

**„Land Abandonment in the Mediterranean – Effects on Butterfly Communities with Respect to Life History Traits“**

The Jana Šlancarová doctoral thesis consists of three scientific papers, with the candidate as first author. The linking topic of the three papers is ecology and conservation of butterflies of European Mediterranean. From methodological point of view, all three papers emphasise studying and analysing *life-history traits* for understanding ecological phenomena – specifically, for faunal response to landscape changes.

Inspiration for the study arised in a small Thracian village Kirki, when our colleague Lukáš Spitzer discovered a population of *Archon apollinus*, little known *Zerynthia* feeding papilionid with bulk of its distribution further to the East. Jana, then a master-level student, was instrumental in organising two expeditions, aiming to learn more about that particular species. In 2011, Jana's field site was visited by busload of vertebrate zoology students, and during a social evening, we Jana expressed her interest to pursue her further career in Mediterranean. I responded positively, because with approaching mid-age, I increasingly longed to do some science in regions with my family roots.

The task was to study effects or rapid landscape change – caused by complex socioeconomic factors – on butterfly communities. (There was a parallel project that sampled moths on identical sites). Despite a few shortcomings, caused by problems with logistics, the results, published in PlosOne, rank among the most complex large-scale (SE Balkans) studies of land abandonment effects on butterflies in that region. The study convincingly shows that forest encroachment both decreases local species richness and suppresses range restricted Mediterranean species while supporting woodland species with large Eurosiberian ranges. It is a valuable contribution to the debate on “Mediterranean biome” natural state, as it contributes to falsifying the centuries old “forested Mediterranean” hypothesis.

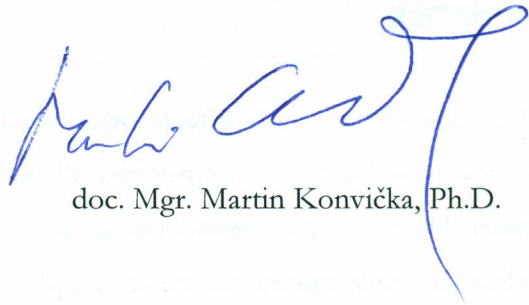
The second paper, „Butterflies in Portuguese 'montados': relationships between climate, land use and life-history traits“, originated during Jana's fellowship at Universidad Autonoma de Madrid (with prof. Enrique García-Barrose). It expands Janas interest to Western Mediterranean and applies life history traits view to comparing climatic and land use effects.

## Posudek na doktorskou disertační práci RNDr. JANY ŠLANCAROVÉ

The third paper, „Co-occurrence of three *Aristolochia*-feeding Papilionids (*Archon apollinus*, *Zerynthia polyxena* and *Zerynthia cerisy*) in Greek Thrace“, is chronologically the earliest Jana's work from the Mediterranean, carried out during her master-level years. It is mainly descriptive work (appropriately published in *Journal of Natural History*, specialised on quality descriptive papers). It targets fascinating system of three syntopic and related butterflies utilising four syntopic and congeneric host plants. The candidate disclosed coexistence patterns of the tree species and thus amassed species-based evidence for her central claim that high diversity of Mediterranean butterflies depends on maintaining the diverse habitat mosaic that characterised the region for millennia.

A decade ago, Jana Šlancarová enrolled in biology without deeper interest in butterflies, insects, or insect conservation. Gradually, she advanced as a qualified ecologist, lepidopterists, scientific expedition organiser, and scientist (besides of three papers presented here she co-authored additional 2 IF-covered papers). She has been exceptionally hard working, diligent, enthusiastic student, as well as friendly and deeply human colleague. I recommend accepting the thesis for defence and awarding the candidate with Ph.D. degree.

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