

taxonomists and to a perceived "difficult" morphology which is often homogeneous for many standard dipteran characters and highly adapted in others. The literature on the Tabanidae fauna of Turkey, it was found that 156 species and 12 subspecies have been reported. *Tabanus bromius*, sometimes called the Band-eyed Brown Horsefly, is a species of biting horseflies. It is one of the smaller European *Tabanus*, at about 13.5-15mm body length. 18S ribosomal RNA (rRNA) gene has been isolated from *Tabanus bromius*. By using 18S RNA universal primers the product was about 1870 bp long. Overall, the *Tabanus* 18S rRNA gene is 95,5% homologous with those of human, and mouse.

Ulidiidae (Diptera) of Russia

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Russian fauna of the family Ulidiidae s.str. includes 21 species of the 5 genera.

The genus *Euxesta* (about 100 species) is most diverse in Western Hemisphere. The only one species (*E. pechumani*) has been introduced into Russia and it was recorded from North Ossetia-Alania and near Sochi.

The genus *Physiphora* includes 24 species. One cosmopolitan species *Ph. alceae* has been registered in Russian fauna. It is widespread in temperate and south area of European part of Russia (including Caucasus) and Altai.

The genus *Ulidia* (18 species) is distributed mainly in semi-arid and arid areas of Palaearctic. Three *Ulidia* species occur in Russian fauna. Two of them (*Ul. albidipennis*, *Ul. erythropthalma*), are found to occur in European part of Russia (including Caucasus) and the third (*Ul. kandybinae*) – in West (Krasnoyarsk) and East Siberia and in Russian Far East (Sakha Republic).

The most diverse fauna of the genus *Timia* is in arid regions of Central Palaearctic. North borders of areas of 10 species reaches the Russian territory. Most of these species (*T. carbonaria*, *T. erythrocephala*, *T. nigripes*, *T. (E.) abstersa*, *T. (E.) camillae*, *T. (E.) melanorrhina*, *T. (E.) nigrimana*, *T. (E.) pamirensis*, *T. (E.) xanthaspis*) are registered from the south of European Russia. 3 species are recorded from Siberia: *T. kerzhneri* (Chita Region), *T. nigripes* (Omsk), *T. (E.) pamirensis* (Chita Region).

The genus *Homalocephala* includes 24 species in the World fauna. 6 species are registered from Russia. 4 of them (*H. albitarsis*, *H. angustata*, *H. apicalis*, *H. bimaculata*) are Holarctic. *H. ozerovi* is widespread in Russian Far East and *H. mamaevi* is Beringian.

Oriental Teratomyzidae (Diptera)

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Practically the first descriptions of Teratomyzidae from the Oriental region will be published in a forthcoming paper (most probably in co-authorship with Prof. T. Saigusa). A new species of the genus *Teratomyza* Malloch, 1933, s. str. is described and compared to *T. chinica* Yang, 199[8]. A new genus with 11 new spp., related to the genus *Vitila* McAlpine & Keyzer, 1994, are described. The new genus is characterised by the following features: Head with a pair of vertical callus; frons shiny, without stripes; first flagellomere elongated in a number of species, and also scape elongated; wings patterned, shiny, mostly dark with a clear "window" distally to apex of R2+3 below costa; vein R2+3 approximated to costa, at least in its middle section; only 1 pair of katepisternal setae; male surstylus with broad base and apically, or apically and caudally, with short thick black teeth; ejaculatory apodeme large; female with 2 large spherical or ovoid spermathecae, sclerotised part of duct thick short and structured. The male genital structures are compared to those of the formerly known genera.

Taxonomic problems in the genus *Phalacrotophora* (Diptera: Phoridae)

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Specific relations within the genus *Phalacrotophora* Enderlein, 1912 – as many other genera close to *Megaselia* Rondani, 1856 – are quite intricate. Several attempts have been made to separate the apparently distinct species into subgenera, but all of these are recently rejected. This does not mean that the taxonomy of the genus has become clear; it shows merely that the former divisions are not to be held on.

My work on the European species resulted in separation of three distinct groups within the genus. The first group involves the species with one or more distinct setae on the anepisternum, the second with bare anepisternum, with two scutellar setae plus additional two setulae, the third is with bare anepisternum, with four almost equal-sized setae on the scutellum and a typical ratio in the length of fore tarsomeres.

Recently I have entered studying the Oriental fauna to establish a basis for a world revision of the genus later. It seems that grouping for the European species is valid also for the Oriental fauna.

It should be noted that the keys published hitherto for the Palearctic and the World genera of Phoridae contain several difficulties in identification of the species to the genus *Phalacrotophora*. All the unclear relationships in the known species, as well as the high number of undescribed ones necessitate a world-wide revision of the genus.

Floral host plant range of syrphid flies (Syrphidae: Diptera) under natural conditions in Southern Punjab, Pakistan

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Syrphid flies are very important group of insects in ecosystem from viewpoint of pollination and biological control. Floral host preference of 15 most abundant syrphid fly species was assessed towards 11 agricultural and 40 non-agricultural plant species in 28 families under natural field conditions. *Coriandrum sativum*, *Cirsium arvense*, *Launaea procumbens*, *Prosopis juliflora*, *Allium cepa*, *Ranunculus muricatus* and *Daucus carota* were visited by maximum number of syrphid fly species (≥ 9). *Eristalinus aeneus*, *Ischiodon scutellaris* and *Episyrphus balteatus* were the most frequent floral visitors and also visited maximum number of plant species. There was a positive relationship between abundance of syrphid fly species and the amount of available floral resources along the flowering weeks. Fifteen syrphid most preferred plant species were identified including 8 agricultural plant species and 7 non-agricultural plant species. *Parkinsonia aculeata* and *Mangifera indica* were the most preferred plant species by syrphid flies from agricultural and non-agricultural plant species, respectively. Most of the syrphid species preferred white and yellow colored actinomorphic flowers.

S77: Soil entomology – an ecosystem perspective II.

Room Maastricht

Click beetle dispersal in agricultural land: A study using molecular markers

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The soil-inhabiting larvae of click beetles (Coleoptera: Elateridae), known as wireworms, are worldwide agricultural pests, causing loss of crop quality and/or yield. Three species are thought to cause the majority of damage in the UK;