Biographical Notice

Professor Aleš Lebeda at Sixty

In 2011, Professor Ing. Aleš Lebeda, DrSc., leading Czech plant pathologist and the current Editor-in-Chief of the Plant Protection Science journal, celebrates his sixtieth birthday.

Personal history and outline of his career

Aleš Lebeda was born in Brno, Czechoslovakia, on April 13, 1951. His father, Professor MVDr. Milan Lebeda, CSc., was a highly regarded researcher and professor in veterinary medicine, and his name was included in several bibliographical dictionaries of world scientists.

In 1975, he received his Ing. degree in Agronomic Engineering from the University of Agriculture and Forestry in Brno, Faculty of Agronomy, with a specialisation in Horticulture.

The Vegetable Breeding Station in Smržice, Czechoslovakia, gave this the new graduate, Aleš Lebeda, his first job as a head of their Plant Pathology Laboratory in 1975. At this breeding station, he started his many years' research on lettuce downy mildew, caused by the genus *Bremia*, and on other diseases of vegetable crops.

In 1978, while working at the Breeding Station, he completed two years of external postgraduate studies on mycology at the Faculty of Sciences of the Charles University in Prague. In 1982, he received his CSc. degree (equivalent to a Ph.D.) in the areas of special plant production, genetics and breeding of plants for resistance from the Czechoslovak Academy of Science, Prague.

His early academic success was recognised in 1993, when University of Agriculture and Forestry in Brno, awarded him its highest mark of scientific merit, the degree of DrSc. for his published studies and many research achievements. The next year, he became Associate Professor of Vegetable Crops at Mendel University of Agriculture and Forestry, and later (in 1999) was promoted to Full Professor of Agricultural Botany.

From 1995 up to 2010, A. Lebeda has simultaneously served as head of the Department of Botany, Faculty of Science at Palacky University in Olomouc, Czech Republic.

Research work

Professor Lebeda's main research has focused on two groups of biotrophic plant pathogens**,** namely the Oomycetes, *Bremia lactucae, Pseudoperonospora cubensis* and *Plasmopara halstedii***,** which cause downy mildew diseases, and the Erysiphales, *Erysiphe cichoracearum, Golovinomyces cichoracearum, Podosphaera xanthii, Oidium neolycopersici*, and *Sphaerotheca* species, the causal agents of powdery mildews.

He has substantially contributed to the characterisation of pathotypes, races, and populations of the above-mentioned pathogens, and to the utilisation of diversity indices for the characterisation of virulence diversity structure. Remarkably, he, together with his collaborators, also described a new species of *Erysiphe*, *E. pachypodii* Lebeda, Mieslerová & Doležalová in 2005.

In his research, much attention has been paid to patterns of genetic variability of host-pathogen interactions in vegetable crops and their genetic resources and in wild pathosystems. He also has

contributed extensively to our knowledge of histological, physiological, biochemical, biophysical, and molecular mechanisms by elaboration of the host-pathogen model system, *Lactuca-Bremia lactucae* and the development of other model systems.

His research results have been directly applicable to the breeding and selection of lettuce, cucurbits, tomato, peas and beans for disease resistance based on the utilisation of cultivated germplasm and wild crop relatives. Other significant research areas include applications of interspecific hybridisation to lettuce and cucumber breeding and the development of *in vitro* culture protocols and biotechnological methods for cucurbit improvement.

The importance of Aleš Lebeda's research for plant breeders and producers has been recognised in his direct involvement in the release of seven Czech vegetable cultivars (2 lettuce, 5 green pea). He has also contributed to the breeding of many other vegetable cultivars developed mostly by foreign companies. Prof. Lebeda is proud of those results of the practical application of his research; he belongs to those researchers who believe that "theory and practice have to hold together."

Publications

The immense extent of work done by Aleš Lebeda becomes evident when we see that up to the present time he has published 257 scientific papers and 656 other articles as book chapters for professional and trade journals. His scientific papers have been collectively cited 1111 times in 194 international scientific journals, books, and proceedings. Today, he may well be the most frequently cited Czech plant pathologist.

Unique lettuce germplasm collection

Professor Lebeda has spent many years travelling and exchanging samples to assemble a unique collection of wild *Lactuca* germplasm and, during the course of these efforts, has substantially contributed to research on taxonomy, ecogeography, ecology and biodiversity of wild *Lactuca* species.

At the same time, Aleš Lebeda has built extensive collections of plant pathogenic organisms, which have recently been recognised as important in the new Czech "National Programme of Conservation and Utilization of Genetic Resources of Microorganisms."

Involvement in professional societies and international cooperation

Professor Lebeda is a member of 43 scientific societies, boards, commissions and editorial boards of journals. Four notable positions are as follows: a member of the Accreditation Commission of the Czech Government – specialization in biology and ecology, as well as a member of the National Commission Awarding D.Sc. in Agricultural and Forestry Phytopathology, as President of the Czech Society for Plant Pathology, and as Editor-in-Chief of "Plant Protection Science".

He has visited, as a lecturer or for research purposes, numerous foreign countries and represented his country in many conferences and congresses (nearly 140 lectures in 27 countries). He participated in more than 30 mid- and long-term research stays in Australia, China, Costa Rica, Germany, India, Israel, Korea, Netherlands, Portugal, Spain, Sweden, U.K., and USA.

For his meritorious contributions to the field of science and education, he was granted the "Rudolf Hermanns Foundation Award" (Geiseinheim, Germany) in 1996 and the "Visiting Fellow Award" (The University of the Warwick, Warwick HRI, Wellesbourne, UK) in 2000.

Hobbies and municipal politics

One might not ask "What about Professor Lebeda's hobbies?" given all his professional accomplishments. But in spite of such a demanding work schedule, he has been able to spare some time for such activities as long walks through natural areas, gardening, reading (philosophy, history, biography, travel, and natural history) and, surprisingly, also the sport of a hunting (or more likely game keeping management). In his youth, he was a zealous follower of the Scouting Movement, and he continued with Scouting well after his youth.

Starting in 1990, he became engaged in municipal politics, serving as vice-Mayor of Smržice (1990–1998) and as a member of the local town council. He has also been active in several political and social organisations.

Final comments

Over of a 36-year of professional carrier, Prof. Lebeda displays that he is a strong personality with immeasurable diligence, remarkable insight into plant health problems, strengths to concentrate on solved problems and abilities to solve any problem. To his privilege belongs an ability to find and work with people to whom he is most grateful for their cooperation and friendship.

Thanks to his vigorous determination, Aleš Lebeda succeeded in establishing a strong research and education program in plant pathology and mycology within Faculty of Science at Palacky University in Olomouc. We sincerely hope that some of Lebeda's younger colleagues will follow his footsteps.

Professor Lebeda's concern for both applied and basic research in plant pathology and graduate education, combined with his enthusiasm for professional societies and public affairs generally, undoubtedly will continue to yield benefits in agriculture and food production in coming years. He is full of energy and ideas. We wish him a long life and further achievements in the field of plant pathology and all endeavours that he chooses to address.

The List of Aleš Lebeda Publications is available http://www.agriculturejournals.cz/web/PPS.htm.

Václav Kůdela, Prague, Czech Republic

I met Aleš for the first time in 1988, when he had a sabbatical year at the Institute of Horticultural Plant Breeding (IVT) in Wageningen. At that time I was responsible for lettuce breeding research at IVT and was happy to get a guest-worker for a year to help me to do research on mechanisms of partial resistance of lettuce to downy mildew (*Bremia lactucae*). At that time I was not aware of Aleš's enormous drive and working power. When he arrived, after explaining the research to him, he said that he was happy to do this research, provided that in the rest of his time he could work on other topics related to the gene-by-gene interactions of lettuce and downy mildew. We agreed upon this, and for the next year Aleš worked like a horse, and while doing the work on partial resistance that we agreed upon, which involved a great deal of microscopic histology work, he also did research on some twenty other topics describing various aspects of the interaction between lettuce and downy mildew. Very soon we also recognised his great social skills: within short time he knew everybody in the institute, as well as what research they were doing. Also he took the opportunity to make some trips to other European countries and to the USA, a trip that was not common or easy for a citizen of Czechoslovakia at that time. Only much later did I learn how much effort it had taken Aleš to get official permission to spend a year in the Netherlands in 1988, and how harshly he was treated when he returned back home because of his additional travels, especially a trip one to California. I am very happy that the political changes in Central and Eastern Europe have made it possible for Aleš to pursue the scientific career that suits him so much. He has been able to publish an enormous number of papers, write and edit important books, organize workshops, meetings and congresses, teach a lot of students, and play an important role in the administration of Palacky Universiy in Olomouc. His knowledge and recommendations have caught the attention of, and stimulated, many plant breeders involved in resistance breeding, most notably those of cucurbits and lettuce. Everyone opening a catalogue or viewing a website of one of the renown vegetable seed companies can see what impact resistance breeding has had on these crops in the last 25 years.

Apart from being a great phytopathologist, Aleš also has a passion for collecting wild lettuce. In the footsteps of the great Vavilov, he collected lettuce germplasm on all continents, often combining a visit to a scientific meeting with one or more days in the field to collect wild lettuce. He calls this lettuce germplasm collections his "treasury," a "pot of gold" waiting for the plant breeder to uncover its value. Strong as ever, Aleš will be 60 years now. He lives the live of a true scientist, who has always maintained his deep interest in the interaction between pathogens and plants, who works and studies with great determination and has a great heart for his friends and students.

Kees Reinink, Rijk Zwaan Breeding B.V., De Lier, the Netherlands

I have known Professor Aleš Lebeda since 2002 when I was searching for authors to contribute a chapter on Cucurbits for the Volume 3, dealing with vegetable crops, in the series "*Genetic Resources, Chromosome Engineering, and Crop Improvement.*" Thanks to modern information technology, I stumbled on one of his (Aleš) papers published in Genetic Resources and Crop Evolution, **43**: 461–469 (1996). After looking into his boundless publications, I concluded that Professor Lebeda would be an excellent choice to compose a chapter on Cucurbits. I obtained his email address from the Palacky University web site. I immediately emailed an invitation letter urging him to contribute a chapter on Cucurbits for the vegetables crops volume. I was a bit shocked and surprised when receiving his positive email note next morning. He also agreed to contribute a chapter on lettuce, and helped me in composing an introductory chapter entitled "Landmark Research in Vegetable Crops."

Since that initial contact, we have been communicating for almost 9 years. Our scientific collaboration strengthened, matured and moved forward in a positive direction. The ample testimony is that after few email communications, he started addressing me "Dear Ram" and ending with "your Czech friend, Aleš ". It is his exceptional quality!

I was profoundly pleased to learn that he was planning to visit Urbana in November, 2010. The most amazing moment of pleasure was seeing him personally at The Illini Bus Terminal in Champaign after his day-long bus journey. He accepted our invitation to stay in our home and became like a family member. We hope that Aleš had a 'memorable time' with us. We missed him for many days after he departed from our home.

Aleš is an extremely friendly, helpful, kind, and generous human being, and I am proud to call him a friend and colleague. As we all know, we are getting older each day but we should move forward during the remaining days of our life with a positive attitude.

On this special 60th birthday of Aleš, my wife, Kalindi, and I wish him a very happy, prosperous, fruitful, healthy, and many more birthdays ahead!

Ram Singh, Department of Crop Sciences, National Soybean Research Laboratory, University of Illinois, Urbana, Illinois, USA

It's my great pleasure to wish Professor Aleš Lebeda well as he turns 60. My professional and personal relationship with Aleš began rather unexpectedly twenty years ago, based first on his unsolicited germplasm requests, but, shortly thereafter (in 1992), especially by way of a letter he sent asking about the possibility of making the long trip from Czechoslovakia to Ames, Iowa in order to visit our genebank, the North Central Regional Plant Introduction Station. On that first visit, I drove to Chicago to meet Aleš and there introduced him to my parents, which began a wonderful connection between families that continues to this day. Many of my father's ancestors lived in Moravia, and Aleš has been instrumental in helping us arrange travel in Moravia.

Right from the start, I was impressed with Aleš's vitality, intellect, communications skills, and personality. He is quite enthusiastic about his research, but without being self-serving. He understands and appreciates the big picture and has been a very effective leader in academia. Many others have already commented upon his incredible energy and productivity.

From a research perspective, he does not work alone. Aleš clearly knows how to recruit skillful people and motivate them to work together as teams to get much accomplished. By working with Aleš, my colleagues in Ames and I have learned a lot about the cucurbit germplasm collections within our own US National Plant Germplasm System, especially regarding their disease reactions, but also about current research on cucurbit germplasm more generally, through collaboration on many publications including a major review paper. Throughout, he has also been a fine friend to me and my family, with an engaging smile, fascinating tales to tell, and broad interests. I think these two aspects of Aleš's modus operandi, being a great friend and how he organises his research efforts, go together hand in hand.

So I would very much like to wish Aleš and his family all the best as he celebrates his 60th birthday and approaches a new phase in his professional and academic career and his personal life. May the years ahead be filled with good health, enjoyment, and fulfillment.

Mark P. Widrlechner, A North Central Regional Plant Introduction Station, Iowa State University, Ames, Iowa, USA