# New species of Eumenidae (Hymenoptera, Vespoidea) from Turkey

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## Summary

Leptochilus gusenleitneri n.sp., L. palandokenicus n.sp. and Microdynerus erzincanensis n.sp. are described from Erzurum and Erzincan provinces of Turkey.

#### Introduction

Vecht and Fischer (1972) reported 80 species of *Leptochilus* Saussure and 13 species of *Microdynerus* Thomson from Palaearctic region. However, 18 species of *Leptochilus* and 9 species of *Microdynerus* were recorded from Turkey (Blüthgen 1955, 1961; Giordani Soika 1952, 1970, 1986; Gusenleitner 1966, 1970, 1977, 1979, 1988; Bytinski-Salz and Gusenleitner 1971; Yıldırım and Özbek 1996). Amongst those, type localities of 12 species of first genus and 2 species of second genus are in Turkey. Holotypes of three new species are presently being preserved in the collection of Department of Plant Protection, Faculty of Agriculture, University of Atatürk, Erzurum, Turkey.

#### Results

Leptochilus (Lionotulus) gusenleitneri sp.n.

Holotype: Turkey, Erzincan Bahçe Kültürleri Araştırma Enstitüsü, 1250 m, 7.VII.1993, male, Leg. E. Yıldırım.

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Male: Black with yellow maculations: clypeus and anterior of scape yellow; small spot on temples, band on pronotum medially interrupted and semicircularly formed, broad bands on tegulae: distal of femorae, tibiae and basitarsi yellow: two small fasciae on 1st and 2nd tergites, laterally not broadened; a twice interrupted band on 2nd sternite; orange red areas: last three segments of antennae, underside of flagellum except last three basal segments, and last four segments of tarsi; tips of mandibles redish; wings light and translucent.

Clypeus (Fig.1) shiny, slightly broader than long (49:45), with deep excision and slightly more narrow than distance between antennal grooves (13:11), edges of apical-half with translucent band, with fine punctation; scape with fine punctation; last antennal segment acute, turned back and unreach apical end of 10th segment (Fig. 2); head, thorax and upper part of propodeum with dense and coarse punctation, intervals shiny and showing micropunctation; anterior edges of pronotum elevated and bow formed; back face of postscuteflum shiny and few coarse punctation, with micropunctation; metapleurae and lateral of propodeum with striate; propodeum descending perpendicularly after the postscutellum, posterior face of propodeum shiny and chagreened; legs shiny; on 1st tergite coarse punctation, intervals and descending part with micropunctation; 2nd tergite with coarse punctation, intervals larger than one point-diameter, with micropunctation; hem of 2nd tergite translucent, larger than the yellow apical band, and base with open-ended light punctures; 2nd sternite slightly convex, inflected toward base, shiny and with coarse punctation, intervals larger than one point-diameter, with micropunctation; on 3-7 tergites and sternites with micropunctation.

Pilosity light, lateral of clypeus with quite dense hairs, on lateral parts of propodeum short, on other part of body with microscopic hairs.

Lengt: 5.5 mm. Female: Unknown.

L. gusenleitneri is very similar to L. hermon Gusenleitner, 1971, but the latter species has a differently formed clypeus (Fig. 3) and antenna (Fig. 4), different punctation and pilosity.

**Dedication:** The new species is dedicated to Dr. Josef Gusenleitner who is an authority on Vespoidea in Palaearctic region, and was always helpful during our studies.

Leptochilus (Lionotulus) palandokenicus sp.n.

Holotype:Turkey, Erzurum, Palandöken, 2200 m, 28.VII.1992, male, Leg E. Yıldırım.

Male: Black with yellow maculations: clypeus, anterior of scape yellow, band on pronotum medially interrupted and narrowed toward shoulders, broad bands on tegulae,

small spot on outer face of femur of fore leg, two small fasciae on 1st and 2nd tergites, laterally not broadened; tips of mandibles redish; underside of flagellum except basal segment, distal of femorae, tibiae and tarsi orange red; pretarsi of mid and hind legs dark brownish; wings light and translucent.

Clypeus (Fig. 5) shiny, slightly broader than long (47:39), excision shallow and slightly less than distance between antennal grooves (12:10), edge of apical-half with translucent band, disc with indistinct punctation; scape and pedicel with fine punctation; last antennal segment acute, turned back and extend up to apical end of 10th segment (Fig. 6); head and thorax with dense and coarse punctation, intervals shiny with micropunctation; pronotum in front slightly elevate, edge medially interrupted; back face of postscutellum shiny and coarse punctate, intervals with micropunctation; metapleurae and lateral of propodeum with striate; propodeum descending perpendicularly after the postscutellum, posterior face of propodeum shiny and chagreened; legs shiny; 1st tergite with coarse punctation and shiny, intervals between points on disc smaller than one point-diameter, on descending part larger than one point-diameter; 2nd tergite and sternite with dense and coarse punctation, intervals shiny and with micropunctation; hem of 2nd tergite translucent and brownish, about as broad as the yellow apical band; 3-7 tergites and sternites with micropunctation.

Pilosity light, on clypeus, between antennal grooves, on ocular sinus and propodeum short, on the other part of the body microscopic.

Lenght: 6 mm. Female: Unknown.

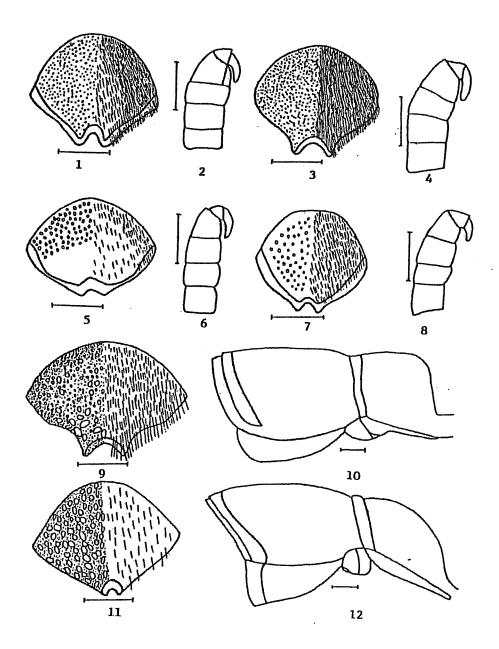
L. palandokenicus is similar to L. alpestris (Saussure, 1835), but the latter species has a differently formed clypeus (Fig. 7); last antennal segment acute, turned back and unreached apical end of 10th segment (Fig. 8); distal of femorae, tibiae and basitarsi yellow, other segments of tarsi redish; different punctation and pilosity.

The specific name is derived from the locality of type specimen.

Microdynerus erzincanensis sp.n.

Holotype:Turkey, Erzincan, Bahçe Kültürleri Araştırma Enstitüsü, 1250 m, 19.VII.1992, female, Leg. E. Yıldırım

Female: Black with two light yellow spots on pronotum: mandibles redish: light yellow narrow band on outer edge of tegulae: a small light yellow spot on outer face of distal of femur of fore leg; distal half of outer face of tibiae liht yellow; base of tibiae, distal of femorae and tarsi of fore legs orange red: base of tibiae, distal of femorae and tarsi of mid and hind legs dark brownish black; two small light yellow fasciae on 1st and 2nd tergites, laterally not broadened; narrow light yellow band on 2nd sternite; mandibles redish; wings light and translucent.



Figs 1-12. Three new species of Eumenidae

1. Leptochilus gusenleitneri n.sp. male clypeus; 2. L. gusenleitneri, male last six segments of antenna; 3. L. hermon, male clypeus; 4. L. hermon, male last six segments of antenna; 5. L. palandokenicus n.sp., male clypeus; 6. L. palandokenicus, male last six segments of antenna; 7. L. alpestris, male clypeus; 8. L. alpestris, male last six segments of antenna; 9. Microdynerus erzincanensis n.sp., female clypeus; 10. M. erzincanensis, female 1st and 2nd tergites; 11. M. atriceps, female clypeus; 12. M. atriceps female 1st and 2nd tergites (Scale, 0.3 mm).

Clypeus (Fig. 9) matt, broader than long (55:45), excision deep and less than distance between antennal grooves (13:12), coarse and sparse punctation on disc, especially in front, intervals with dense fine and micropunctation, predominantly at base and sides; scape fine punctation; head with dense and coarse punctation, especially in front, intervals with micropunctation: pronotum in front slightly elevate and edge medially interrupted; tegulae with micropunctation: pronotum and upper part of propodeum with coarse punctation, intervals less than points and chagreened, with micropunctation; mesothorax and postscutellum coarse punctation; intervals larger than points, with micropunctation; metapleurae and lateral of propodeum shiny and with microstriation; propodeum descending horizontally after the postscutellum, posterior face of propodeum with microstriation; legs matt; 1st tergite descended perpendicularly from top to petiole in front (Fig. 10), surface with coarse punctate and chagreened, intervals between points with micropunctation; 2nd tergite with fine punctation; hem of 2nd tergite not transparent, about as broad as the yellow apical band; 2nd sternite coarse and with sparse punctation, and very dense micropunctation; on 3-6 tergites and sternites micropunctation.

Pilosity light, on clypeus dense and toward apical getting gradually longer, on head, thorax and abdomen short microscopic.

Lenght: 8 mm.
Male: Unknown.

M. erzincanensis is similar to M. atriceps Morawitz, 1894, but in the latter species excision of clypeus (Fig. 11) shallow, coarse punctated and chagreened on disc and less pilosity; on upper part of mesopleurae two yellow spots; on outer edge of tegulae with a yellow spot; on scutellum two small spots; in distal of outer face of the femor of fore leg without yellow spot; 1st and 2nd tergites coarsely punctate; 2nd sternite dense coarse punctate; 1st tergite descend gradually from top to petiole (Fig. 12).

The specific name is derived from the locality of type specimen.

## Özet

Türkiye'den yeni Eumenidae (Hymenoptera, Vespoidea) türleri

Bu çalışmada Erzurum ve Erzincan illerinden toplanan materyale dayanılarak *Leptochilus* gusenleitneri n.sp., L. palandokenicus n.sp. ve Microdynerus erzincanensis n.sp. olmak üzere 3 yeni tür tanımlanmıştır.

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