biologia plantarum
an international journal for experimental botany

BIOLOGIA PLANTARUM (2023) 67: 303-304 DOI: 10.32615/bp.2023.040

EDITORIAL

The 150th anniversary of the birth of Prof. Bohumil Němec - founder of Biologia Plantarum

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Before we move with Biologia Plantarum to the next year and next volume, we have an enjoyable duty to commemorate the founder of our journal Prof. Bohumil Němec´s 150th anniversary. He was born on March 12, 1873 in Prasek by Nový Bydžov in what was then k.u.k Austrian-Hungarian monarchy, and passed on April 7, 1966 in Havlíčkův Brod in Czechoslovakia. He was a Czech botanist, mycologist, pedagogue, rector of Charles University and interwar Czechoslovak politician. Already as a student he participated in a Czech patriotic and republican movement "Omladina" and in 1893 was persecuted. Almost forty years later before the second world war in 1935 he was considered as a candidate for the president of Czechoslovakia.

He was originally trained as a zoologist by prof. Vejdovský at the Charles University in Prague, but before he finished his university studies he accepted assistant position at the Institute of Botany and so became a disciple of Ladislav Josef Čelakovský – first scholar systematically studying alteration of generations in plants also from the evolutionary perspective. Čelakovský was regularly in close contact with Julius Sachs as he moved from Breslau (today Wroclaw in Poland) as a protégé (and schoolmate of his sons) of Jan Evangelista Purkyně. Inspired by Purkyně, Sachs became a father of modern plant physiology and had a strong indirect influence on young scholar Němec via Čelakovský. Inspired by Sachs, Němec was active in the establishment of the first Institute of plant anatomy and physiology in Bohemia, then as a part of the Faculty of Philosophy. Later in post-war Czechoslovakia he was not only a creative and influential plant biology scholar, academician and teacher, but also organizer of the university (as a dean and rector – founder of the Faculty of Science) with extensive scholarly international contacts and acceptance. He was the member of several international and national learned societies.

At the centre of Bohumil Němec's scientific interest was the biology of the plant cell studied by contemporary best possible microscope. He was a great representative of that era of cellular biology preparing the emergence of

molecular biology. He was the founder of the field of plant anatomy and physiology in Czechia and also Slovakia (active there after the second world war). He studied and chemically or physically manipulated plant cells during the cell division; supported research of phytohormones. Based on his milestone discovery of statoliths in root columella (1900) he formulated between 1901 and 1902 the theory of gravity perception in plants in a work entitled "On the Irritability of Plant Plasma". In 1904, he chemically induced polyploidy in plant cell nuclei. In the 1930s, he studied the hyperaccumulation of metals by plants and the possibility of isolating them. He also described the trans-differentiation of a pollen tube tip into the embryo sac in hyacinth (Němec phenomenon).

Professor Němec was the editor in chief of popular Czech science journal "Vesmír" and author of many scientific and popular scientific works and textbooks written in Czech language. With his intensive popularization activities, he attracted general public attention to science and inspired many young people to study biology.

Under the auspices of the rector of Charles University, the 150th anniversary of birth of Prof. Bohumil Němec, was commemorated by a two-day conference at the Faculty of Science on 8th and 9th June 2023. First day

of the meeting was devoted to the historical context of Němec life and activities while second day was focused on the current advancements in the plant physiology and development from the molecular point of view starting with the latest developments in plant graviperception. The conference was a testament to the lasting impact of Němec's work and his contribution to the field of plant science in the international context.

Establishment of Biologia Plantarum as an international journal for experimental botany in 1959 was largely facilitated by Němec international reputation. Assisted by two young colleagues Bohdan Slavík and Jan Krekule he initiated long productive but also at places bumpy journey of our journal. Sixtyfour years later we are still inspired and encouraged by the legacy of Bohumil Němec.