

FROM THE SPHERE OF SCIENCE

To the Anniversary of Prof. Ing. Jiří Petr, DrSc., Dr.h.c.

Professor Jiří Petr is a respected personality among plant and cereal specialists in both the Czech Republic and abroad. He was born on 13 May 1931 in Hradec Králové in the miller's family. Having finished the grammar school, he attended the University of Agriculture in Prague. After graduation in 1953, he began working at the Department of Plant Production, first as a postgraduate research (PhD.) student and since 1956 as a lecturer. In 1966, he became a senior lecturer in the field of special plant production. He received the degree of doctor of sciences (DrSc.) in 1989 and then professor. Thanks to his scientific, pedagogical and management abilities, he served as rector of the Czech University of Agriculture in Prague. Under his leadership, the University significantly expanded the co-operation with a number of universities and scientific institutions in Europe and all over the world.

The scientific career of Prof. Petr has surpassed the Czech boundaries and he has become a recognised European personality in science. In 1999, he was awarded the "doctorate honoris causa" in agronomy of the Swedish Agricultural University in Uppsala for his lifelong scientific work in the field of cereal production.

Prof. Petr began his scientific career in 1953 by the study of biology of Czech intermediate wheat forms. His second-degree thesis focused on combination of effects of photoperiod and vernalisation on generative development. In the 1950s, he was engaged in issues of frost-hardiness of wheat and later, in production processes of yield formation in cereals. He has significantly contributed to the integration of growth analysis (formation of biological yield) with formation of individual yield elements constituting the structure of grain yield. A dynamic conception that he has introduced in the Czech Republic allows quantitative assessment of dynamic changes in formation of individual yield elements in time, determination of critical periods for their formation and proposal of management measures. Under his leadership, the plant production has become a creative process. Prof. Petr and co-authors summarised the outcomes of these investigations in the book "Yield Formation in Field Crops", which was published in the Czech Republic in 1980 and then translated into four languages.

Based on the development of the theory of cereal yield formation, the system of agrobiological control of the stand was elaborated, which signifi-

cantly contributed to the introduction of modern crop management practices and leaving the so-called prescription approach. The books "Intensive Cereal Production" and "A Handbook of an Agronomist", a series of guidelines for practical growing of cereals, and tens of the so-called field "preaches", lectures and scientific papers helped to the extension of research results in practice. Outcomes of the study aiming at variety particularities in yield formation have contributed also to the improvement of variety testing. Prof. Petr served for many years as a chairman of the State Variety Commission at the Ministry of Agriculture of the Czech Republic and participated in designing crop management practices according to variety properties. At the same time, he also stressed the importance of seasonal variability of the climate in Central Europe. He summed up the theoretical bases and results of many experiments with co-authors in "Weather and Yields". This excellent book was also translated into several languages. Its practical application has resulted in development of seasonal crop management practices.

In the following years, Prof. Petr participated in elaboration of the conception of crop management practices according to the intended use of production; first for malting barley and bread wheat, and later for starch-producing wheat. Besides these main cereal crops, Prof. Petr has paid attention to some other species, such as rye, triticale, millet, buckwheat and amaranth, and no small attention also to legumes. His interest in alternative crops extended to the study of problems associated with ecological farming for whose promotion Prof. Petr did much deserving work in the 1990s. In the recent years, he has been engaged in quality of cereals.

His extensive scientific accomplishments have been documented by rich publication activity that comprises 75 original scientific studies, 210 papers at scientific conferences, 260 special articles, 20 guidelines for farmers and 54 monographs for both students and specialists community. Prof. Petr has conducted numerous research projects. He is now a chairman of the Commission of the Grant Agency of the Czech Republic for the Plant Production, Breeding and Genetics of Plants. He is also a chairman of the editorial board of the journal of the Czech University of Agriculture, *Scientia Agriculturae Bohemica* and the editorial board of the special journal for crop production "Úroda". He was a member of various scientific associations, commissions and scientific boards of domestic and foreign institutions.

Prof. Petr has handed over wide experience from his own research and actual knowledge obtained also due to his numerous foreign contacts to hundreds of university students and specialists from practice in his lectures, practical trainings, workshops, etc. His lectures are always highly erudite, rich in practical knowledge and show the trends of future development. Therefore, they are much attended and acknowledged. His high inventiveness

is manifested in well chosen themes of his students' theses, which are always topical, closely related to research projects and help to solve the problems of practice or to verify hypotheses of basic research. Prof. Petr is able to carry his enthusiasm on the people around him, therefore he always finds a lot of colleagues for the co-operation. He has educated for research work a large number of his followers of more than 100 M.S. and more than 20 PhD. students. The success is not a matter of his own; he is glad to share the knowledge and experience with students and others, and helps to develop scientific and personal qualities of his colleagues. He is an example of a man who has devoted his life to science and education.

Doc. Ing. Jan Moudrý, CSc.

Doc. Ing. Jan Křen, CSc.

Doc. Ing. František Vrkoč, DrSc.