# A new species Diglyphus Walker (Nymenoptera : Eulophidae) from Eastern Anatolia

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#### Summary

**Diglyphus anadolucus** n.sp., collected from alfalfa fields in Erzurum district of Eastern Anatolia, is described and illustrated.

#### Introduction

Diglyphus anadolucus n.sp. were collected from alfalfa fields in Erzurum district of Eastern Anatolia. Presumably, the new species is a parasite of a dipterous leaf miner on alfalfa. The specimens were compared with the types of the species of the genus in the British Museum (Natural History) by the author during his work which was supported by the Turkish Scientific and Technical Research Council (TUBİTAK). The specimens were also examined by Dr. Zdenek Boucek of the Commonwealth Institute of Entomology, c/o British Museum (Natural History), London, England. They were recognized to be of an undescribed species of the genus.

One specimen of each sexes of paratypes are deposited in the British Museum (Natural History), London, and all of the other types are deposited in the Museum of the Plant Protection Department, Agriculture Faculty, Atatürk University, Erzurum, Turkey.

#### Diglyphus anadolucus sp.n.

#### (Figs. 1-4)

Female: Length 1.64-1.84 mm. Body metallic dark green with golden flecks on scutellum. Scape mainly pale yellow with dark spot on dorsal

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surface; pedicel and flagellum blackish. Coxae, hind trochanters and basal 2/5 of hind femora concolorous with thorax; remainder legs pale yellow except for tips of tarsi brownish. Wings hyaline; venation flavous.

Head finely alutaceous; scrobes smooth, polished.

Antennae (fig. 2): Scape distinctly shorter than an eye (4:5); combined length of pedicellus and flagellum as long as the breadth of mesoscutum; pedicellus (in profile) twice as long as broad, distinctly shorter than the first funicular segment (7:9); flagellum gradually thickening up to middle of clava which is about twice as broad as the pedicellus; first funicular segment slightly more than twice as long as broad and slightly longer than the second (9:8) second funicular segment 1.6 times as long as broad; clava (including its terminal spine) a little longer than funicle, about 3 times as long as broad; sensillae irregularly disposed in two rows on funicular segments and in single row on clava.

Thorax 1.66-1.80 times as long as broad. Mesoscutum 1.2-1.3 times as broad as long, with fine, raised reticulation; notauli distinct only in front of the sclerit. Scutellum as long as broad, basally more finely but apically slightly finer reticulated than mesoscutum, distance between base of scutellum and the second pair of bristles 2.6-3.0 times the distance between the second pair of bristles and tip of scutellum. Dorsellum polished with weak alutaceous sculpture, 0.56-0.64 times as long as distance between the submedian lines. Propodeum with very fine, weak alutaceous sculpture, 0.4 times as long as scutellum, and 1.11-1.22 times as long as dorsellum.

Forewing (fig. 4) 2.21-2.25 times as long as broad; basal cell bare and open below, basal vein pilose; speculum broad, closed below, extending to beneath 2/5 proximal part of marginal vein; cubital vein not strongly sinuate upwards where it joins the basal vein; underside of costal cell with a complete row of hairs, its upperside with a row of 10-14 hairs in the distal half; marginal vein modarately to considerably thickened, 2.4-2.6 times the length of stigmal vein, and 1.6-1.9 times the length of the postmarginal vein which is 1.4-1.6 times the length of the stigmal vein; stigma oblong; disc of forewing thickly pilose. Marginal vein of hindwing normal.

Gaster ovate, about as long as thorax, about 1.6 times as long as broad, its apex pointed, ovipositor sheeths hardly exserted.

Male: Differs from the female as follows: Length 1.34-1.70 mm. Scape completely pale yellow or slightly brownish on dorsal surface of apical; pedicel and flagellum blackish or their beneath pale yellow except clava which is brownish: venation fulvo-testaceous.

Antennae (fig. 1) funicular segments distinctly thicker than pedicellus; clava 1.6 times as broad as the breadth of pedicellus; first funicular segment 1.5 times as long as the second; clava 2.5 times as long as broad.

Forewing (fig. 3): Underside of the wing without speculum, basal cell with some hairs in a row but the upperside of the wing with a broad speculum, basal cell bare and open below; parastigma and marginal vein considerably thickened, postmarginal vein thick, stigma oblong, distinctly petiolate; marginal vein 2.6-3.3 times the length of stigmal vein, and 2.1-2.5 times the length of postmarginal vein which is 1.25-1.33 times the length of stigmal vein. Marginal vein of hindwing conspicuously thickened. Gaster obtuse apically, slightly shorter than thorax.

Types: Holotype, female, Erzurum, Turkey, 8.9.1979, H. Özbek. Allotype, male, Erzurum, Turkey, 16.8.1979, H. Özbek.

Paratypes: 1 female, 16.8.1979; 1 female, 3 male, 8.9.1979, same locality as holotype. All of the specimens were collected by. H. Özbek from the fields of Medicago sativa L.

Diagnosis: The species resembles *Diglyphus pusztensis* (Erdoes and Novicky), D. albiscapus Erdoes and D. pachyneurus Graham. D. anadolucus differs from the former by having scutellum green with golden reflects (that of pusztensis purplish); speculum broad and basal cell bare in female (in pusztensis speculum absent and basal cell with a line of hairs). Marginal vein modarately to considerably thickened in female and male, and 2.4-2.6 times the length of stigmal vein (marginal vein in pusztensis not thickened and 3.5 times; in albiscapus 3 times; in pachyneurus 2.7-3.3 times the length of stigmal vein). Pedicellus twice as long as broad and distinctly shorter than first funicular segment (that of albiscapus slightly shorter (Kamijo, 1978); first funicular segment about twice as long as broad (that of albiscapus quadrate and that of pachyneurus slightly elongate (Graham, 1963); second funicular segment 1.6 times as long as broad (that of albiscapus strongly transverse and that of pachyneurus quadrate); distance between base of scutellum and the second pair of bristles 2.6-3.0 times the distance between the second pair of bristles and tip of scutellum (that of albiscapus 1.6 times); basal cell open below (in albiscapus basal cell closed distally); postmarginal vein 1.4-1.6 times the length of stigmal vein (those of albiscapus and pachyneurus as long as stigmal vein); fore and mid femora pale yellow (those of pachyneurus with black spot).

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Figs. 1-4. Diglyphus anadolucus n.sp. 1. male antenna (paratype); 2. female antenna (holotype); 3. male forewing (paratype); 4. female forewing (paratype).

The male of D. anadolucus resembles D. pachyneurus and  $D_{\downarrow}$  crassinervis Erdoes by having parastigma and marginal vein of forewing and marginal vein of hindwing conspicuously thickened, but it differs from the both species in having fore and mid femora and tibiae pale yellow.

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## Özet

Doğu Anadolu'da yeni bir Diglyphus Walker türü (Hymenoptera: Eulophidae)

*Diglyphus anadolucus* n. sp., Doğu Anadolu'da Erzurum yöresindeki yonca tarlalarından atrapla toplanmıştır. İlim için yeni olduğu bulunarak isimlendirilmiş, tanımı ve çizimi yapılmıştır.

#### References

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