Agriella gavrylenkoi, a new species of fleshfly from Ukraine
(Diptera: Sarcophagidae: Sarcophaginae)

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ABSTRACT. *Agriella gavrylenkoi* sp. n. is described and illustrated. One male was collected on the loamy coasts of the Sivash saline lagoon in southern Ukraine. *Agriella gavrylenkoi* is well differentiated from closely related species by the weakly developed lateral spots on the abdominal tergites and the very narrow juxta of the phallus. *Blaesoxipha tunisia* PAPE, 1994 is placed in the genus *Agriella*: *A. tunisia*, **comb. n.**

KEY WORDS: Sarcophagidae, Sarcophaginae, *Agriella*, new species, Ukraine, Palaearctic Region.

INTRODUCTION

The genus *Agriella* VILLENEUVE, 1911 (type species: *Agriella pandellei* VILLENEUVE, 1911, by monotypy) belongs to the tribe Protodexiini and is very similar to *Blaesoxipha* LOEW, 1861 but is distinctly differentiated by the closed or petiolate cell r_{4+5} of the wing and by the structural peculiarities of the distiphallus (VILLENEUVE, 1911; SALEM 1938; VERVES 1985, 1986; LEHRER 2003). We propose to place *Blaesoxipha tunisia* PAPE, 1994 in the genus *Agriella*: *A. tunisia*, **comb. n.** As a result, seventeen known species of this genus are distributed in the arid zones of the Palaearctic region. They are reported from Ukraine for the first time. The larvae are known to be internal parasites of tenebrionid adult beetles (*Anatolica abbreviata*, *A. angustata*, *Tentyria nomas*): female flies inject the first

stage larvae into the oral opening of the host (KNOR 1970, KOLOMYIETZ 1971, CHARYKULIEV & NEPESOVA 1972).

One specimen of *Agriella* was collected by hand net on the loamy coasts of the Sivash (Fig. 1), a saline lagoon of southern Ukraine along the northeastern coast of Crimea. Detailed studies have proven it to be a new species. It is named in honour of the famous Ukrainian protector of the environment, director of the “Askania Nova” Biosphere Reserve Dr. Victor S. Gavrylenko.

The terminology of the description follows MERZ & HAENNI (2000) with a few modifications proposed by VERVES (2000), VERVES & KHROKALO (2006), SZPILA & PAPE (2007). The photographs were taken with a Nikon 8400 digital camera mounted on a Nikon SMZ1500 stereomicroscope.

Fig. 1. The loamy Sivash coast near the village of Ivanivka.

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RESULTS

Agriella gavrylenkoi sp. n.

(Figs 2-4)

Diagnosis

This species is similar to *Agriella setosa* SALEM, 1938 in that it has a black flagellomere, one row of parafacial setae, a rectangulate, dorsally curved apical part of the cercus and short ventral processes on the distiphallus, but is well differentiated by the weakly developed lateral spots on the abdominal tergites and the very narrow juxta.

Description

Body length: 6.0 mm.

Head: frons at level of posterior ocelli equal to 0.21, in the narrowest part 0.17, at the antennal base 0.36 of the head width. Fronto-orbital plates and parafacials densely dusted greyish white; frontal vitta in fore part almost black, its hind part dusted grey, in the narrowest part of the frons 1.8-1.9 x as wide as one of the fronto-orbital plates, but slightly constricted in centre; anterior to posterior width ratio 1.0:1.2. Flagellomere 1.7 x as long as pedicel, arista long pubescent, thickened in basal 0.2-0.3, antenna completely greyish-black, apex of pedicel and base of flagellomere reddish; palpus slightly widened at apex, brownish black. Proboscis about 4 times as long as width. Parafacial at level of antennal base is 0.20 x, gena 0.22 x of eye height. One regular row of postocular setae present; outer vertical bristles about 0.5 x as long as inner vertical bristles; ocellar bristles strong and long, directed latero-anteriorly; 2 pairs of fine postocellar bristles; orbital bristles strong, 1+0, parafrons practically bare; 9 pairs of medium-length frontal bristles. Parafacials with one vertical row of black fine setae. Face, lunula, genal groove and facial ridge dusted pale silver-grey. Vibrissae well developed; subvibrissal setae black, of medium length and relatively strong. Genae dusted grey, covered with black setae, postgenae and occiput also dusted grey, intermixed with short black setae in the upper part and medium-length golden white hairs in lower part.

Thorax: black, densely dusted light-grey, covered with black hairs; mesonotum with one broad median and two lateral black stripes, median stripe subdivided into three narrower ones near transverse suture. Scutellum wholly dusted pale grey. Lateral parts of thorax

densely dusted grey. *acr* 3-4 + 3-4, only presutural pair strong; *dc* 2 + 3, strong; *ial* 1 + 3; *prs* 1; *spal* 3-4; *h* 3; *ph* 2-3; proanepisternum bare; *npl* 2, in addition to those bristles, notopleural area covered by several short erect hairs; anepisternum covered with medium-length dense hairs and a row of 7-8 further long, strong posterior bristles; katepisternum with long anterior and posterior bristles (1 + 1), one more short bristle placed behind the fore bristle. Scutellum with long and strong paired parallel preapical and basal paired bristles, apical ones fine and crossed; one pair of discals well developed, very much longer than discal hairs. Fore and hind spiracles brownish black.

Wing: hyaline, veins blackish brown; basicosta and tegula whitish yellow. Costal spine well developed, of medium-length; cell r_{4+5} closed; vein R_1 bare, node of vein R_{4+5} with 3-4 black setae above and 1-2 below; vein dm-cu distinctly curved; M right-angled, with very short appendix; ratio of 3rd and 5th costal sections = 1:0.91; ratio of lengths of 2nd and 3rd M-sections = 1:0.36. Thoracic squama white, bare on upper surface. Haltere light brown except for whitish knob.

Fig. 2. Male genitalia of *Agriella gavrylenkoi* sp. n. – lateral aspect.

Fig. 3. Male genitalia of *Agriella gavrylenkoi* sp. n., a. cerci and surstyli, dorsal aspect, b. phallus, ventral aspect.

Legs: Claws elongate, slightly curved, as long as 5th tarsomere; fore tibia with 2 *ad* on basal half; mid tibia with 2-3 *ad*.

Abdomen: narrow, elongate-conical, black, densely dusted light grey, with black narrow longitudinal stripe on all tergites and small blurred lateral spots in fore 0.1 of 3rd-4th tergites; 2nd and 3rd tergites without mediomarginal bristles; 4th and 5th tergites with rows of marginals. Each of 2nd-4th sternites covered by long erect hairs.

Genitalia: small, not prominent, 6th tergite, 7+8th syntergosternite and epandrium reddish brown, distinctly dusted grey; 7+8th syntergosternite with a row of mediomarginals. Cercus in profile hook-like, its apical part rectangulate curved; ventral processes of distiphallus short, juxta narrow (Figs 2-3).

Female. Unknown.

Type material

Holotype: male, Ukraine, Kherson region, 50 km S of Askania Nova, coast of Sivash, close to the village of Ivanivka (46°13'N, 33°55'E), 24 VII 2008, coll. Yu. Verves & K. Szpila. The holotype is deposited in the Natural History Museum of Denmark, Zoological Museum.

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