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**SEASONAL ACTIVITY AND VERTICAL DISTRIBUTION  
OF FUNGUS GNATS  
(DIPTERA: SCIAROIDEA, EXCLUDING SCIARIDAE)  
IN THE WESTERN AND THE CENTRAL PARTS OF STARA  
PLANINA RIDGE (BULGARIA)**

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**Abstract.** 270 species of fungus gnats are found in the West and Central Stara planina ridge (Bulgaria). Two peaks have been observed in the imago seasonal activity – in April and in June – July. The species number is maximum in June. The largest variety of species have been found in mesophilous beech forests. Of the species found in the West and Central Stara planina, 23.4% have Holarctic distribution.

**Key words:** fungus gnats, Sciaroidea, seasonal activity, vertical distribution, Bulgaria.

**Introduction.**

The fungus gnats\* are most common in forest habitats and do not inhabit dry and open-air areas. Their larvae are predominantly endomycetobionts and mycetophagous. A large part of the species inhabit vast areas. Of the 270 species found in the West and Central Stara planina ridge, 23.4% have Holarctic distribution (BECHEV, unpublished).

The study of the seasonal activity and vertical distribution of the species in the middle and southern mountain parts of the Palearctic provides information about their ecologic plasticity and is a prerequisite for their more exact zoogeographic categorization. The mycetophiloid fauna of the Palearctic region is the most researched one compared to that in other parts of the world. However, a number of its peculiarities are still less well known. Researches on the seasonal activity are few (PLASSMANN, 1971; RUSSELL-SMITH, 1979; YAKOVLEV, 1988) and the vertical distribution has not been studied at all.

\* Fungus gnats (or mycetophiloids) belong to the families of Sciaroidea, excluding Sciaridae.

