

During a cooperation on a project of the orchid protection in the Říčany Ecocenter number of questions arose. Firstly it is a question of an identification of orchid meadows. Then finding main parameters of an environment, which influence the occurrence of *Dactylorhiza majalis*. Consequently finding factors that influence the size of population of *Dactylorhiza majalis*. And eventually finding a suitable management for the orchid meadows.

I was trying to find the answers mainly via a comparison of orchid and similar non orchid meadows. I was comparing species composition, local conditions and historical use of the site. I decided for the method of phytocenologic snaps and Ellenberg numbers for detection of the local conditions. Historical maps were used for finding the historical use. Data were processed by statistic analytical methods (PCA,RDA)

When comparing orchid and non orchid meadows I found out that they differ conclusively in species composition and in number of species. I found plant species according to which it is possible to determine a potential orchid location. Furthermore I found out that orchid and non orchid meadows differ in values of parameters of an environment. Consequently I found that these parameters are continentality, humidity and trophy of the site.

Then I found out that humidity and light are parameters that influence the occurrence of orchids positively, on the other hand the trophy value is the main factor that influences it negatively.

Furthermore I was dealing with the affects on the size of population. I didn't succeed in finding a conclusive difference between big and little populations in values of environment parameters. Although the analysis for each parameter separately showed that the size of population of *Dactylorhiza majalis* depends on continentality, pH value and trophy of the site. When with the rising of these parameters its occurrence decreases.

Summing up the results I succeeded in finding and proving some differences between orchid and non orchid locations, which will help in the search for other orchid locations. From the acquired data I deduced a suitable type of management for a site with the occurrence of *Dactylorhiza majalis* which coincides with so far known information in specialized literature that deals with this theme and I partially complemented it.