairs fringe. Labrum long and wide (L/l = 1), apically lightly emarginate on both side; the terminal edge subdivided into three rounded teeth. Proximal labrum part with three longitudinal translucid marks. Galea short (L_{galea}/L_{glossa} = 0,19), smaller than paraglossa, apically sided by an irregular fringe of long and strong hairs. Galea ventral edge with a little acute tooth. Maxillary palpi nearly absent. Labial palpi four segments well developed; the first much longer than the three apical. Glossa quite elongated (ratio L_{glossa}/L_{face} = 1,27); flabellum poorly individualised. **Mesosoma**. Pronotum cuticule dark, blackish, a bit lighter at the posterior margin and on the dorsal lobus. Mesopleurae, mesonotum and scutellum black, smooth, light, fine and sparse punctured. Wings whitish; venation clear, yellow. Three submarginal cells. First recurrent vein branched distally on second submarginal cell. Posterior wings anal lobes wide, well developped. Legs partly yellow from femur apex to tarsus; tibia with a median black spot. Pilosity less developed, mainly present on thorax lateral and ventral parts. **Metasoma**. Terga flat (apical depression weak); cuticule black. T 2-6 with a median yellow stripe. Cuticule nearly entirely smooth, sculpture very fine, sparsly and light. Pilosity whitish, short, restricted at the sternum apical margin. St 2-6 with weak yellow mark. **Sex parts** (figs. 2, 3a,b,c). T 7 medio-apically flattened. Gonocoxites strongly emarginate with isolation of a short angulous internal lobus. Gonostyli simple and quite reduced, about half as long as gonocoxites. St 8 cradle as by *Meliturgula*. St 7 spandrel like, median top partly individualized, the terminal edge widly emarginate.

***Gasparinahla megapalpae* sp.nov.**

T y p e m a t e r i a l : one male Holotypus conserved in Linz OÖL museum and one male Paratypus conserved in Gembloux, presenting both same labelling.

L o c u s t y p i c u s and original labelling: Bandar-e Bušehr; Iran south, Bandar-e Bušehr, 11.5.1999, K. Deneš sen. lgt.

E t y m o l o g y . The specific epithet "megapalpae" is chosen to describe the notable first labial palpus segment elongation, singular among the whole old world Panurginae.

D i a g n o s i s . Generic characters see previous description. Small bee. Cuticule black with numerous yellow marks. Thorax entirely black (excepted legs). Pilosity whitish, poor.

F e m a l e s : Unknown. M a l e s : H e a d (figs. 1a,b,c). Generic characters see previous description. Cuticule fine and sparsly sculptured, smooth and shiny. Clypeus periphery a bit more punctured. Vertex and posterior genae's edge stronger sculptured, less shiny. Face's ventral part yellow (whitish); clypeus with two brownish points below subantennal areas. Two small black zones beyond scapes, front, vertex and genae black. Antennae entirely yellow. Lateral ocelli with a small external yellow spot. Compouned eyes very large (L/l = 1,45). Genae smooth and shiny, fine and superficially punctured. Mandibules yellow, the top reddish-blackish. Labrum entirely yellow with three proximal translucid marks (the median longer). Labral apical margin sinuous, subdivided into three distinct lobi by two lateral emarginations. Labrum apex with a fringe of long hairs. Mouth parts see previous description. Head pilosity whitish, rare and sparsly; mainly restricted to clypeus periphery and lateral parts, scapes, vertex and ventral edge of labrum and mandibules. M e s o s o m a . Pronotum cuticule black, anterior part, two spots of the posterior margin and dorsal lobus ligther coloured. Mesopleurae, mesonotum and scutellum black; cuticule smooth, light, fine and sparse sculptured. Mesonotum and scutellum punctuation fine, sparse but regular. Mesopleurae fine sculptured, lesser shiny than other parts. Wings whitish; venation clear, yellow. Legs partly yellow from femur apex to tarsus; tibia with a median black spot. F 2-3 ventral margin yellow striped. Pilosity sparse and irregular, about absent on pronotum, mesonotum (2/3 posterior) and scutellum, mainly developed on legs, pleurae and thorax ventral side. M e t a s o m a . Terga flat; cuticule fine sculptured, less shiny than on other body parts. Terga mainly dark. T 1 entirely blackish. T 2-6 with a median yellow band, rather irregular. Apical terga depression translucid. Pilosity whitish, short, restricted at the sternum apical margin median part. St 2-6 with weak very imprecise yellow marks. S e x p a r t s (figs. 2, 3a,b,c). See generic description.

Discussion

Comparision of the compouned eyes' shape with the typical one of *Meliturgula* species, presence of paraoccular guts, alar venation and genital conformation make us consider the new genus *Gasparinahla* as a close relative taxon of Paramelitturgini. This conclusion is also very well supported by St8 comparison. Paramelitturgini are the only Panurginae taxa to exhibit the typical cradle-like shape of this sternum. Nevertheless, despite of this obvious proximity, none morphologic structure allow to place *Gasparinahla* into any already described genera of the tribe: *Meliturgula* FRIESE 1903 and *Flavomeliturgula* WARNCKE 1985. It is therefore proposed here as a new genus.

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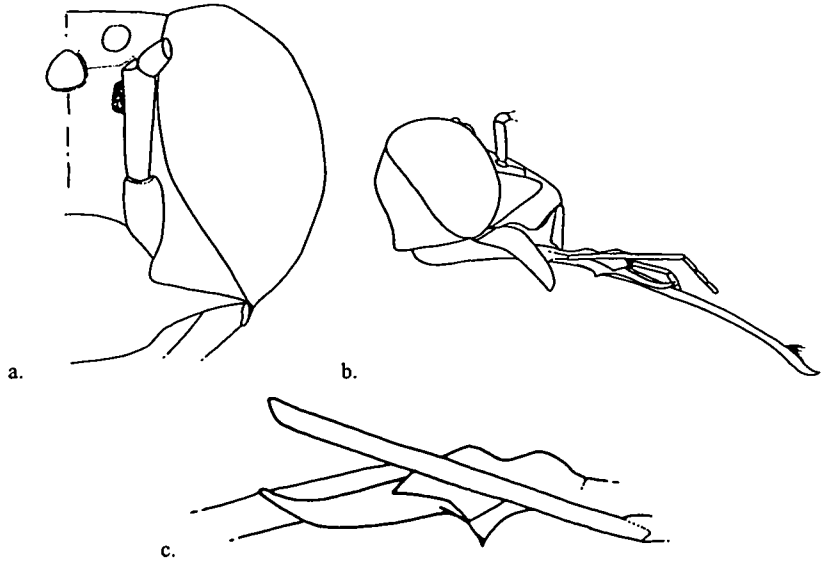

Figure 1. - Head of *Gasparinahla megapalpae*. a. - left half od the face; b. - right profil the head; c. - galeal area of the mouth parts (left profil).

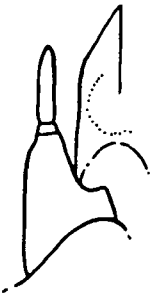

Figure 2. - Right part of genitalia, dorsal view.

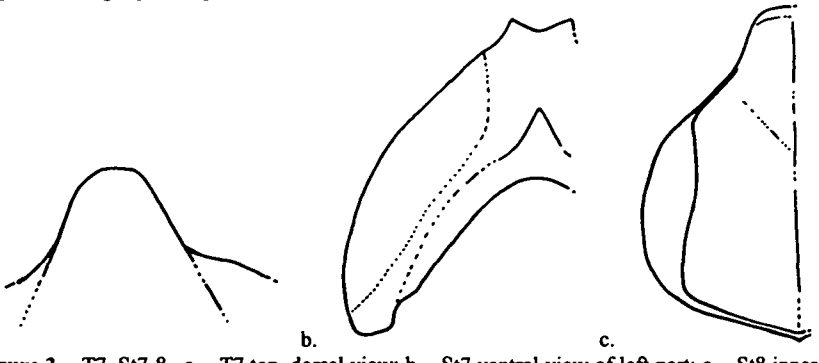

Figure 3. - T7, St7-8. a. - T7 top, dorsal view; b. - St7 ventral view of left part; c. - St8 inner view of right part.