

Ants as seed dispersers and ecosystem engineers in temperate region

The thesis of Marie Konečná is composed of four chapters that are research papers (actually three complete papers with Marie Konečná as the first author and a part of multiauthored paper written nearly solely by her). Actually, this seemingly very small part represents large work and valuable contribution – because it represents the myrmecochory status of all Czech species in the Pladias database, where it is accompanied by a picture gallery of seeds of myrmecochorous or supposedly myrmecochorous plants. Also, the critical evaluation of myrmecochory status required large amount of work, because the published data use very different criteria and are sometimes based on rather casual observations. Nevertheless, this contribution is really valuable and is frequently used by wide community of the Czech botanists as valuable research tool – this can be illustrated by the fact that the paper describing the whole database is now rated as Highly cited paper according to the Web of Science. Of the remaining three papers, one is published (Biodiversity and Conservation, IF = 4.296), one is submitted and one will be submitted soon. Marie Konečná has been my student for more than decade, and she was always a dedicated ant-plant relationship researcher. She published also another paper on myrmecochory (on the chemical composition of elaiosomes in comparison with seeds), which is partial basis for the other papers. However, parts of this study were already included in her Master thesis, and so, this paper is not part of the thesis (but contributes to the whole picture of the advantages of myrmecochory). The “research paper” chapters are accompanied by introduction, presenting in a comprehensive way the wider context of the study, and general conclusions.

Marie worked very independently and managed to collect large amount of data, both for the Pladias database, but also in field experiments and studies of the effect of ant-hills on the vegetation. She worked quite independently, including the data analyses, and also when writing the papers (and she also designed the experiments and sampling designs for these papers quite independently). In writing she is not only independent, but even a little stubborn, and it was sometime difficult to persuade her that not all the collected data need to go into the respective papers. Nevertheless, I think that the results of her writing are quite nice.

In addition to her work on thesis, she was also engaged in other activities, resulting in being coauthor of six additional papers. She was also very active pedagogically; under her supervision, two bachelor and one master thesis have been already defended, and she was also active in teaching in several courses.

I was satisfied with the work of Marie Konečná and I believe that she has clearly demonstrated her ability of independent scientific work.

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