

Phortica variegata (Fallén, 1823) (Diptera, Drosophilidae) new to Norway

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Falck, M. 2007. *Phortica variegata* (Fallén, 1823) (Diptera, Drosophilidae) New to Norway. Norw. J. Entomol. 54, 113-114.

The drosophilid fly *Phortica variegata* (Fallén, 1823) is reported new to Norway. The number of Norwegian Steganinae is thus increased to eleven.

Keywords: *Phortica variegata*, Steganinae, Drosophilidae, Diptera, Norway, *Thelazia callipaeda*.

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INTRODUCTION

Despite their well known importance as laboratory animals, and their importance in the decomposition of vegetable matter and natural circulation, the fruit fly (Drosophilidae) fauna of Norway is not thoroughly investigated. Bächli & Al. (2004) lists 40 species from Norway, but a total of 64 species from Sweden and 61 (62?) from Finland.

THE RECORD

A female specimen of the species *Phortica variegata* (Fallén, 1823) was caught at AK Oslo: Østensjø, Almedalen, GPRS 32V PM 026 404, 15 May 2006. The specimen is kept in the author's private collection.

Almedalen is a small brook ravine on the North-Eastern side of Østensjø gård, overgrown with deciduous trees like *Ulmus*, *Alnus*, *Acer*, *Tilia*, *Fraxinus*, *Quercus*, *Betula*, *Prunus padus* and *Sambucus racemosus*, mixed with some *Picea abies* and *Abies alba*. In spring, the ground is covered with *Ranunculus ficaria* and *Anemone nemorosa*. The area has been privately protected for more than 50 years, and old trees are falling down and are left to rot on the ground.

P. variegata is separated from other European species of the same genus by a dark scutellum of the same ground-colour as scutum and with only the usual scutellar setae, predominantly light abdominal tergites with dark bands in the posterior half, tarsi yellowish, at most tip of tarsomere 5 slightly darkened, and occiput dark along eye margin in the upper half, lighter yellowish below

According to Bächli & al. (2004) the species is widespread in Europe and Eastern Asia, and is recorded from Great Britain and Germany, but in Scandinavia there are only a few, mostly doubtful, records from Sweden and Finland. It is not recorded from Denmark.

BIOLOGY

The species hibernates as an adult fly, and Otranto et Al. (2006b) found it to be most abundant in late summer. The species was shown to be most active at temperatures from 20-25 ° C and at 50-75 % RH.

Papp (2002) found the species to breed in fox dung and tinder fungi, both of which could be the case at the locality in Almedalen. From Italy



Figure 1. *Phortica variegata* (Fallén, 1823). Female, lateral view.
Photo: K. Sund.

it is known to feed on vegetables, and the adult flies are known to feed on lacrymal secretions, i. e. tears or eye-liquid of humans and carnivores, and to be an intermediate host of the nematode worm *Thelazia callipaeda* Railliet and Henry, 1910 (Spirurida, Thelaziidae), and consequently a vector of infection in cats, dogs and foxes of thelaziosis, commonly known as “oriental eyeworm”, which also infects humans. (Otranto & al. 2003, 2004, 2006a,b) The nematode worm is not known from northern Europe.

Acknowledgements. I would like to thank Karsten Sund and Øivind Gammelmo, both at the Natural History Museum, University of Oslo – the first for taking the photographs, the second for valuable assistance with the identification.

REFERENCES

Bächli G, Vilela CR, Andersson Escher S, Saura A, 2004. The Drosophilidae of Fennoscandia and

- Denmark. Fauna Ent. Scand. 39, 362 pp.
- Otranto D, Lia RP, Traversa D, Giannetto S.2003. *Thelazia callipaeda* (Spirurida, Thelaziidae) of carnivores and humans: morphological study by light and scanning electron microscopy. Parasitologia 45, 125-33.
- Otranto D, Lia RP, Buono V, Traversa D, Giangaspero A. 2004. Biology of *Thelazia callipaeda* (Spiruridae, Thelaziidae) eyeworms in naturally infected definitive hosts. Parasitology 129, 627-33.
- Otranto D, Cantacessi C; Testini G; Lia R. P. 2006a. *Phortica variegata* as an intermediate host of *Thelazia callipaeda* under natural conditions : Evidence for pathogen transmission by a male arthropod vector. Int. J. Parasitol. 36, 1167-1173.
- Otranto D, Brianti E, Cantacessi C, Lia RP, Máca J. 2006b. The zoophilic fruitfly *Phortica variegata*: morphology, ecology and biological niche. Med. Vet. Entomol. 20, 358-64.
- Papp, L. 2002. Dipterous guilds of small-sized feeding sources in forests of Hungary. Acta Zool. Hung. 48 (Suppl. 1), Hungarian Natural History Museum, Budapest.

Received 18 September 2007,
accepted 12 October 2007