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Nohoveus vanharteni sp. n. from Oman (Neuroptera: Myrmeleontidae)

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Ábrahám, L.: *Nohoveus vanharteni sp. n. from Oman (Neuroptera: Myrmeleontidae).*
Abstract: *Nohoveus vanharteni* sp. n. from Oman is described and compared to *Nohoveus palparis* Klapálek, 1914, *Nohoveus implexus* (Walker, 1853) and *Aspoeckiana caudata* (Navás, 1913). With 11 figures.

Keywords: new species, Neuroptera, Myrmeleontidae, Oman.

Introduction

Genera (*Aspoeckiana* Hölzel, 1969; *Holzezus* Krivokhatsky; 1992, *Iranoleon* Hölzel, 1968; *Lopezus* Navás, 1913; *Myrmecaelurus* Costa, 1855; *Nohoveus* Navás, 1919; *Nophis* Navás, 1912) of Myrmecaelurini Esben-Petersen, 1918 are distributed mainly in the Palearctic region (Krivokhatsky 1988). Some species of the tribe spread in the transitional zone in the Oriental and the Ethiopian realms, too. This tribe is characterized by 1-3 pairs of pleuritosquamae and the absence of pilula axillaris in the hind wing of male.

Nohoveus Navás, 1919 is closely related to genus *Myrmecaelurus* Costa, 1855. In this genus, wing of male is somewhat longer than abdomen, abdomen of female is always shorter than that of male, pronotum longer than wide, apical area of hind wing without gradual cross-veins (except aberrant specimens), gonarcus and parameres are long narrow and strongly bent. In opposite of this, *Myrmecaelurus* has about same length of abdomen as the wings in both sexes. Wings are wide and there are gradual cross-veins in the apical areas. Gonarcus and parameres are stout and slightly curved, male ectoproct is never longer than the ventral edge of last sternal segment.

Monotypic genus *Naya* was designated by Navás (1932), type species is *Naya stigmata* Navás, 1932, it was synonymized by Aspöck et al. (2001) to *Nohoveus*. Soon after this, Stange (2004) confirmed the validity of *Naya* based on the enlarged last segment of labial palps which is not typical of the other *Nohoveus* species.

Naya stigmata Navás, 1932 proved to be a junior synonym of *Nohoveus palparis* Klapálek, 1914, its type designated by Hölzel (1968). Also Aspöck et al. (2001) synonimized *Nohoveus surcoufi* Navás 1918 from Libya to *Nohoveus palparis* Klapálek, 1914. (white labels: "*/Alger, Ain Sefra, 5.VIII:1910 Coll. F. Werner/ /Myrmec. palpalis Klap./ red label: /Lectotype ♀ Myrmecaelurus palpalis Klapalek H. Hölzel 1968*/" preserved in Nature History Museum in Wien (NHMW) (Fig. 1).

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In neuropterological papers and books (HÖLZEL 1982, STANGE 2004, ASPÖCK et al. 2001), taxonomical rank of taxonomic position of genus *Nohoveus* is always subject of discussion: some papers discuss it as synonym of *Myrmelcaelurus* and other times, others as subgenus of genus *Myrmelcaelurus*. However, the latest comprehensive taxonomical work written by KRIVOKHATSKY (2011) mentioned as a valid genus which I could also support.

Taxonomical part

Nohoveus vanharteni sp.n. (Fig. 2)

Material examined:
Holotype male: Oman Al Batinak Region, Nakl 264 m, 23º25,1519'N; 57º49,246'E, 11.10.2009, leg: Ilniczky S., Simonyi S.
Paratypes: 3 males, 12 females as holotype
Holotype and paratypes are deposited in the entomological collection of Somogy County Museum, Kaposvár. 1 paratype female is deposited in the entomological collection of Upper Silesian Museum, Bytom.

Head: Vertex strongly arched; yellow with two large transversally elongated brown spots anteriorly and with two small round and brown spots posteriorly (Figs 3-4). Frons, gena, clypeus and labrum shiny yellow without any marks and hairs. Mandible yellow with dark brown apices and inner margin. Maxillar and labial palps yellow. Last segment of labial palps very large as long as clypeus, brownish, its sensory pit slit-like well defined, end of palp incised (Fig. 4). Eyes large and shiny brown. Antenna 2.5x longer than diameter of eye. Scape, pedicel, flagellar segments and club brownish above and yellowish below. Segments with very short pale hairs.

Thorax: Pronotum longer than wide, yellow with wide lateral and narrow central brown stripes (Fig. 3). Lateral stripes not reach anterior margin while central stripe not reach posterior margin. Pronotum with short sparse and white hairs, pronotal margin with some long and stiff hairs. Mesonotum and metanotum yellow with interrupted wide dark brown middle and lateral stripes. Central line with elongated spots. Meso- and metanotum almost bare. Sides yellow with very short sparse and white hairs.

Legs: Fore coxa yellow with large brown spot in outside. Middle and hind coxae yellow. Femora yellow with distal yellowish brown suffusion and with sparse stiff and white bristles. Fore and middle femora shorter than fore and middle tibiae. Hind femur as long as hind tibia. Tibial spurs pale somewhat shorter than segment 1-2 combined on fore and middle legs and about as long as basitarsus on hind leg. Tarsi and tibiae with sparse stiff and black bristles. Tarsal segment 1 as long as segment 2-3, segment 5 as long as segment 1-4 combined. Claws shiny pale, half length compared to segment 5.

Wings: Fore wing: 18.5 mm long, 5 mm wide. Hind wing: 16.5 mm long, 4 mm wide. Wings elongated with obtusely angled anal area and rounded apices. Membrane transparent. Venation yellow, not dense. Only Sc marked with faintly brownish dashes. Fore wing with 6 radial cross-veins before origin of R. Radial sector with 7 branches. Apical area with cross-veins. Pterostigma light brown proximally and yellow distally with 5 cross-veins. Hind wing with 4-5 radial cross-veins before origin of R. Radial sector with 7 branches. Pterostigma light brown proximally and yellow distally with 3 cross-veins. Apical area without cross-veins.

Fig. 1: Lectotype of *Nohoveus palparis* Klapálek, 1914 preserved in Natural History Museum Wien

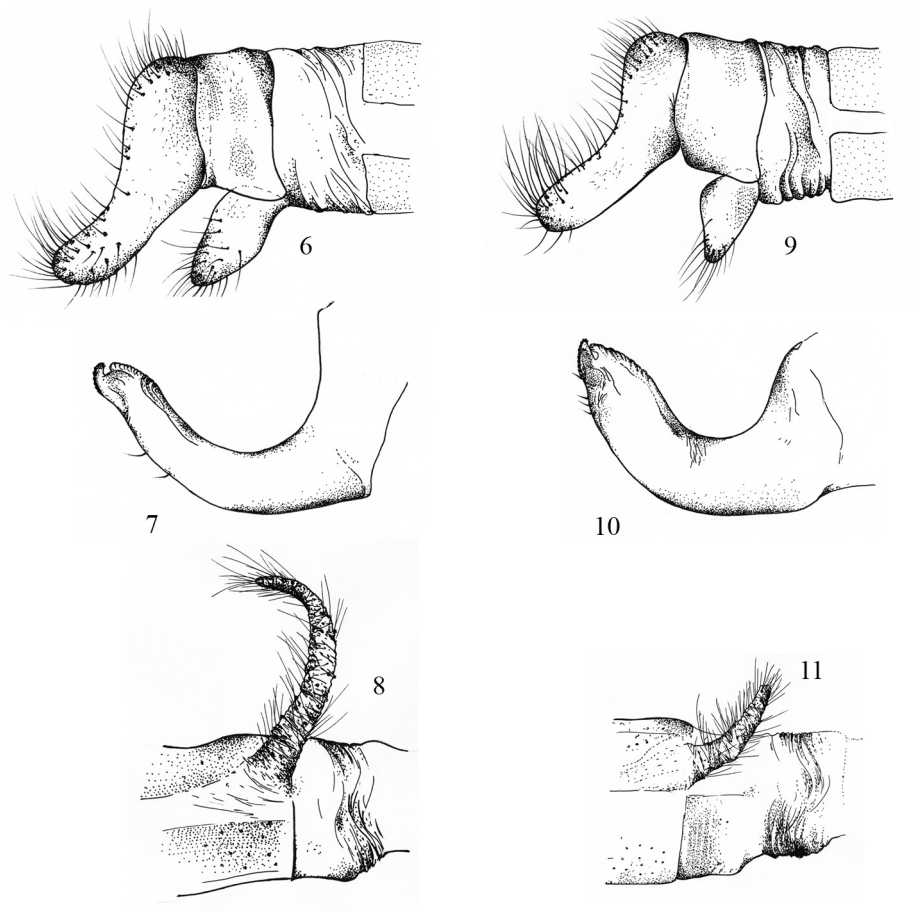
Fig. 2: Habitus of *Nohoveus vanharteni* sp.n.

Fig. 3: Notum pattern of *Nohoveus vanharteni* sp.n.

Figs 4-5: Head of *Nohoveus vanharteni* sp.n. with the enlarged last segment of labial palps in frontal view (Fig. 4); Apex of female abdomen of *Nohoveus vanharteni* sp.n. in lateral view (Fig. 5)

Abdomen: 20-21 mm long. Males abdomen longer than the length of wings. Tergite 1 yellow with dark brown middle spot and with long white hairs. Tergites yellow with brown central line and interrupted brown to faintly brown lateral lines. Tergal segments with very long rather dense and white hairs. The pair of pleuritosquamae on segment 6 and 7 rather stout (Fig. 11). Sternites yellow with indistinct central brown spot and also with rather long white hairs.

Genitalia: Apex of abdomen as in Figs 9. Gonarcus and parameres as in Fig. 10.



Figs 6-11: Apex of male abdomen, gonarcus and parameres, distal pleuritosquamae in lateral view: *Nohoveus palparis* (Figs: 6-8.); *Nohoveus vanharteni* sp.n. (Figs: 9-11.)

Paratype females: Fore wing: 18.5 mm long, 5 mm wide. Hind wing: 16.5 mm long, 4 mm wide. abdomen 16-17 mm long (Fig. 2). Abdomen shorter than wings and without conspicuous pubescence. Genitalia female as in Fig. 5. Otherwise like holotype.

Comment: The new species can be easily distinguished from the similar species of the genus by the enlarged last segment of labial palp. Superficially (especially females), it is similar to *Aspoeckiana caudata* (Navás, 1913) but it has narrower wings than the new species and its pattern on thorax is also different. Probably, TIGAR and OSBORNE (1999) found the new species in the United Arab Emirates since they listed as "*Myrmecelaurus* cf. *caudatus* Navás". However, ASPÖCK et al. (2001) did not catalogued it from Western Palaearctic region. According to KRIVOKHATSKY (1998a) it is known only from Central Asia.

The other similar species, *Nohoveus palparis* has almost entirely yellow body with faintly brownish lines on the pronotum and two small black spots on the notum, its abdomen is unicolour, yellow. While the new species has brown lines and spots on pro-, meso- and metanotum as well as a wide brown middle line on tergal segments (Fig. 3). Ectoproct of male of *N. palparis* in lateral view is slightly wider than that of *N. vanharteni*. The ventral part of gonarcus and parameres of *N. palparis* is curved while that of *N. vanharteni* is rather straight. The pair of distal pleuritosquamae shows also differences, this organ of *N. palparis* is longer than that of the new species (Figs 6-11).

The new species is also similar to *Nohoveus implexus* (Walker, 1853) but the pattern of pronotum, the shape of ectoproct and smaller measurement distinguish them from each other. *N. implexus* (Walker, 1853) is known from India (GHOSH 1981) and probably in Pakistan (IQBAL and YOUSUF 1991). *Nohoveus* genus is not characterised by the "Fig. 1. A B" in the paper published by IQBAL and YOUSUF (1991), consequently the specimen is misidentified. Based on the features and published figures, *Nohoveus virgulatus* Iqbal and Yousuf, 1991 also seems to be only a species of *Myrmecaelurus*.

Nohoveus palparis seems to be a widespread species in North Africa: Algeria (KLAPÁLEK 1914), Egypt (KIMMINS 1951), Libya (POGGI 1993), Tunisia (GÜSTEN 2002), Mauritania (KRIVOKHATSKY 1998b), an unpublished new data from Morocco (Erg Hamada Mhamid N29°50"51.9'; W05°35'41.8" 27.06.2008 leg: Ábrahám L., Bognár L., Nagy L. 1 female in coll. SCMK) and in the Middle East: Iran (HÖLZEL 1968), Israel (SIMON 1979), Saudi Arabia (HÖLZEL 1982, 1988, 1998), and unpublished new data found from Pakistan Prov. Balochistan desert SW from Quetta 24.07.2005 Leg. Gurko 1 male, 4 females; Pakistan Prov. NW FPS Waziristan agency near Tanai 02-12.09.2005 Leg. Gurko 1 female; and Iran Prov. Esfahan Qumsar (Quaz An) 1772m N33°44.425'; E51°28.905' 2005.07.06. Leg: Ábrahám L. 1 female; Iran Prov. Yazd Aliabad 1157m N32°03.436'; E54°12.309' 2005.07.04. Leg: Ábrahám L. 1 female in coll. SCMK.

The new sp. is known only from Oman.

Etymology: The new species is dedicated to Antonius van Harten, the Dutch entomologist who made significant contribution to our knowledge on the fauna of Arabian Peninsula.

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