

BIOGRAPHICAL NOTICE

Eightieth Birthday of Dr. JENS NIELSEN



On 10th February 2007 Dr. JENS NIELSEN, a world authority on smut fungi and a member of the editorial board of the journal *Plant Protection Science*, accomplished eighty years of his life. Dr. J. NIELSEN was born in Bleckede/Elbe, Germany. His professional career started in 1946 by apprenticeship in farming on farms in the Province of Schleswig Holstein (Germany) where he became an assistant manager and a manager after two years. In 1951–1952 he attended the Agricultural College in Celle (Diploma course) and thereafter he worked as a technician in the Plant Protection Service in Göttingen and Braunschweig. This was his first involvement in plant pathology and plant protection that became his whole-life profession and hobby. After a two-year technical engagement in the Institute of Plant Pathology at the University of Göttingen, he studied botany and plant pathology at the universities in Hamburg and in Göttingen and graduated there as D.Sc.Agr. in 1960. After graduation he was awarded Research Fellowship from the German Research Council and Postdoctoral Fellowship by the National Research Council of Canada. That influenced not only his scientific career but also his entire future life. The following year after the expiration of the fellowship he got a permanent position of the research scientist, Agriculture Canada, Research Station, Winnipeg. After an illustrious 31-year research career at Winnipeg Research Station, he retired in 1992. Before Dr. J. NIELSEN concentrated his attention on cereal smuts, he carried out physiological research on *Peronospora parasitica* on cabbage and *Puccinia recondita* on wheat. For most of his career he devoted his work to smuts, from the scientific as well as practical point of view. His scientific achievements represent an important contribution to the smut research. E.g. he revised the list of smuts occurring on wheat and found many novel host species for *Ustilago nuda* and *U. tritici*. He concluded that *U. tritici* was the older of the two species and that *U. nuda* evolved from it. In hybridization studies of *Ustilago avenae*, *U. kolleri*, *U. nuda* and *U. nigra* he demonstrated that the four species were closely related, thus supporting a revision of their taxonomic status. He also declared the possibility of the transfer of virulence genes from the flower infecting *U. nuda* to the seedling infecting *U. nigra*. The exploration of the relationship of cereal smuts with those found on closely related wild grasses was another topic of his research.

His experience with farm management and practical plant protection gave him broad knowledge and insight in the needs of farmers. Though he reached excellent scientific results in his research, he has never forgotten practical aspects of research. During his work at the Winnipeg Research Station he followed an integrated approach of various ways to prevent or control the cereal smuts. He helped in the smut resistance breeding by developing efficient methods to test parental material and large population of breeding lines, by screening foreign and domestic collections of cultivars as well as wild relatives with the aim to select sources of resistance and by collecting and analyzing smut races and their distribution in Canada. He developed unique collections of sources of resistance to smuts as well as of smut races that were made available to the breeders. He also tried to ensure that efficacious seed treatment fungicides would be available if susceptible cultivars were grown, and to ensure that pedigreed seed would be disease free.

Dr. JENS NIELSEN published about 45 papers in prestigious scientific journals. Annually or periodically he supplied farmers, agricultural advisors and plant breeders with reports on the efficacy of seed treatment fungicides to control smut of wheat and oats, on smut reaction of breeding lines and

on yield losses due to smut. He had numerous presentations at scientific conferences, meetings and seminars and was active as postdoctoral fellow advisor, adjunct professor at the University of Manitoba and as a frequent reviewer of manuscripts for several scientific journals. He was a member of many scientific and technical agricultural institutions and was awarded several prizes and honours.

Dr. J. NIELSEN had scientific contacts with main specialists in smutology all over the world and in 1988 he organized with P.L. Thomas the international 6th Biennial Workshop on Smut and Bunt Fungi in Winnipeg. Though personal contacts of scientists from the West with scientists behind the “iron curtain” were not frequent before 1990, Dr. J. Nielsen tried to maintain contacts with specialists from the Middle and East European countries like the former Czechoslovakia, Roumania, Bulgaria, or the former USSR and to visit them. On these trips he also visited the Research Institute of Crop Production in Prague-Ruzyně (Czech Republic). Because of his friendly selflessness and sense of humour, his trips often initiated not only scientific contacts, but also long lasting friendships. Both of it caused that after the “velvet revolution” in the former Czechoslovakia, he and his wife Barbara used to spend a few months every year at the Research Institute of Crop Production in Prague for several years helping the research staff by their knowledge of English to meet the demands of those years. Help and friendly advice and often also amicable discussions offered by Dr. J. NIELSEN and his wife, as well as their generous gift in the year of floods were greatly appreciated by many colleagues in the Research Institute. At that time Dr. J. NIELSEN was also active as an advisor in a Czech grant project on wheat bunt and reviewer of papers in Plant Protection Science. In 1995, he became a member of the Editorial Board of that journal and devoted a huge amount of time to the reviewing and linguistic amendments of the papers submitted to the journal.

All colleagues from the Research Institute of Crop Production, Prague-Ruzyně, who enjoyed his selfless help and friendship wish him good health, personal well-being and strength for all his activities in future.

The head and members of the editorial board of the journal Plant Protection Science are most grateful to Dr. J. NIELSEN for all his personal sacrifice in the effort to help to improve the level of the journal by his knowledge and criticism. He greatly contributed to changes in the Plant Protection Science to provide for its present appearance and scientific level that corresponds to international standards. His long-lasting help is greatly appreciated. We are looking forward to having him as a member of the Editorial Board in the coming years. It is a great pleasure for us to congratulate Dr. J. NIELSEN and wish him good health and enthusiasm for his future activities. Among his numerous hobbies like botany, cartography, ethnology, gardening or photography, the leading one is boating. Therefore, we also wish him many lucky and happy nautical miles on the Lake Winnipeg in future.

Pavel Bartoš, Václav Kūdela, Aleš Lebeda