

Dolerus nigrominutus Haris, 1998, new record for Slovakia with description of its female

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HARIS, A.: *Dolerus nigrominutus* Haris, 1998, new record for Slovakia with description of its female.

Abstract: Female of *Dolerus nigrominutus* Haris, 1998 is described firstly and removed from synonymy of *Dolerus coruscans* Konow, 1890. Differences between *Dolerus nigrominutus* Haris, 1998, *Dolerus coruscans* Konow, 1890, *Dolerus picipes* (Klug, 1818) and *Dolerus varispinus* Hartig, 1837 is provided.

Keywords: *Dolerus nigrominutus* Haris, 1998, *Dolerus coruscans* Konow, 1890, spec.rev., description, female, new record, Slovakia, Hymenoptera, Symphyta, Tenthredinidae

Introduction

Dolerus nigrominutus Haris, 1998 was described from Hungary based on several males (Haris, 1998). Female has been still unknown, till a series of *Dolerus nigrominutus* specimens were captured at Cerova Vrchovina, from same time and same locality including a female specimen which completely corresponds morphologically to males and different from *D. coruscans* Knw.

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Taxonomy

Dolerus nigrominutus spec. rev.

Material examined: Gemerské Dechtáre, Dech. Vinice, 232 m, 48.2372219°N, 20.04.98697°E, 13. 04.–28. 04. 2023, 1 female, 2 males.

Female. Body coal black including legs and antennae without any bluish lustre. Apices of mandibles reddish brown, cenchri brownish white. Head including vertex, frons and temples roughly, moderately and densely punctured without any shiny interspaces except 4 interspaces on temples about 1.5x as large as diameter of a puncture. Anterior and lateral lobes of mesonotum and mesoscutellum deeply, densely and uniformly punctured with moderately large punctures. Diameter of a puncture circa 0.3x as large as diameter of front ocellus. Mesoscutellar appendage with dense horizontal microstriation. Anterior lobes of mesonotum separated by deep furrow. Mesepisternum with rough,

deep (but not crater-like) and dense punctures, matt. Mesosternum shiny with moderately deep, small punctures with shiny interspaces. Interspaces of mesosternum about 1.5x as large as diameter of a puncture. First abdominal tergite smooth and shiny, other tergites with horizontal microstriation. Ratios of antennal segments: 7 : 5 : 18 : 15 : 14 : 13 : 11 : 10 : 10. OOL : POL : OCL: 15 : 5 : 12. Clypeal emargination rounded, slightly asymmetric. Clypeal emargination 0.5x as deep as median clypeal length. Length of ovipositor : length of hind femur: 1.0 : 1.0. Width of malar space : distance between antennal sockets: 4.0 : 5.0. Pronotum with long lateral hairs about 1.7x as long as diameter of anterior ocellus. Postocellar furrows parallel (similarly to males, although 1 male has weak furrows covered more or less with punctures of vertex, this feature is not constant in this species). Head parallel behind eyes. Mesonotum and head with sparse white hairs as long as diameter of anterior ocellus. Upper edge of valvula 3 : length of cerci: 7 : 5. Cerci nearly as long as sawsheath in dorsal view, unusual in subgenus *Poodolerus*. Lateral sides of sawsheath in dorsal view is parallel (neither rounded, not narrowed and not dilated). Apical hairs of sawsheath long, brown, gently curved and forming obtuse angle about 130°. Length: 7.5 mm.

Discussion

LISTON et al. (2022) synonymised *Dolerus nigrominutus* Haris with *Dolerus coruscans* Konow and provided the description of female. However, *Dolerus coruscans* itself was never described by Konow. KONOW (1884) described females of *Dolerus varispinus*. Later, (KONOW 1890), he provided the name "*Dolerus coruscans*", for this description. Worth quoting the original description: to see the significant differences between *D. coruscans* and *D. nigrominutus*. Konow's description (KONOW 1884): "*D. varispinus* Htg. Niger, subcyaneo-micans; capite macro subconvexo, occipite fortiter et sparsim punctato; vertice antice subrotundato, partim elato; mesonoto antice medio, lobis later-alibus, scutello basi sublaevibus nitentibus; sutura media profunda; alis leniter nigri-cantibus; stigmatum apice late truncato. Masantennis crassis, abdomine longioribus; abdomine usque a segmento secundo ad apicem rugoso-punctato et piloso. Femina antennis abdomen longitudine fere superantibus, medio vix incrassatis; abdominis segmento primo parum hiantem, polifo; ceteris usque ad apicem tenuiter strigosis, vix punctatis, submicantibus; vagina superne ante apicem parum incrassata; segmento sexto ventrali subrotundato, tenuiter albo-marginato. — Long. 8 — 9 mill."

Males were not described. In Konow's collection housed at DEI, several males were deposited and labelled as "*D. coruscans*". These males are conspecific neither with the original description, nor the female figured by Liston (see the differences below), finally, KONOW (1905) synonymised *Dolerus coruscans* under *Dolerus anthracinus* Thomson, 1871.

Our opinion:

Females and males sensu LISTON et al. (2022) of *D. coruscans* Knw. are not conspecific, female is *D. coruscans* Knw. but males belong to different species.

Konow, never described any males. His description based on female specimens (see "*vagina superne ante apicem parum incrassata*" and no mention any males). Therefore, the male selection of *D. nigrominutus* for *Dolerus coruscans* female is mistake.

Differences between females *Dolerus coruscans* Knw. and *Dolerus nigrominutus* Haris is discussed and keyed below and figured in Figs. 1-14.

Dolerus nigrominutus is coal black (male and female as well), while *Dolerus coruscans* has female black with bluish iridescence ("*Niger, subcyaneo-micans*"). Apical hairs of sawsheath of *D. nigrominutus* are brown, long, evenly arched, apical hairs of sawsheath are in obtuse angles, circa 130°. In *Dolerus coruscans*, apical hairs of sawsheath are short, white, sparse and they are in acute angle (see the figures of LISTON et al. 2022).

Conclusion:

Female of *Dolerus coruscans* figured in LISTON et al. (2022) well agrees the original description of Konow and valid species. *Dolerus nigrominutus* is not conspecific with *Dolerus coruscans* and doesn't match at all with Konow's description.

Dolerus nigrominutus is a valid species and its female is described above and its male in HARIS (1998). *Dolerus nigrominutus* female was captured in the same time and same locality with 2 other males. Male of *D. coruscans* is still unknown.

Key for the related species is provided below:

- 1 (7) Sawsheath clearly dilated apically, or at 2 species parallel. The tip very broadly rounded, truncate or appearingly emarginated
- 2 (3) Sawsheath extraordinarily dilated apically, the width here being about the same as the apical width of the hind tibia; each side of apex of sawsheath with long curved setae. 8.0-9.0 mm. Frequent, European species.....***picipes*** Klug
- 3 (2) Sawsheath in dorsal aspect not extremely or only slightly dilated apically (or in one species the sheath in dorsal aspect subparallel, very slightly dilated, in this case the setae extremely short, the width here being less than three-quarters of the hind tibia
- 4 (5) Sawsheath clearly dilated apically, although not as strong as at *D. picipes* (see above)
- 5 (6) Sawsheath with the long setae almost straight, 9.0-10.5 mm. - Common European species. Insect pest on cereal and grass cultures.....***nigratus*** (O. F. Müller)
- 6 (7) Apical setae of sawsheath curved apically (Fig. 15). 8.0-9.0 mm
.....***varispinus*** Hartig
- 7 (1) Sawsheath parallel sided, not dilated apically
- 8 (9) Apical setae white, hardly developed, short and pale, shorter than apical width of sawsheath and straight, forming acute angle. 8.0-9.0 mm (according to Konow's description). Black with bluish iridescence.....***coruscans*** Konow
- 9 (8) Apical setae brown, well developed and clearly curved, apical setae close obtuse angle. Colour coal black without any bluish iridescence.....***nigrominutus*** Haris

Personal communication of Mikk Heidemaa on Wednesday, August 18, 2010: "*It cannot be excluded that the females of D. nigrominutus (?hibernicus) have been found but accidentally misplaced under D. aeneus because of their great similarity.*" Dr, Heidemaa was correct, the obtuse angle of long hairs of sawsheath really resembles to *Dolerus aeneus*. Significant difference of these 2 species, that *Dolerus aeneus* has narrowed sawsheath in dorsal views, and cerci are short. Males of *Dolerus aeneus* have contracted head, one male of *Dolerus nigrominutus*, the Látrány male specimen has strongly contracted temples as well.



Fig. 1: *Dolerus coruscans* sawsheath in dorsal view (after LISTON et al. 2022)



Fig. 2: *Dolerus nigrominutus* sawsheath in dorsal view (original)

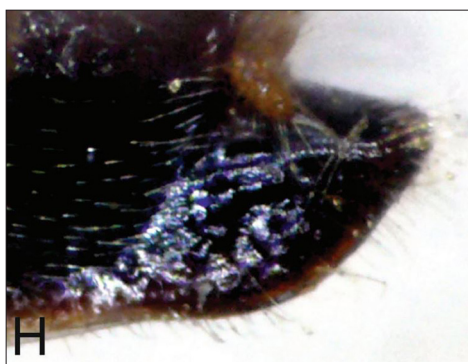


Fig. 3: *Dolerus coruscans* sawsheath in lateral view (after LISTON et al. 2022)



Fig. 4: *Dolerus nigrominutus* sawsheath in lateral view (original)



Fig. 5: Head of *D. coruscans* female (after LISTON et al. 2022)



Fig. 6: Head of *D. nigrominutus* female (original)



Fig. 7: Head of *D. nigrominutus* male (original)



Fig. 8: Thorax of *D. coruscans* female in lateral view (after LISTON et al. 2022)



Fig. 9: Thorax of *D. nigrominutus* female in lateral view (original)



Fig. 10: Thorax of *D. nigrominutus* male in lateral view (original)



Fig. 11: Thorax of *D. coruscans* female in dorsal view (after Liston et al. 2022)



Fig. 12: Thorax of *D. nigrominutus* female in dorsal view (original)



Fig. 13: Thorax of *D. nigrominutus* male in dorsal view (original)



Fig. 14. Penis valve of *D. nigrominutus* (original)

Fig. 15: Sasheath of *Dolerus varispinus* (original)

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