

Comparison of Dynamics of Ground Spider Species Communities in Two Different Habitats

*Alenka Gorjan*¹, *Cene Fišer*²

¹Pod vinogradi 31, 5250 Solkan, Slovenia; E-mail: alenka.gorjan@gmail.com

²Department of Biology, Biotechnical Faculty, University of Ljubljana, Večna pot 111, 1000 Ljubljana, Slovenia;
E-mail: cene.fiser@bf.uni-lj.si

Abstract: The estimates of local species richness depend on activity of ground spiders' community. The latter varies throughout the year and this study explores whether the vegetation affects the occurrence of these periods. Ground spiders were sampled weekly from April 2005 until January 2006 using ethylene glycol pitfall traps in Solkan (Nova Gorica) on a meadow and in the forest. The peak of spider activity was estimated from the number of species and specimens per period of time – an approach sensitive to both, period length and onset of the studied periods. For this reason, we separately analyzed raw data (one week period) and data pooled into two and three week long intervals. In order to account for the bias related to the onset of sampling, we re-analyzed the pooled data with a shift of one and two weeks. The highest activity of araneofauna is in the spring, first occurring in the meadow and followed by a peak in activity in the forest. We noted an additional peak of activity in a meadow in late summer. Based on our data, we assume that an additional sampling of the grassland in the autumn can significantly change the estimates of local fauna richness.

Key words: influence of vegetation, periods of increased spider activity, species richness, Western Slovenia