

## *Parevania flavofacies* sp.n., a new species of ensign wasps (Hymenoptera: Evaniidae) from North Vietnam

### *Parevania flavofacies* sp.n. — новый вид эваниид (Hymenoptera: Evaniidae) из Северного Вьетнама

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КЛЮЧЕВЫЕ СЛОВА: перепончатокрылые, Evaniidae, *Parevania flavofacies*, новый вид, Ориентальная область.

**ABSTRACT.** A new material from the Hymenoptera collection of the Zoological Institute of Russian Academy of Sciences, St.-Petersburg, Russia (ZIN RAN) been examined. A new species *Parevania flavofacies* sp.n. (Hymenoptera: Evaniidae) is described from Oriental region (North Vietnam). A characteristic feature of the new species is the yellow coloring of the face and cheeks.

**РЕЗЮМЕ.** Изучен новый материал коллекции перепончатокрылых Зоологического института РАН (ЗИН РАН) из Ориентальной области. Описан новый вид *Parevania flavofacies* sp.n. (Hymenoptera: Evaniidae) из Северного Вьетнама, отличающийся желтой окраской лица и щёк.

### Introduction

The Evaniids are rather small, but very peculiar morphologically and behaviorally group of parasitic hymenopterans. The unique features of Evaniids gave rise to their unusual names: nightshade wasps, hatchet wasps, ensign wasps. The last two names are explained by the fact that these insects often move up and down their flattened abdomen, attached to a long thin “handle” (petiole). The present paper deals with the description of *Parevania flavofacies* sp.n. from Oriental region (North Vietnam).

### Material and methods

All specimens are dry and pinned or pasted. The photos of morphological structures were made using a Olympus SZX10 stereomicroscope and digital camera (Olympus OM-D E-M1).

All labels of the holotype are cited verbatim. The labels with geographical data, data of photos are printed on white paper,

but the type label of the holotype and paratypes are printed on red paper.

The holotype and the paratype are kept in the collection of the Zoological Institute of Russian Academy of Sciences, St.-Petersburg, Russia (ZIN RAN).

### Taxonomic account

#### *Parevania flavofacies* sp.n.

Figs 1–5.

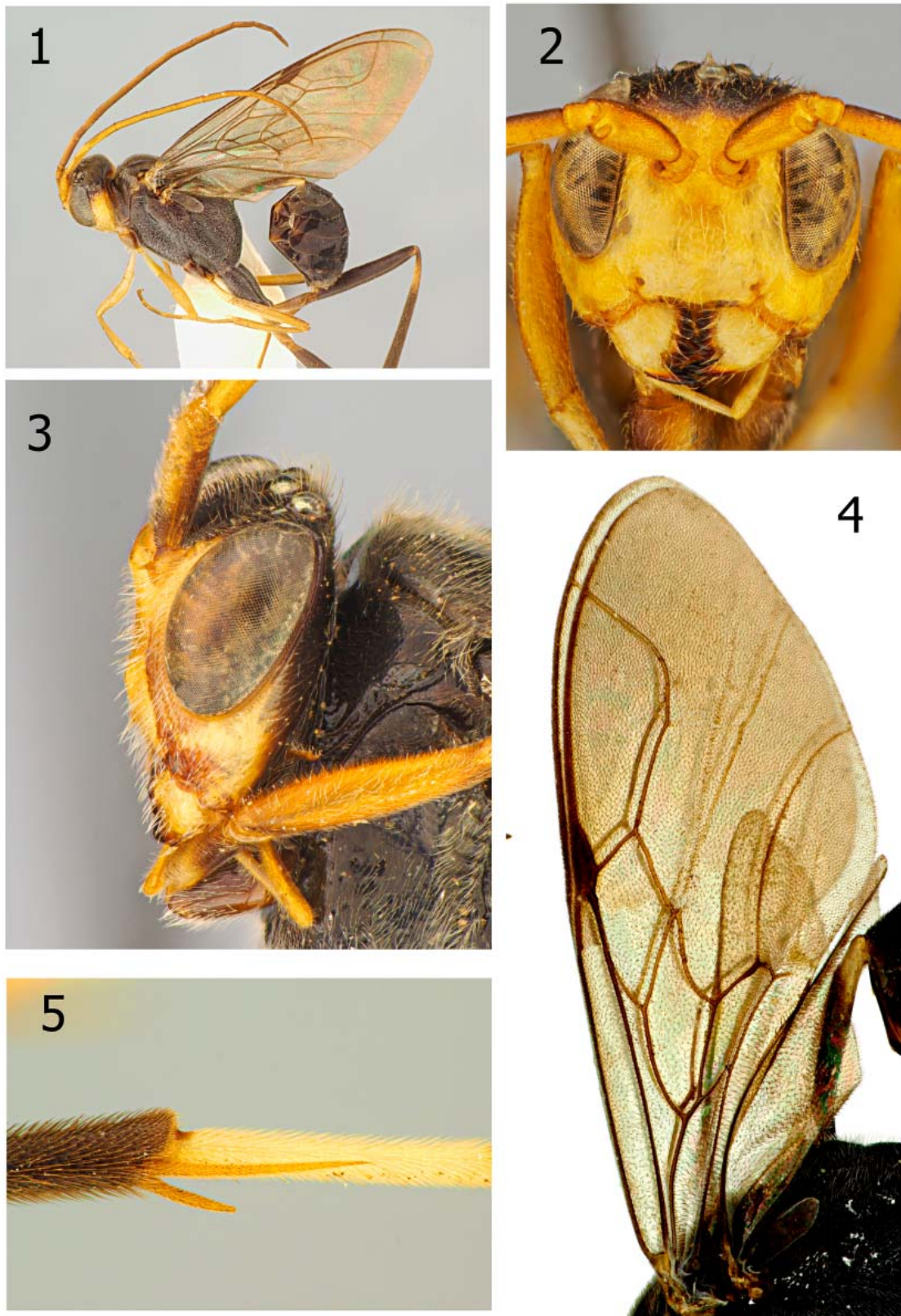
**MATERIAL.** **Holotype** ♂ (Figs 1–6) with labels: “VIETNAM: Hoa Binh Province. Mai Chau District, Pa Co, Xa Linh, 20° 44' N 104° 55' E; h = 1120 m. 22–24.04.2002. S. Belokobylskij.” “HOLOTYPE ♂ / *Parevania flavofacies* Alekseev, 2025”.

**Paratype** (1 ♂) with labels: “VIETNAM: Vinh Phuc Province, Tam Dao, 900 m. May 1995. A. Gorohkov.” “PARATYPE ♂ / *Parevania flavofacies* Alekseev, 2025”.

**DESCRIPTION.** **Male** (holotype) (Figs 1–5). Body length 8.2 mm, forewing length 7.2 mm.

Body coloring: Head black. Face below the upper quarter of the eye, clypeus and gena up to the upper quarter of the eye light yellow (Fig. 3). Mandible yellow, with teeth blackish-brown (Fig. 2). Maxillary and labial palpi light yellowish. Antenna light brown, with scape and first flagellomeres light brown ventrally. Mesosoma and metasoma black. Fore and mid legs light brown, except brown coxae. Hind coxa, trochanter, femur and tibia blackish-brown with bases of femur and tibia, spurs and tarsus yellow-brown. Petiole black-brown, with apex yellow-brown. Wing membrane hyaline, veins dark brown.

Head: densely pubescent with whitish hairs, finely punctate, hemispherical in lateral view and circular top view. The border between vertex and occiput is rounded. POL : OOL = 1 : 1. Eye elliptical, 1.3 x high as wide. Toruli slightly lower of the mid-line of eye. Antennal sockets clearly separated. Face slightly convex. Genae smooth and shiny. Antenna 13-segmented. Scapus 2.5x as long as wide; pedicel as



**Fig. 1–5.** *Parevania flavofacies* sp.n., holotype ♂: 1 — habitus, lateral view; 2 — head, frontal view; 3 — head, lateral view; 4 — hind leg: joining of the tibia and tarsus; 5 — wings.

**Рис. 1–5.** *Parevania flavofacies* sp.n., голотип ♂: 1 — общий вид сбоку; 2 — голова, вид спереди; 3 — голова, вид сбоку; 4 — задняя нога: соединение голени и лапки; 5 — крылья.

long as wide. Antennal segments in following proportions: 25 : 8 : 33 : 33 : 32 : 29 : 27 : 25 : 22 : 22 : 20 : 16 : 21. Mandible with three teeth.

Thorax: mesoscutum and mesoscutellum finely and sparsely punctate, with whitish hairs. Notauli complete, gradually converging at the beginning and almost parallel at the end. Metanotum irregularly foveolate. Propleuron, mesopleuron and metapleuron weakly cellular-rugose. Propodeum cellular-rugose. Distance between fore and mid coxae distinctly longer than distance between mid and hind coxae (12:5).

Hind tibia and tarsus without prominent spine. Hind femur is slightly shorter than the hind tibia. Hind inner tibial spur  $0,6 \times$  as long as first tarsomere and  $2,1 \times$  as long as outer spur (Fig. 5).

Forewing with 7 closed cells. Vein 1RS attached to Sc+R clearly before of the stigma (Fig. 4). Hind wings with eight hamuli.

Metasoma: finely punctate, shiny, slightly longer than its height (15:11). Petiole  $8.3 \times$  as long as wide.

#### Female. Unknown

INDIVIDUAL VARIABILITY. Paratype differs from the holotype by duller yellow coloration of the head and legs.

DIFFERENTIAL DIAGNOSIS. Among the oriental species of Evaniidae [Deans, 2005] known to the author, the *Parevania flavofacies* **sp.n.** most resembles *Zeuxevania orientalis* Li et Xu [Li, Xu, 2017] by its coloration, although morphologically they belong to different genera [Deans *et al.*, 2016]. However, some authors consider the genus *Parevania* Kieffer, 1907 as a synonym of *Zeuxevania* Kieffer, 1902 [Sharanowski *et al.*, 2019]. Apparently, this fact is an example of the multifaceted mimicry complexes that exist among Evaniidae, observed “especially in South America, where distant relatives possess similar, possibly aposematic and/or unusual color schemes of black, brown, orange, and red” [Deans, Huben, 2003]. In addition, such yellow facial coloration is reminiscent of some wasps from genus *Vespa*.

As rightly noted by Deans & Huben [2003], the boundaries of ensign wasp genera have not been definitively defined yet.

Probably, wing veining applied by J.-J. Kieffer [1902, 1912] as the main generic character requires revision. For example, in the collection of hymenopteres of ZIN there is a specimen from Vietnam with veining of forewings characteristic similar to that of the endemic nearctic genus *Evaniella*.

BIONOMICS. Biology and hosts are unknown.

DISTRIBUTION. This new species is known only from Oriental region (North Vietnam)

ETYMOLOGY. The species is named because of the unusual yellow coloration of its face (flava + facies).

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## References

- Deans A.R. 2005. Annotated catalog of the world's ensign wasp species (Hymenoptera: Evaniidae) // Contributions of the American Entomological Institute. Vol.34. No.1. P.1–164.
- Deans A.R., Huben M. 2003. Annotated key to the ensign wasp (Hymenoptera: Evaniidae) genera of the world, with descriptions of three new genera // Proceedings of the Entomological Society of Washington. Vol.105. No.4. P.859–875.
- Deans A.R., Yoder M.J., Dole K. 2016. Evanioidea. Online-catalog of information about evanioid wasps (Hymenoptera). Available from: <http://evanioidea.info> (accessed 18 October 2016)
- Kieffer J.J. 1902. Hymenoptera. Fam. Evaniidae // P. Wytsman (ed.). Genera Insectorum. Bruxelles. Fasc.2. P.1–15.
- Kieffer J.J. 1912. Hymenoptera, Ichneumonidae, Evaniidae // Das Tierreich. Lfg.30. S.I–XIX + 1–431.
- Li Yi-Cheng, Xu Zai-Fu. 2017. First record of the genus *Zeuxevania* Kieffer, 1902 from Oriental Region (Hymenoptera: Evaniidae) // Zootaxa. Vol.4286. No.1. P.129–133.
- Sharanowski B.J., Peixoto L., Dal Molin A., Deans A.R. 2019. Multi-gene phylogeny and divergence estimations for Evaniidae (Hymenoptera) // PeerJ. Vol.7. Art.e6689.