



Review of bachelor thesis Nematodes associated with fig wasps by Kateřina Pužejová

The thesis consists of two parts, a review of literature related to nematodes associated with fig wasps, and a trial to isolate and sequence genes that could be used in identification of nematodes found in fig wasps sampled in Papua New Guinea. The third aim, quantification of infection rates, was not possible to achieve. It was not a failure of the candidate, but it might simply be omitted from the thesis.

The review starts with well written chapters – both the level of English language and the structure of the text suggest that Kateřina gained much during many years of studies at our faculty, dating back to her high school age when she investigated beetle reproduction. Especially the description of the life cycle of pollinating fig wasps is excellent.

The experimental part probably chronologically describes procedures made with the samples. However, it is not clear on the first look why there were these steps in this order. Results describe what was successful (methods, steps, individual samples) and what failed (quite much). Table 7 clearly shows that despite 85 to 96% nucleotide identity, BLAST failed to classify the COI gene even to a certain family of nematodes. Inclusion of chromatograms with multiple overlapping peaks and gel photographs in Results helps to understand sources of the failure.

In a short discussion, Katka correctly identifies possible causes of failure to get clear sequences and to determine the taxa of nematodes in the samples. Moreover, she suggests what methods could be used to overcome the present difficulties. Among them, I recommend cloning of genes in bacteria. I do not know what means “blocking of primers”, [1] can Katka explain it?

There are some inaccuracies in the thesis, such as disparity in number of sequences mentioned in text and shown in table (page 17), in name of identified genus (*Schistonchus* on page 18, *Ficotylus* elsewhere). Caption of Table 10 promises product lengths, but there are none, names of genera are in italics in one line and in straight letters in other. Thus, the candidate still have to learn to be precise in writing scientific reports.

Any acquired or analysed sequence, although considered bad, must be given. Or at least the length of product.

References are well formatted, although the letters “et al.” should be replaced by the list of all authors, if there are not hundreds of them.

Among the species listed in attachment, there is also *Enorchus ater*. What does the presence of this name in the attachment mean? [2]

Formal improvements should include indentation of the first line of all proper paragraphs.

Minor errors are marked in the printed version of the thesis. However, my copy with remarks is in a bad shape.

I can classify the present version of the thesis as very good (2).

In České Budějovice, 17.5.2018

Oldřich Nedvěd