



## Vyjádření školitele k disertaci

### **RNDr. Lukáš Sekerka: Taxonomy and ecology of Neotropical Cassidinae (Coleoptera: Chrysomelidae)**

After less than eight years, we succeeded to force Lukáš Sekerka to finish his Ph.D. thesis on tortoise beetles from Latin America. The time required correspond to the volume and quality of scientific work achieved by Lukáš during his doctoral studies and presented in a magnificent book. There is not merely a general introduction to a few articles but a real monograph summarizing current knowledge of taxonomy and ecology of this species rich beetle subfamily, that includes 69 pages of text and 104 photographs and line drawings of the adult beetles, their larvae and host plants with traces of feeding.

Also the set of articles attached to this monograph is exceptional, including nine already published articles with impact factor from 0.5 to 2.8, which is not easy to achieve in the field of taxonomy, where Lukáš is the first author in six of them. In four of the articles, Donald Windsor from Smithsonian Tropical Research Institute, the best specialist on the subfamily Cassidinae on the World, is a co-author. I am grateful to Don to supervise my research in Panama 25 years ago and then mentoring my student Lukáš during numerous and long lasting trips to Latin America.

The thesis is based on a deep knowledge of ecology of the beetles in their natural habitats as well as their diverse host plants. If Lukáš were not an entomologist in a museum, he could as well work as a botanist. Thanks to his knowledge, he can efficiently find the beetles scattered in rain forest, where I can see few of them. He can rear many of the beetles in captivity.

He visited many museums in the world, first to learn the diversity and taxonomy of the beetles, later to revise the identification and taxonomic status of many misidentified or misplaced beetles. Still many and many of the species he found during his expeditions to Latin America and visits to the museums were not described. Lukáš's approach to description of new species and higher taxa is wise and careful, he does not fill up journals with tens of articles with individual descriptions. His recognition of new separate species is often based on knowledge of its ecology, mainly host plant spectrum, on observation of mating pairs, and on individual variability in a large series of collections specimens if available. Thus, there will be no need to revise his taxonomic actions, what is on contrary probable in other highly productive taxonomists.

In his articles, Lukáš uses pretty and informative colour photographs from the field and from collections, which are difficult to obtain due to the shape and surface structure of the beetles. Most of here presented taxonomic work is based on morphology, ecology and behaviour of the beetles, while molecular genetics does not contribute to these articles. This is because of the labour division of work in the team coordinated by Don Windsor. Lukáš contributed by samples of many rare species to the molecular work, but was not allowed to do the specialized



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subsequent steps in the analyses. At least, he knows the preliminary results of the phylogenetic reconstruction which does not contradict his morphological conclusions.

Thus, I am happy to recommend to accept the thesis and to grant the title Ph.D. to Lukáš Sekerka.

In České Budějovice, 26.1.2017

**doc. RNDr. Oldřich Nedvěd, CSc.**