SEASONAL VARIATION OF CAVE-DWELLING PHLEBOTOMINE SANDFLIES (DIPTERA:PSYCHODIDAE) IN PHRA PHOTHISAT CAVE, SARABURI PROVINCE, THAILAND

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Abstract. Phlebotomine sandflies are widely distributed in Thailand. In view of recent occurrence of indigenous cases of leishmaniasis in Thailand, a bionomic study of sandflies was undertaken in Phra Phothisat cave, Saraburi Province, Thailand from August 2005 to July 2006. The insects were collected monthly by CDC light traps between 06:00 PM and 06:00 AM. They were preserved in 80% alcohol and mounted with Hoyer's medium for species identification. A total of 5,514 sandflies were collected with a female:male ratio of 2.5:1. The collected sandflies belong to 13 species in the genera *Phlebotomus* and *Sergentomyia*, namely *S. silvatica* (43.5%), *S. anodontis* (31.5%), *S. dentata* (15.3%), *S. barraudi* (3.3%), *P. argentipes* (2.0%), *P. philippinensis gouldi* (1.0%), *P. stantoni* (0.5%), *S. gemmea* (0.5%), *P. major major* (0.1%), *S. perturbans* (0.1%), *S. iyengari* (0.1%), *S. bailyi* (0.1%), and *P. teshi* (0.1%). The results revealed seasonal variation in sandflies with the highest peak in July (436 sandflies/trap-night). Some of the sandflies could not be identified and were assumed to be new species. Soil samples inside the cave were analyzed for chemical characteristics. The soil was characterized by moderate acidity (pH 5.8) with various amount of chemicals and nutrients.

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