

The male of *Alophosternum albofacialis*, with a note on the biology of the species (Hymenoptera: Ichneumonidae, Pimplinae)

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Abstract: The male of *Alophosternum albofacialis* Kasparyan is described and a key to the males of the holarctic genus *Alophosternum* is given.

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Introduction

In a previous paper (Zwakhals, 1987) *Alophosternum albofacialis* Kasparyan, 1981 was reported as new for the fauna of Central Europe. Soon after that publication Dr. M. G. Fitton (British Museum, Nat. Hist.) kindly informed me that there were unidentified European *Alophosternum* specimens in the collection of the British Museum (Natural History), London. Examination of this material showed it to belong to *A. albofacialis*. The specimens are: Corfu, May 1889, Dr. O. Schniedeknecht 1♂ and [Austria] Koralpe, Styria 8/62-5/63 ex *Heterarthrus vagans* 1♂ and 1♀. The new material enables me to describe the up to now unknown male of *A. albofacialis*.

Description

General habitus as in female. Front wing length 4-4.5 mm, body length 5-6 mm. Face rather convex, clypeus basally fairly convex, apically flat to concave. Mandible bidentate. Top part of occipital carina absent. Distance between the point where the occipital carina meets the hypostomal carina and the base of mandible is equal to half the breadth of mandible base. Malar space about half as long as mandible base. Distance from ocellus to compound eye equal to diameter of ocellus. Flagel-

lum with 21-23 segments, tyloids on segments 6-8. Basal three flagellar segments are 4, 3 and 3 times as long as broad respectively, the first flagellar segment being twice as long as breadth of mandible base. Prepectal carina absent. Propodeum with pleural carina present. Areolet quadrangular (fig. 2). Nervellus broken just above the middle, discoidella unpigmented. Tarsal claws without basal tooth. First tergite twice as long as apical width, tergite 2 square, tergite 3 transverse. Tergites 2, 3, 4 in apical quarter impunctate. Punctures on tergites 2 and 3 shallow and nearer to each other than their diameter. Tergites 5-7 impunctate and rather polished.

Black. Face, frontal orbits in lower half, cheek, clypeus, mandibles (except apically), palpi, scape and pedicel beneath, propleurum, hind angle of pronotum, tegulae, subalar prominence, front and middle legs, ivory. Flagellum fuscous, its five basal segments whitish beneath. Hind trochanter white, hind femur light stramineous, hind tibia white, subbasally and apically brown-marked, hind tarsus apically brown. Hind coxa fuscous beneath, fulvo-ferruginous above and apically narrowly white. Tergites 2 to 6 with narrow stramineous apical margin. Pronotum (except medially), apical half of mesoscutum, the whole scutellum and the mesopleurum fulvo-ferruginous.



Figs. 1-2. Right front wing areolet of *Alophosternum*. 1, *A. foliicola* Cushman; 2, *A. albofacialis* Kasparyan. (Scale line 0.2 mm)

Key to the *Alophosternum* males

1. Flagellum with 16-18 segments, tyloids absent. Whole frons yellow. All coxae ivory. Areolet triangular (fig. 1). Nervellus broken well below the middle. Propodeum usually with a shallow longitudinal depression dorsally. Nearctic
..... *foliicola* Cushman
- Flagellum with 21-23 segments and with tyloids on segments 6-7 (8). Only frontal orbits yellow. Hind coxa for the most part fulvo-ferruginous or black with at most the apex white. Areolet quadrangular (fig. 2). Nervellus broken at or slightly above the middle. Propodeum without longitudinal depression. Palearctic 2
2. Pronotum for the most part, and mesopleurum fulvo-ferruginous with black mesosternum. Mesoscutum in apical half and the whole scutellum fulvo-ferruginous. Hind coxa fulvous, fuscous ventrally. Tergite 1 more widened; twice as broad apically as basally
..... *albofacialis* Kasparyan
- Whole thorax black. Hind coxa black. Tergite 1 less widened; 1.5 × as broad apically as basally. Japan
..... *nigricoxis* Zwakhals

Biology

Prof. H. Pschorr-Walcher (University of Kiel) who reared the above mentioned Austrian specimens kindly supplied the following information: "These specimens were part of a series reared from *Heterarthrus vagans* (Fallen) on *Alnus viridis* DC. in the Koralpe region, province of Styria (1200 m). Dr. Kerrich identified them as *Alophosternum* sp., "extremely different from the American species", but did not describe the material. Since then more material has been reared from the same host and the same locality, as well as from *H. leucomelus* (Klug) cocoons on *Acer campestre* L. These cocoons had been exposed under bushes of common maple between Linz and Vienna. *A. albofacialis* attacks only *Heterarthrus* prepupae in their cocoons in the withered and fallen leaves of their host plants, so rearing is rather difficult."

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Reference

- ZWAKHALS, C. J., 1987. Revision of the genus *Alophosternum* Cushman with a new species from Japan (Hymenoptera: Ichneumonidae, Pimplinae). - *Ent. Ber., Amst.* 47(7): 108-111.

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