

Drosophilidae in a Southwest Virginia Woods

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Collections of Drosophila were made in an oak-hickory woods near Blacksburg, Virginia, between the last week of April and the second week of November in 1950 and 1951. Banana mash bait was used in Mason jar traps at constant locations. Twenty-eight species were obtained, twenty-four of the genus Drosophila. The more common species showed extensive seasonal fluctuations in numbers, the main factors responsible apparently being temperature and interspecific competition. The affinis complex, transversa, and putrida are most common in the spring; the melanicas, robusta, tripunctata, and the cosmopolitan species are most common in the summer and fall. Transversa and putrida show a second peak in July. Whether the affinis complex is common in late August and early September appears to depend inversely on the density of immigrans and busckii at the time. The species also seem to differ in their tertiary sex ratios.