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Supervisor's evaluation of the PhD thesis of Tihana Vondrak "*Analysis of repeat-rich regions of plant genomes using long read sequencing technologies*"

The topic of Tihana's PhD study was inspired by the recent availability of long-read sequencing technologies and their potential to reveal structural and sequence features of repeat-rich genomic regions that are otherwise difficult to study. To make efficient use of long-read sequences (or genome assemblies generated from these sequences), Tihana had to spend much of her time developing new bioinformatics tools or adapting existing approaches. She then applied these tools to study repetitive DNA in three plant species selected to answer questions about the origin of satellite DNA from mobile elements, the composition and evolution of constitutive heterochromatin, and the evolution of satellite DNA-based holocentromeres.

Tihana's work provided a wealth of new data on all of the above research topics and resulted in three research articles in peer-reviewed journals. She contributed significantly to all three articles and was the lead author on two of them. Although her contribution was mainly in the bioinformatics parts of these articles, she had a good overview of the related experimental work used to prove her results and collaborated efficiently with her laboratory colleagues as well as with members of research teams abroad.

Throughout her studies, Tihana proved to be a dedicated and hardworking student who was always friendly and maintained good relationships with her colleagues. Considering her achievements and the excellent results she obtained, I fully support her successful

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