



**BIOLOGY CENTRE, ACADEMY OF SCIENCES OF THE CZECH REPUBLIC
INSTITUTE OF PARASITOLOGY**

Branišovská 31, 370 05 České Budějovice, Czech Republic
Phone: 00420-385 310 351; Fax: 00420-385 310 388
<http://www.paru.cas.cz>

Supervisor's report

Miroslava Soldánová

After her graduation from the Pedagogical Faculty of the University of West Bohemia in Pilsen in 2006, Miroslava Soldánová was admitted to the PhD program at the University of South Bohemia in České Budějovice with an ambitious and well prepared research plan. In my opinion, it was a plan for two PhD projects: one focused on comparative inter-pond study on trematode community patterns and one focused on experimental inter-taxon study on the determinants of cercarial production of a number of trematode species. Miroslava worked hard and has completed successfully the planned tasks for both lines of research, the second in collaboration with the MSc student Andrea Bednářová. Unfortunately, although unique and valuable data were obtained that shed light on transmission dynamics of a range of trematode species, the analyses lagged far behind the scheduled thesis submission.

By the start of my supervision, Miroslava has already successfully completed the sampling, identification of parasites and initial databasing, so all I had to worry about was the analytical approaches. And there was a lot to worry about in a database where each snail has a "name" and appears at different times in the recapture samples, often with a different infection. This explains the generally descriptive manner recapture data have been treated in the few snail-trematode systems studied to date. Managing the wealth of data took what seemed to me ages. Thus for each question we addressed, the data had to be extracted in a different manner, with extreme care and awareness that one can introduce error any moment. With her patience and ability to concentrate for as long as needed, Miroslava proved to be the best person for this immense task. Her work was virtually error-free ... although some 14 uninfected snails have been "lost" for some time in the numerous Excel worksheets!

Another strength of Miroslava's approach to her PhD project was her eagerness to obtain conceptual and theoretical knowledge of the field of her study. She read extensively and, to my amazement, took notes while reading so that I used to receive a file with her comments and remarks on the literature with most important findings highlighted just after I have asked for a brief check on the literature on some topic. Her English language skills and mature writing style were an important asset for the successful accomplishment of the PhD study. I also rate her ability to communicate her results orally as excellent.

Miroslava mastered quickly and easily the techniques and analytical programs and worked fast and precisely to achieve results. I am particularly pleased with her performance in data analysis and paper writing. Although the publications comprising the thesis are multi co-authored, her contribution is substantial. I personally consider as her major achievement the deep insight Miroslava gained into the concepts and methods for detecting the effect of competition on community structure during her short research stay at the University of California (Santa Barbara, USA). The manuscript in advanced stage of development will represent the first paper after the introduction of the method applying null model analyses at the infracommunity level, and I have no doubts it will be well received.

To conclude, Miroslava is a highly motivated, well organised young researcher who can be relied upon to work on her own as well as part of a team. In the last year of her PhD study she became a "major force" in our current project, recruiting and teaching students, and working hard towards reaching project objectives. Certainly she will have a substantial contribution in the data analysis and publication outputs of the project. When I first met Miroslava in 2006, I did not expect at all I would play a role in her development as a scientist and that this would become an important milestone in my life. I would like to express my delight at having the opportunity to teach and observe the development of a dedicated, able and hard working student. I am confident that the thesis is of a standard worthy of defending and wish Miroslava success in her viva examination and future research career.

Aneta Kostadinova

České Budějovice, 14th April 2011