

Linzer biol. Beitr.	52/2	1257-1266	Februar 2021
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Four new species of *Belomicrus* A. COSTA, 1867 (Hymenoptera, Crabronidae) from Morocco and Southern Spain

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Abstract: *Belomicrus atlasiensis* nov.sp. (♂), *Belomicrus christmani* nov.sp. (♀) and *Belomicrus rasmonti* nov.sp. (♀) are described from Morocco, *B. heinrichwolffi* nov.sp. (♂) is described from southern Spain. A key to species of *Belomicrus* (partly) and *Oxybelomorpha* from Morocco and Spain is given.

Key words: Hymenoptera, Crabronidae, *Belomicrus*, *Oxybelomorpha*, new species, Morocco, Spain.

Introduction

During a collecting trip to Morocco in 2015, I found an undescribed *Belomicrus* species in the High Atlas Mountains. Later, I could examine new material of Crabronidae from the ICARDA Projekt, provided by the University of Mons in Belgium, which included further two undescribed species of the same genus. A detailed examination of an unknown *Belomicrus* species collected in Spain showed that it also is not described. These species are described here, and a key for the relevant species lineage is given.

The genus *Belomicrus* s.lat. was revised and keyed by GUICHARD (1991). Later, ANTROPOV (2005) restored the genus *Oxybelomorpha* BRAUNS in KOHL, 1897 to the full genus status, treated as a synonym of *Belomicrus* by GUICHARD (1991), and transfered some species of *Belomicrus* to this genus. Consequently, both genera are occurring in Morocco and southern Europe now. A key to species of *Oxybelomorpha* is given by ANTROPOV (2006). Other related genera of this lineage are *Belomicroides* KOHL, 1899, *Guichardus* ANTROPOV, 2007 and *Pseudomicroides* ANTROPOV, 2001.

The genera *Oxybelomorpha*, *Guichardus* and *Belomicrus* are characterized by distinct "squamae" (flat prominences) on metanotum and by a mucro (large spine) on propodeum, similar to *Oxybelus* LATREILLE, 1796. Remaining genera lack squamae and mucro. *Oxybelomorpha* is separated from *Guichardus* and *Belomicrus* by joint postspiracular carina, omaulus, sternaulus, and precoxal carina on mesopleuron. These carinae lack in remaining genera. See ANTROPOV (2005) for further genus recognition. The here provided key includes species of *Oxybelomorpha* and *Belomicrus* in Morocco and Spain in addition to the key of GUICHARD (1991). *Guichardus* does not occur in Northwest Africa or Europe and is not considered here.

Males and females of *Belomicrus* look very similar in general aspects. Consequently, both sexes are treated together in the key. Each of the new described species is only known by one sex. However, it can be expected, that the related and unknown sex also can be recognized by the same character combination given in the key.

Material and methods

Types are deposited in the collection of the Zoologische Staatssammlung München, Germany (ZSM) and in the collection of the author (CSE). Further material is also deposited in the collection of the University of Mons, Belgium (UMO).

The following special terms and abbreviations are used in the key and descriptions:

Squamaelateral lobes of metanotum
 Mucrospine of propodeum
 AS.....Antennal segments.

Key to species of *Belomicrus* and *Oxybelomorpha* from Northwest Africa and Spain, part

- 1 Lateral parts of squamae narrow, more or less flat, and therefore not united and not enclosing the metaonotum behind (fig. 1).
species not treated here, see key of GUICHARD (1991)
- Squamae united to a semi-circle platform, apically with narrow emargination, laterally often bent upwards (figs 2-8) 2
- 2 Mucro strongly curved downwards, hook-like (fig. 8). Mesopleuron below with joint postspiracular carina, omaulus, sternauleus, and precoxal carina. [Clypeus with large vertical shiny area. Mandible with large lobe below basally. Mucro pale, apically pointed.]*Oxybelomorpha* 3
- Mucro straight (figs 1-7). Mesopleuron below without sharp carinae *Belomicrus* 4
- 3 Tergites red laterally (fig. 16). Ventral mandibular lobe comparatively weak. Male sternites with dense pubescence forming distinct convex areas on sternites II-III. Body length: 7.0-8.0 mm. Spain and southern France, southwest Morocco
*Oxybelomorpha steckii* (KOHLE)
- Abdomen in both sexes black (fig. 15), except pygidial plate reddish apically. Ventral mandibular lobe comparatively stronger. Male sternites with dense pubescence not forming distinct convex areas, evenly shortened posteriad. Body length: female 6.0, male 7.0 mm. Western Morocco *Oxybelomorpha maroccana* (DE BEAUMONT)
- 4 Emargination of squamae triangular or rounded, wider than deep (figs 5-7) 5
- Emargination of squamae narrow, deeper than wide (figs 1, 2, 4) 7
- 5 Squamae and mucro all pale (fig. 6). Emargination between squamae triangular (fig. 6). Mandible basally below with lobe. AS 3-5 wider than long. [Abdomen black or partly red in specimens from the Atlantic coast, fig. 13]. Body length 3.5-4.0 mm. North Africa to Central Asia, Spain..... *Belomicrus odontophorus* KOHL
- Squamae and mucro predominantly dark (fig. 5, 7). Squamae form a plate with weak emargination apically (fig. 5, 7). Mandible basally straight. AS 3-5 as least as long as wide..... 6
- 6 Squamae longer, appr. 1.5x as wide as long, and lateral margin distinctly bent upwards (fig. 7). Punctuation of scutellum dense and somewhat coarse. Morocco. Body length 4.5 mm *Belomicrus rasmonti* SCHMID-EGGER **nov.sp.** ♀
- Squamae shorter, appr. 2.6x as wide as long, lateral margin flat (fig. 5). Punctuation of scutellum with large shiny interspaces. Body length 4.0-6.0 mm. Southern Europe, Turkey..... *Belomicrus italicus* A. COSTA
- 7 Mucro yellow, apically distinctly widened, its apex wider than depth of squamal emargination (fig. 1). Mesopleuron behind (above mid coxa) with triangular lobe). Clypeus medially with triangular point. Body length 5.2 mm. Southwest Morocco
*Belomicrus atlasiensis* SCHMID-EGGER **nov.sp.** ♂
- Mucro dark, apically narrower, apex smaller than depth of squamal emargination (figs 2, 4). Mesopleural lobe shorter, rounded..... 8

- 8 Squamae distinctly shiny and smooth (fig. 4). Body length 4,2 mm. Southern Spain.....
 *Belomicrus heinrichwolffi* SCHMID-EGGER **nov.sp.** ♂
 - Squamae with some striae, more or less dull (fig. 2). Body length 5,1 mm. Central
 Morocco. *Belomicrus christmani* SCHMID-EGGER **nov.sp.** ♀

Species list

Genus *Belomicrus*

Belomicrus atlasiensis SCHMID-EGGER **nov.sp.** (figs 1, 9, 17)

H o l o t y p e : Morocco: 1♂ 16.iv.2014 Morocco, 80 km NE Agadir, Talmakant 30.834N 8.956W, 1100 m (leg. et coll. CSE).

D i a g n o s i s : *Belomicrus atlasiensis* nov.sp. is mainly characterized by the shape of the mucro. It is apically distinctly widened (fig. 1) and has - seen from below - the form of a triangle. In remaining species mucro is apically narrow or pointed.

D e s c r i p t i o n o f m a l e h o l o t y p e : Body length 5.2 mm. Colour: black, with the following parts yellow: basal half of mandible (medial part reddish, apex black), scape (with black band above), flagellomeres below, pronotal lobe, apex of squamae (apical margin transparent), mucro, large spot of forefemur apically below, small spots of mid- and hindfemora apically, tibiae (with some brownish spots). Tarsi brown, tergite VII reddish. Tegula and basal sclerite of forewing transparent with some reddish parts, basal veins of forewing reddish, remaining veins dark brown. Wings transparent. Morphology: Mandible basally without lobe, in medial third with weak longitudinal impression. Clypeus apically with diagonal shiny area, the area medially with obtuse tooth (fig. 17). Gena below near mandibular socket and frons above scape shiny, remaining head and mesosoma apart from propodeum with dense punctation, interspaces shiny, distinctly smaller than puncture diameters. AS 2-12 appr. as long as wide, AS 13 twice as long as basally wide. OOL = ocellar diameter, with orbital fovea between lateral ocellus and eye. Vertex large, distance between hindocellus and hindmargin of vertex as long as length of scape. Pronotal collar with deep and narrow medial impression. Mesopleuron below and mesosternum without carinae, mesopleuron in front of midcoxa with large ear-shaped shiny lamella (approximately as large as AS3). Squamae united, apically with deep drop-like emargination, lateral margin bent upwards. Mucro with large triangular apex, apex as wide as length of AS3. Propodeum dull, with fine reticulation and some striae, laterally only with striae in apical part. Tergites dull, finely and densely punctured, punctures half in size compared to punctures of mesosoma. Tergite VI with indistinct punctation, tergite VII with shiny parts, all tergites laterally with keel in whole length. Sternites with indistinct and fine punctation, shiny. Lower half of face covered with short silver pubescence, remaining body with sparse pubescence, somewhat denser on apical margin of tergites. Apex of sternite II and sternites III-VI with some erect pale setae, longest setae as long as length of AS3.

The female is unknown.

H a b i t a t : *Belomicrus atlasiensis* nov.sp. was collected in a narrow river valley with sandy river sides into the High Atlas Mountains in southwestern Morocco in about 1,100 meters about sea level.

Geographic distribution: High Atlas Mountains in Morocco.

Etymology: The species is named after the origin of the species, the High Atlas Mountains in Morocco.

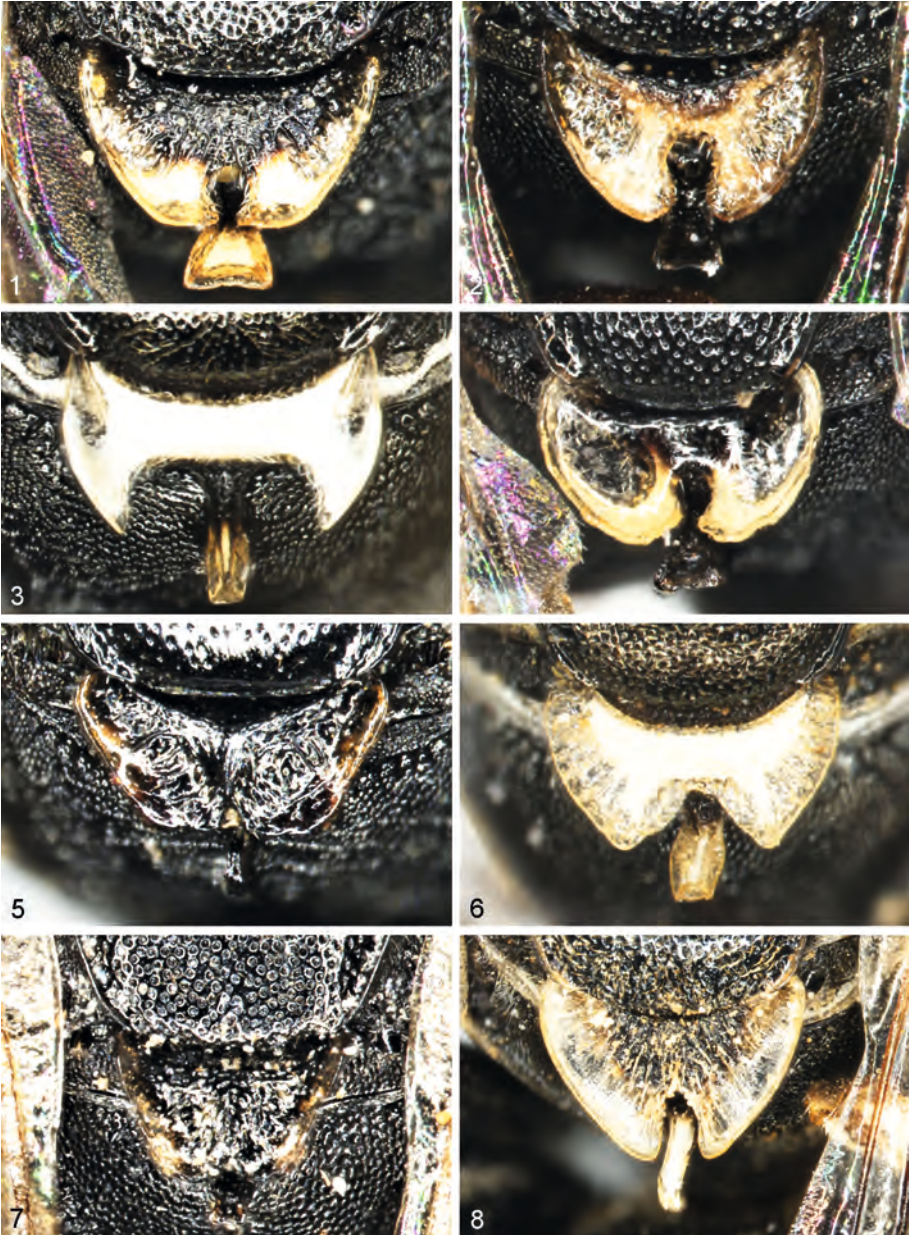
***Belomicrus christmani* SCHMID-EGGER nov.sp. (figs 2, 10)**

Holotype: Morocco: 1♀, FK, Laanoucer, 33.711N 4.844E 1367 m 20-21.vi.2018 (blue pan trap /leg. L. Hamroud, O. Ihsane, P. Lhomme, coll ZSM).

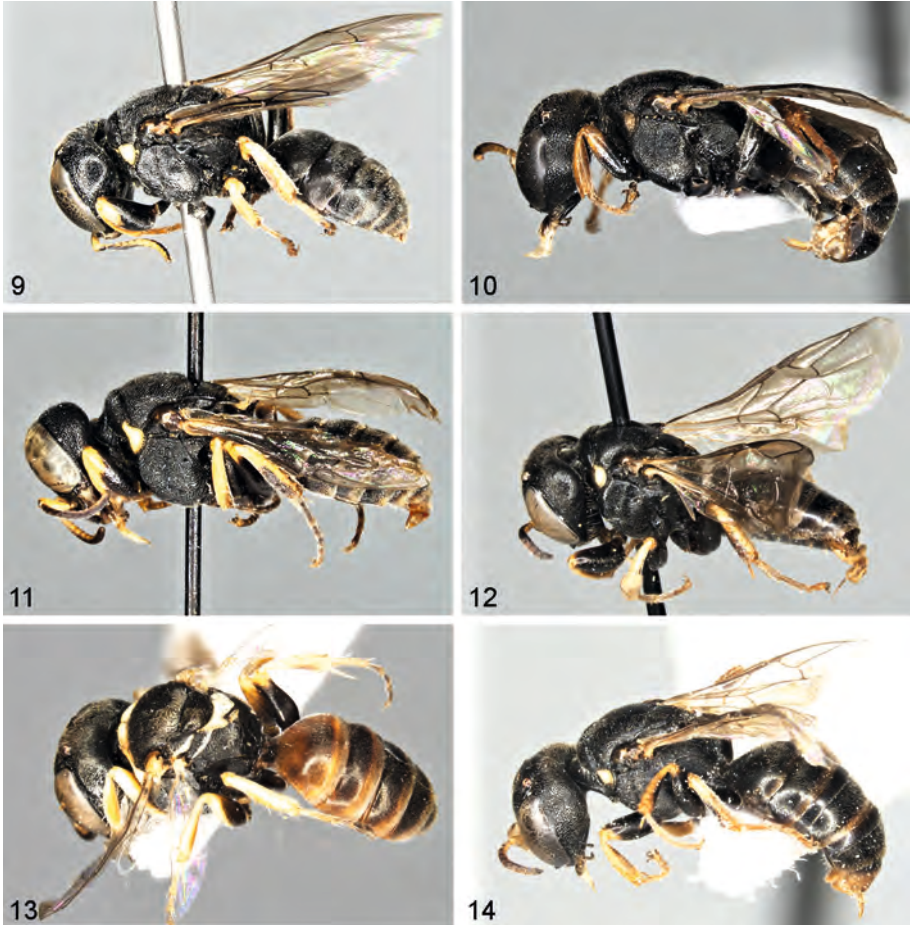
Diagnosis: *B. christmani* nov.sp. is mainly characterized by form of squamae in combination with a black and moderately enlarged mucro (fig. 2). The squamae have a deep, U-shaped emargination apically. The species shares the overall aspect, mainly punctuation, shape of head etc., with *B. atlasiensis* nov.sp., and differ in some characters which justify a description as a distinct species: medial impression of pronotal collar is weak (more deep in *B. atlasiensis* nov.sp.), mucro black and only weakly widened apically, pale colour of body yellowish-reddish and not clearly yellow as in *B. atlasiensis* nov.sp., propodeum laterally with horizontal striation on whole surface (only with some short striae in the back part at *B. atlasiensis* nov.sp.), emargination of squamae U-shaped (drop-like in *B. atlasiensis* nov.sp.). Additionally, the mesopleural lamella in front of the midcoxa is smaller, and not ear-shaped but rectangular.

B. heinrichwolffi nov.sp., described from southern Spain and only known in male sex, is very similar and differs mainly by the shiny and smooth squamae, which are striate and somewhat dull in *B. christmani* nov.sp. Also, puncture of gena and mesopleuron is more coarse and distinctly striate, compared with *B. christmani* nov.sp.

Description of female holotype: Body length 5.1 mm. Colour: black, with the following parts reddish-yellowish: basal half of mandible (base whitish, apex black), scape (with black band above), flagellomeres below, outer part of pronotal lobe, most squamae, apex of femora, tibiae and tarsi, apex of tergite VI. Tegula and basal sclerite of forewing transparent with some reddish parts, basal veins of forewing reddish, remaining veins dark brown. Wings transparent. Apical margin of tergites reddish. Morphology: Ventral mandibular margin straight. Clypeus with inverse T-shaped raising, apical margin with obtuse emargination, lateral corner with obtuse angle. Gena below near mandibular socket and frons above scape shiny, remaining head and mesosoma apart from propodeum with dense punctuation, interspaces shiny, distinctly smaller than puncture diameter. Punctuation on gena and mesopleuron with some striation. AS 2-10 appr. as long as wide, AS 11 and 12 1.5x as long as basally wide. OOL = ocellar diameter, with orbital fovea between lateral ocellus and eye. Vertex large, distance between hindocellus and hindmargin of vertex as long as length of scape. Pronotal collar with indistinct medial impression. Mesopleuron below and mesosternum without carinae, mesopleuron in front of midcoxa with shiny lamella, twice as long as high, and as high as midocellar diameter. Squamae apically with deep U-shaped emargination, lateral margin bent upwards. Surface of squamae with some striae. Mucro apically enlarged, apex appr. as large as wide of emargination of squamae (fig. 2). Propodeum dull, with fine reticulation and some striae, propodeal sides horizontally striated in whole length. Tergites I-V dull, finely and densely punctured, punctures half in size compared to punctures of mesosoma. Tergite VI shiny with large punctuation. All tergites laterally with keel in whole length. Sternites with indistinct and fine punctuation, shiny. Lower half of face covered with short silver pubescence, remaining body with sparse pubescence. Foremetatarsus with four pale spines, shorter than tarsal diameter.



Figs 1-8: Squamae and mucro. (1) *Belomicrus atasiensis* nov.sp. ♂, (2) *Belomicrus christmani* nov.sp. ♀, (3) *Belomicrus dunensis* ♀ from Morocco, (4) *Belomicrus heinrichwolffi* nov.sp. ♂, (5) *Belomicrus italicus* ♀ from Sicily, (6) *Belomicrus odontophorus* ♀ from Morocco, (7) *Belomicrus rasmonti* nov.sp. ♀, (8) *Oxybelomorpha maroccana* ♀.



Figs 9-14: (9) *Belomicrus atlasiensis* nov.sp. ♂ habitus lateral; (10) *Belomicrus christmani* nov.sp. ♀ habitus lateral; (11) *Belomicrus heinrichwolfi* nov.sp. ♂ habitus lateral; (12) *Belomicrus italicus* ♀ from Sicily, habitus lateral; (13) *Belomicrus odontophorus* ♀ from Morocco, habitus lateral; (14) *Belomicrus rasmonti* nov.sp. ♀ habitus lateral.

Geographic distribution: Middle Atlas Mountains in Morocco.

Etymology: The species is named in honour to Dr. Stefanie Christman, leader of the ICARDA project.

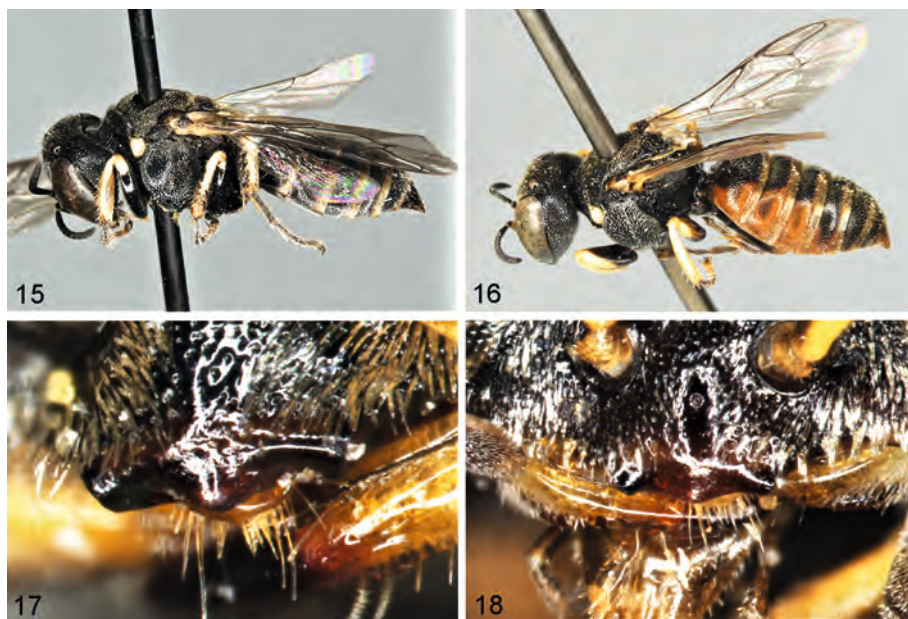
***Belomicrus italicus* A. COSTA (figs 5, 12)**

Belomicrus italicus A. COSTA, 1867: 151.

Holotype: ♂, Italy: Piemonte (Napoli).

Material examined: Several specimens from Italy, Greece and Cyprus.

Geographic distribution: Southern and Central Europe, Turkey, Iran and Cyprus (Pulawski, 2020). Records from Northern Africa probably refer to *B. rasmonti* nov.sp.



Figs 15-18: (15) *Oxybelomorpha maroccana* ♀ from Morocco habitus lateral; (16) *Oxybelomorpha stecki* ♀ from Spain habitus lateral; (17) *Belomicrus atlasiensis* nov.sp. ♂ clypeus; (18) *Belomicrus heinrichwolffi* nov.sp. ♂ clypeus.

***Belomicrus heinrichwolffi* SCHMID-EGGER nov.sp.** (figs 4, 11, 18)

H o l o t y p e : Spain, 1♂, 7.-14.v.1989 Alicante, Javes [38.802N 0.181E] (H. Wolf leg. coll. CSE).

D i a g n o s i s : *B. heinrichwolffi* nov.sp. is similar to *B. christmani* nov.sp., described from Morocco. Both species share a special and unique form of the squamae (fig. 4). It has a deep, U-shaped emargination apically. Both species differ by the surface of the squamae, which is distinctly shiny in *B. heinrichwolffi* nov.sp. and with some striae and more dull in *B. christmani* nov.sp.

D e s c r i p t i o n o f m a l e h o l o t y p e : Body length 4.2 mm. **Colour:** Black, with the following parts yellow: basal half of mandible (apex black), scape (with brown band above), flagellomeres below, pronotal lobe, margin of squamae, apex of femora, tibiae and tarsi, apex of tergite VI. Tegula and basal sclerite of forewing transparent with some reddish parts, basal veins of forewing reddish, remaining veins dark brown. Wings transparent. Apical margin of tergites reddish. **Morphology:** Ventral mandibular margin straight. Apical clypeal margin weakly tridentate, lateral corner black, medial point with obtuse angle, reddish (fig. 18). Clypeus shiny below. Gena shiny below near mandibular socket, frons also shiny above scape, remaining head and mesopleuron punctato-striate, mesonotum and scutellum densely punctured, interspaces shiny. AS 2-12 appr. as long as wide, AS13 twice as long as basally wide. OOL = ocellar diameter, between lateral ocellus and eye with orbital fovea. Vertex large, distance between hindocellus and hindmargin of vertex as long as length of scape. Pronotal collar with indistinct medial impression. Mesopleuron below and mesosternum without carinae, mesopleuron in front of midcoxa

with shiny lamella, twice as long as high, and as high as midocellar diameter. Squamae shiny, apically with deep U-shaped emargination, lateral margin bent upwards. Mucro apically enlarged, apex as large as wide of emargination of squamae (fig. 11). Propodeum dull, with fine reticulation and some striae, laterally in whole length horizontally striated. Tergites I-V dull, finely and densely punctured, punctures half in size compared to punctures of mesosoma. Tergite VI shiny with large punctation. All tergites laterally with keel in whole length. Sternites with indistinct and fine punctation, shiny, with a few erect pale setae. Lower half of face covered with short silver pubescence, remaining body with sparse pubescence.

G e o g r a f i c d i s t r i b u t i o n : Alicancte province in southern Spain.

E t y m o l o g y : The species is named in honour to the late Heinrich Wolf, a leading expert of Pompilidae, who collected the holotype.

***Belomicrus odontophorus* (KOHLE, 1892) (figs 6, 13)**

Oxybelus odontophorus KOHLE, 1892: 205.

H o l o t y p e o r s y n t y p e s : ♀, Armenia or Azerbaijan: Arax River Valley (Vienna Museum).

M a t e r i a l e x a m i n e d : Morocco: 1♂ 25.-27.vi.2018 RK, Bouknadel 34.0634N 6.6278E 136m (leg I. El Abdouni & A. Sentil, coll Mons); 3♂♂ 2♀♀, 12.-13.vi.2018; 4.-29.vi.2019, RK Haddada 34.3050N 6.5397E 67m (leg. I. El Abdouni & L. Hamroud, coll. Mons); 1 ♀ 13.vi.2014 43 km NWW Ouarzazate, Route N9 31.093N 7.301W; 2♂♂ 4♀♀ 14.vi.2014 30 km SEE Agdz 30.620N 6.160W; 1♀ 12.iv.2015 2 km NW Tissint 29.922N 7.328; 17♂♂ 1♀ 27.ix.2016 10 km E Agdz 30.684N 6.348W; 1♂ 28.ix.2016 80 km NEE Ouarzazate, 2km SW El-Kelâa M'Gouna 31.230N 6.141W; 1♀ 18 iv.2018 2 km NW Tissint 29.922N 7.328W (leg. et coll CSE)

R e m a r k : De Beaumont described different subspecies from North Africa (*B. o. maurusius* DE BEAUMONT, 1957, from Morokko/Marrakech, *B. o. oceanicus* DE BEAUMONT, 1957, from Medhia near Kenitra and *B. o. saharicus* DE BEAUMONT, 1958 from Tassili des Ajjer in Algeria), which are not recognized here.

G e o g r a f i c d i s t r i b u t i o n : North Africa to Central Asia, Spain (Pulawski, 2020).

***Belomicrus rasmonti* SCHMID-EGGER nov.sp. (figs 7, 14)**

H o l o t y p e : Morocco: 1♀ CS, Oueled Sghir 32.8226N 7.6221E 450 m 29-30.i.v.2019 Blue pan trap (leg A. Sentil, coll ZSM).

D i a g n o s i s : *B. rasmonti* nov.sp. is characterized by shape of the squamae. It forms a semi-circle with small triangular emargination apically (fig. 7). The species is very similar to *B. italicus* A. COSTA, 1867 from southern Europe and temperate Asia, and represents without doubt a close related relative. Both species differ by shape of squamae. In *B. rasmonti* nov.sp. is it longer, appr. 1.5x as long as wide, and the lateral margin is distinctly bent upwards (fig. 7), and in *B. italicus* 2.6x as wide as long, with a nearly flat lateral margin (fig. 5). Also punctation of scutellum is dense and somewhat coarse in *B. rasmonti* nov.sp. and with large shiny interspaces in *B. italicus*. Lateral interspaces are somewhat larger than puncture diameter. Remaining punctation of face and mesosoma is also somewhat denser with dull interspaces, compared to *B. italicus* with a more sparse punctation and shiny interspaces. The characters of *B. italicus* base on a female from Sicily (Italy).

Description of female holotype: Body length 4.5 mm. **Colour:** black, with the following parts reddish-yellowish: basal half of mandible (base whitish, apex black), scape (with black band above), flagellomeres (dorsally somewhat darker), pronotal lobe (whitish instead of reddish), apico-lateral margin of squamae, apex of femora, tibiae and tarsi (with dark band on mid- and hindtibia ventrally, apical margin of tergites I-V, tergite VI and sternite VI completey. Tegula and basal sclerite of fore wing transparent, brown, basal veins of forewing reddish, remaining veins brown. Wings transparent. **Morphology:** Ventral mandibular margin straight. Clypeus with inverse T-shaped raising, apical margin straight. Gena below near mandibular socket and frons above scape shiny, remaining gena, vertex and mesopleuron with dense and somewhat coarse punctation, dull. Frons, mesoscutum and scutellum with larger and shiny interspaces, punctures in average larger than on gena and on mesopleuron. AS 2-11 somewhat shorter than wide, AS 12 2.0x as long as basally wide. OOL = 1.5x ocellar diameter, between lateral ocellus and eye with orbital foveae. Vertex large, distance between hindocellus and hindmargin of vertex as long as length of scape. Pronotal collar with indistinct medial impression. Mesopleuron below and mesosternum without carinae, mesopleuron in front of midcoxa with shiny triangular lamella. Squamae apically with small triangular emargination, with obtuse angle, medially with longitudinal carina, lateral margin bent upwards. Mucro apically widened, apex appr. as large as midocellar diameter (fig. 7). Propodeum dull, with fine reticulation and some diagonal striae. Tergites I-V dull, finely and densely punctured, punctures half in size compared to punctures of mesosoma. Tergite VI shiny with large punctation. All tergites laterally with keel in whole length. Sternites with indistinct and fine punctation, shiny. Lower half of face covered with short silver pubescence apart from clypeus, remaining body with sparse pubescence. Foremetatarsus with 4 pale spines, apical spine as long as tarsal diameter, remaining spines somewhat shorter.

The male is unknown.

Geographic distribution: Western Morocco, Settat province.

Etymology: The species is named in honour to Prof. Dr. Pierre Rasmont from Mons University in Belgium, a leading expert for bumblebees and other bee genera, and entomological expert of the ICARDA project.

Genus *Oxybelomorpha*

Oxybelomorpha maroccana (DE BEAUMONT, 1957) (figs 8, 15)

Belomicrus stecki maroccanus DE BEAUMONT, 1957: 157.

Holotype ♀, Morocco: Mehdiya near Kenitra (coll. Museum Lausanne).

Material examined: Morocco: 1♂ 20.v.2019 RK, Bouknadel 34.0634N 6.6278E 136m (leg I. El Abdouni & A. Sentil); 1♀ 29.v.2019 RK Haddada 34.3050N 6.5397E 67m (leg. I. El Abdouni & L. Hamroud).

Remark: *B. maroccana* was described as subspecies of *Oxybelomorpha stecki* (KOHLE, 1923) in the genus *Belomicrus*. ANTROPOV (2006) transferred both taxa to the genus *Oxybelomorpha* and raised *O. maroccana* to rank of a valid species. The present specimens were collected near the type area. Squamae and mucro looks similar in both species (fig. 8). **Geographic distribution:** Western Morocco, all records come from close to the type area (ANTROPOV 2006).

***Oxybelomorpha stecki* (KOHL, 1923) (fig. 16)**

Belomicrus steckii KOHL, 1923: 188.

H o l o t y p e : ♀, southern France (coll. Museum Wien).

M a t e r i a l e x a m i n e d : Spain 3♀ 2♂ 28.iv.1999 Almeria prov., Almerimar, Punte Entinas, Sabinas parc natur 38.469N 3.520W (leg. M. Irwin, coll. CSE).

G e o g r a f i c d i s t r i b u t i o n : Spain, southern France, an isolated record from Southwest Morocco, Agadir region (ANTROPOV 2006).

Acknowledgements

I thank Pierre Rasmont and Dimitri Evrard for sending specimens; and the ICARDA N.G.O. Rabat and the German "Bundesministeriums für Umwelt, Naturschutz und nukleare Sicherheit (BMU)", for funding the project.

Zusammenfassung

Belomicrus atasiensis nov.sp. (♂), *Belomicrus christmani* nov.sp. (♀) und *Belomicrus rasmonti* nov.sp. (♀) werden neu aus Marokko beschrieben, *Belomicrus heinrichwolffi* nov.sp. (♂) aus Südspanien. Ebenso wird ein Schlüssel für die hier besprochene Artengruppe der Gattungen *Belomicrus* und *Oxybelomorpha* für Marokko und Spanien vorgestellt.

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Zeitschrift/Journal: [Linzer biologische Beiträge](#)

Jahr/Year: 2021

Band/Volume: [0052_2](#)

Autor(en)/Author(s): Schmid-Egger Christian

Artikel/Article: [Four new species of Belomicrus A. COSTA, 1867 \(Hymenoptera, Crabronidae\) from Morocco and Southern Spain 1257-1266](#)