

Supervisors review

Tomas joined our group eight years ago with the aim to shift from molecular biology field to ecology related research. The main reason why his PhD study took more than usual is that we had to change the topic of his PhD thesis during his study. Initially the thesis was planned to study of the role of cyanobacterial metabolites in interspecies communication, which is an exciting topic of modern chemical ecology. Unfortunately, after two years of quite intense research we had to leave this topic due to the highly irreproducible data obtained in the performed experiments. We have moved to a „more safe“ field of cyanobacterial lipopeptides, compound intensively studied in our laboratory. We set the new direction towards understanding the ecological role and distribution of these cyanobacterial secondary metabolites and I'm actually happy that we did so.

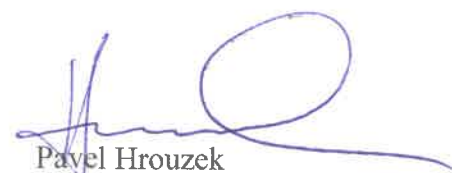
During his research Tomas gained a good laboratory skills ranging from cyanobacterial culture techniques and more complex manipulative experiments to elaborate analyses of the secondary metabolite analyses using liquid chromatography-mass spectrometry methods. Significant part of his effort was also connected to bioinformatic work in which he employed his skills in programing a script development. I must say that during his study and lab work Tomas's approach was independent and he actively suggested the possible future direction of the research. This sometimes led to long debates and supervisor-student battles. But I have to admit that these disputations were usually very productive and I'm quite convinced that both of us learned a lot not only from science point of view, but also in the field of communication and listening opinion of other person.

Here I have to also say that Tomas's original ideas and independent approach gave a rise to the most relevant finding of his thesis. Indeed, Tomas was the one who proposed that cyanobacterial lipopeptides featuring beha-hydroxyapspartate might act as siderophores, which shed a light on the ecological relevance of particular group of cyanobacterial secondary metabolites. Also the methodological approach leading to the results presented as paper II (The study of distribution of cyanobacterial lipopeptides) was to a high degree proposed by him. In other studies, he was a valid member of the research team, although his role here was much smaller.

Concerning his other scientific skills, I value his attitude to writing the scientific texts, although I would say here the maybe in the future it will be good to find the compromise between flowery language and simple script-like expressions (which was also frequent topic of our student-supervisor disputations).

All in all, I think that during his PhD study Tomas definitely proved that he deserves the PhD title and I hope the he will continue in scientific career in the future.

In Třeboň 15th August



Pavel Hrouzek
supervisor