

A new species of the genus *Neoascia* WILLISTON, 1886 (Diptera, Syrphidae) from North-East Turkey

[Eine neue Art der Gattung *Neoascia* WILLISTON, 1886 (Diptera, Syrphidae)
aus der Osttürkei]

by

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Abstract	<i>Neoascia</i> (<i>Neoascia</i>) <i>subannexa</i> spec. nov. is described from the Eastern Black Sea mountain range of north-east Turkey. The main characters distinguishing the new species from the closely related Palaearctic <i>N. annexa</i> (MÜLLER, 1776) are discussed.
Key words	Diptera, Syrphidae, <i>Neoascia</i> (<i>Neoascia</i>) <i>subannexa</i> , new species, North-East Turkey.
Zusammenfassung	<i>Neoascia</i> (<i>Neoascia</i>) <i>subannexa</i> spec. nov. wird nach Material von den östlichen Ausläufern des Pontischen Gebirges aus der Osttürkei beschrieben. Die neue Art wird mit der nahe verwandten paläarktischen <i>N. annexa</i> (MÜLLER, 1776) verglichen.
Stichwörter	Diptera, Syrphidae, <i>Neoascia</i> (<i>Neoascia</i>) <i>subannexa</i> , species nova, Nordosttürkei.

Introduction

There are few records of the Holarctic genus *Neoascia* WILLISTON, 1886 from Turkey. No *Neoascia* species were listed from this area in PECK (1988), but some individual records have subsequently been published: *N. podagrifera* (FABRICIUS, 1775) (ÖZGÜR 1987, CLAUBEN & LUCAS 1988, SPEIGHT & LUCAS 1992); *N. pavlovskii* STACKELBERG, 1955 (HAYAT & ALAOĞLU 1990); *N. tenur* (HARRIS, 1780) (SPEIGHT & LUCAS 1992). STACKELBERG & RICHTER (1968) recorded *N. annexa* (MÜLLER, 1776 - sub nom. *floralis* MEIGEN, 1822), *N. geniculata* (MEIGEN, 1822), *N. interrupta* (MEIGEN, 1822), *N. monticola* STACKELBERG, 1960, *N. obliqua* COE, 1940, *N. „pavlovskiyi“* [sic] and *N. podagrifera* from the adjacent region of the Caucasus. A series of a *Neoascia* species from the extreme north-east of Turkey has proved to be a new taxon, closely related to the Palaearctic *N. annexa*.

Systematic account

Neoascia (*Neoascia*) *subannexa* **spec. nov.** (Figs 1-6)

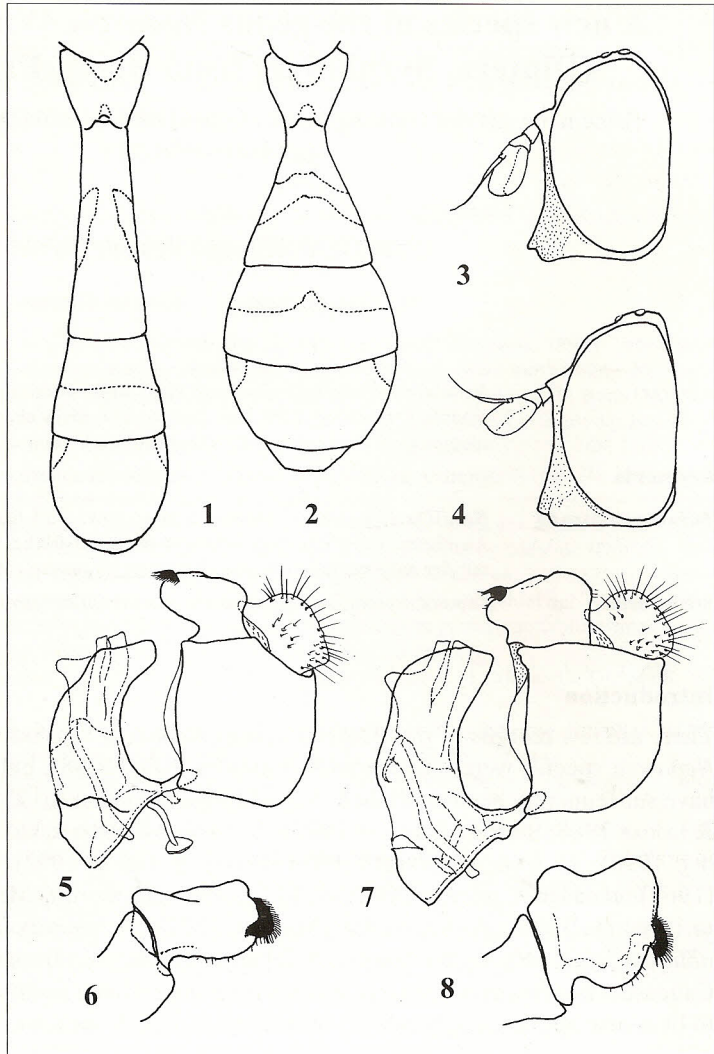
Diagnosis: Similar and closely related to the Palaearctic *N. annexa*, with post-coxal bridge complete. It differs by having a yellow side macula on tergite IV (in most of the specimens), anterior portion of mesopleura dusted dorsally, and the two apical tarsal segments black. - Male: hypandrium shorter than in *annexa* and apically more pointed; surstyli of a different shape, e. g. much more pointed apically.

Description

Male

Head. Face entirely yellowish-grey pruinose, bearing some pale hairs on its lower third. Jowls black, partly shining. Upper mouth-edge only slightly produced (Fig. 3). Frons aeneous-black with a transverse depression just above base of antennae. A shallow longitudinal

furrow present, running from the vertical triangle to the transverse depression, linear in its upper half, rugose triangular below. Frons with a broad patch of black hairs in front of and laterally to ocelli, otherwise pale haired (variable). Occiput with long pale hairs. Antennae (Fig. 3) black to dark brown, reddish on ventral half of third segment. Third antennal segment more than one-and-a-half times as long as deep, in some cases nearly twice as long as deep. Arista slightly longer than third segment, thickened and yellowish at its basal fourth. **Thorax** shining aeneous-black. Mesonotum relatively coarsely punctate and with short, recumbent, mostly golden pubescence, but with a broad patch of black hairs centrally. Pleural hairs relatively long and whitish. Mesopleura, anterior part of sternopleura and epimerum more or less grey dusted (in *N. annexa* these



Figs 1-6: *Neoascia subannexa* spec. nov.; - 1: ♂ abdomen, dorsal (holotype); - 2: ♀ abdomen, dorsal; - 3: ♂ head profile (holotype); - 4: ♀ head profile; - 5: genitalia, dextrolateral; - 6: left sur-stylus, ventrolateral.

Figs 7-8: *Neoascia annexa* (MÜLLER, 1776), ♂ from north-west Germany, Harz; - 7: genitalia, dextrolateral; - 8: left surstylus, ventrolateral.

parts more shining, and in particular the anterior part of mesopleura normally shining black dorsally). With a sclerotized bridge behind hind coxae. **Wings** somewhat darkened, brownish, with dark venation and brownish-black stigma. Cross-veins not margined with brown. Venation very similar to that of *N. annexa*. Halteres dark basally, the knob whitish. Front legs and middle legs, including coxae, mainly yellowish, but femora with a relatively small dark ring at about middle, occupying from one-third to one-fourth of the length of femur, tibiae with a small dark submedian ring, and the two apical joints of tarsi black (in *N. annexa* these tarsal joints mostly pale, at least on fore legs). Basitarsus of fore legs

obscured dorsally in some cases. Hind legs mainly black, but basal third of femur, tip of tibia and middle segments of tarsi (at least ventrally) yellow. **Abdomen** (Fig. 1): Very similar in shape to that of *N. annexa*, but second tergite relatively smaller, normally about three times as long as the width of its hind margin (in *N. annexa* about two-and-a-half times as long). Ground-colour of tergites I-III black, contrasting with the aeneous-black shining surface of tergite IV. With a rather broad yellow band at about middle of tergite II, in some cases interrupted at middle or even more or less obscured, and a similar band on fore-margin of tergite III, occupying about one-third to one-half of length of tergite. Both these bands extend in full width to the side-margins of the tergites. Base of tergite IV normally with a pair of yellow lateral marks, occupying about one-third of the side-margin of the tergite (in *N. annexa* tergite IV normally without yellow markings). Abdominal hairs mainly black, but pale on the yellow markings and on sides of tergite I. Pregenital segment black-haired. For male **genitalia**, see Figs 5-6. **Body length** 4.8-6.7 mm; wing length 3.6-5.0 mm.

Female

Similar to the male, differing in the following respects: **Head** with face slightly wider and less heavily dusted. Frons a little broader than face, shining black, the hairs shorter and mainly pale, but with a small band of black hairs in front of and laterally to ocelli, the transverse depression shallow (Fig. 4) and the triangular extension of the longitudinal furrow not rugose and sometimes indistinct. Antennae similar to the male. **Thorax**: hairs of mesonotum shorter and paler. Pleura less heavily dusted. **Wings** less infuscated. Dark rings on femora and tibiae of fore and middle **legs** normally smaller and paler, but the two apical tarsal segments of all legs black as in male. For the shape and markings of **abdomen**, see Fig. 2. The yellow band on tergite III is complete in one of the females studied, but deeply incised behind in the other two specimens. Base of tergite IV with a pair of yellow lateral marks as in the male (in *N. annexa* tergite IV without yellow marks). **Body length** 5.2-5.7 mm; wing length 4.6-4.9 mm.

Material: Holotype ♂: NE Turkey, Karagöl-Borçka, Artvin, 1350 m, 8 July 1994, leg. R. HAYAT.

Paratypes: 9♂ 3♀, with the same data; 1♂, 1 May 1993, leg A. KOCH, NE Turkey, 45 km S Rize (deviation İkizdere/İspir), 860 m (Coll. DOCZKAL). - The holotype and a series of paratypes (6♂ 2♀) are preserved in the Museum of Plant Protection Department, Faculty of Agriculture, University of Atatürk, Erzurum, Turkey; 1♂ paratype in the Zoologisches Museum, Museum für Naturkunde, Humboldt-Universität Berlin; 2♂ 1♀ paratypes in the private collection of C. CLAUBEN.

Taxonomic remarks

The genus *Neoascia* WILLISTON, 1886 is subdivided into two subgenera, *Neoascia* s. str. and *Neoasciella* STACKELBERG, 1965, based on the presence or absence of a post-coxal bridge in the adults (STACKELBERG 1965), and on the morphology of the immature stages (MAIBACH & GOELDIN DE TIEFENAU 1993). *N. subannexa* spec. nov. belongs to the subgenus *Neoascia*. Using the published keys to Palaearctic *Neoascia* species (STACKELBERG 1965, STACKELBERG 1970, VAN DER GOOT 1981, BARKEMEYER & CLAUBEN 1986), *N. subannexa* spec. nov. keys to *N. annexa*. These two species can be separated as follows:

1. Apical two tarsal segments of fore leg black; tergite IV normally with a pair of yellow lateral marks basally; mesopleura at least faintly dusted, not shining antero-dorsally. For male genitalia, see figs 5-6. *N. subannexa* spec. nov.
- Apical two tarsal segments of fore leg yellow, at the most darkened yellowish-brown dorsally; tergite IV normally without yellow lateral marks; mesopleura shining antero-dorsally. For male genitalia, see figs 7-8. *N. annexa* (MÜLLER)

Ecology

Most of the specimens were collected in a spruce (*Picea* spp.) forestry plantation in the vicinity of Lake Karagöl. The locality was characterized by its rich ground vegetation, due to the high level of the ground water.

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