OBITUARY

PROFESSOR ALICJA SANIEWSKA

Professor Alicja Saniewska was born on 27th March 1949 in Konopki-Koziki, near Zambrów (north-eastern Poland, the Łomża province) – a town in which she completed her education in secondary school (1967). In 1971 she graduated from a three-year Vocational School of Electronics in Warsaw and in October started her work at the Research Institute of Pomology in Skierniewice as a technician in the Laboratory of Isotope Techniques.

In 1977 Alicja Saniewska started her extramural studies at the Faculty of Horticulture of the Warsaw Agricultural University (SGGW) and in 1981 graduated as engineer of horticulture. Meanwhile, in 1978, she started her work in the Laboratory of Plant Pathology, Department of Ornamental Plant Protection of the Research Institute of Pomology.

From 1981 she decided to continue her extramural studies at the Faculty of Horticulture of the Warsaw Agricultural University. Her Master of Science dissertation "Red spot of *Hippeastrum* × *hybridum* hort. plants" (under the guidance of Prof. L.B. Orlikowski from the Research Institute of Pomology and Floriculture and of Prof. H. Chmiel from the University) outlined one of the major objectives of her future research work – diseases of *Hippeastrum*. After graduating in 1985, she went in 1986/87 for training in growing and protection of ornamental plants in Van Wingerden Company in North Carolina (USA). She earned her Doctor of Agriculture degree in 1990, defending a dissertation on "Occurrence, severity and biology of *Fusarium oxysporum* Schl. f. sp. *callistephi* (Beach) Snyd. et Hans. – the causing agent of China aster (*Callistephus chinensis* (L.) Nees) phloem fusariosis", completed under the scientific guidance of Prof. L.B. Orlikowski. That was followed by the degree of *doctor habilitatus* in agriculture (with specialization in horticulture) granted to her in 1999. This was a model career in research work – from Master of Science it took only thirteen years to *doctor habilitatus*, recommended strongly nowadays but rarely achieved.

The scientific interests of Professor Alicja Saniewska covered a broad range of subjects within pathogenesis and control of ornamental plant diseases. It included

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extensive studies on pathogenicity, biology and control of *Stagonospora curtisii* on plants of Amaryllidaceae family and of *Fusarium oxysporum* f. sp. *callistephi* on China aster. Over 150 isolates of *Fusarium oxysporum*: f. sp. *callistephi*, f. sp. *dianthi*, f. sp. *narcissi* and f. sp. *tulipae* were also examined in details in infection experiments and classified to new vegetative compatibility groups.

Identification and control of pathogenic agents of major ornamental plant species followed. She further developed the subject of biological control of diseases caused by *Fusarium oxysporum* (various formae speciales), *Phytophthora cryptogea* and *Stagonospora curtisii*, with the use of bacteria (*Bacillus polymyxa* S13) and active compounds from garlic, horseradish, grapefruit and alfalfa. The latter plant, known for production of saponins, was considered particularly promising as a source of natural biologically active substances suitable for biocontrol of pathogens.

This led Prof. Saniewska to pathophysiology, starting from the role of gums induced in tulip by *F. oxysporum* f. sp. *tulipae* in the growth and development of the pathogen. The gums proved very stimulating both for the tulip pathogen and for other formae speciales, not pathogenic to the host plant. The development of *F. oxysporum tulipae* in tulips proved to be connected with ethylene production and gummosis. She also identified the red pigment produced in hippeastrum tissues upon infection with *Stagonospora curtisii* and mechanical injuries. This was followed by investigation on the synthesis of red antifungal pigment (flavonoid) in tissues of *Hippeastrum* × *hybr*. hort., as a reaction to *Phoma narcissi* infection, *Steneotarsonemus laticeps* (mite) injury and mechanical injury, and the protective effect of the pigment *in vivo* and *in vitro*.

Among her last works were those on systemic acquired resistance (SAR) connected with activities of salicylic acid, thiosalicylic acid and β-aminobutyric acid (BABA). She also worked on the inhibiting effect of chitosan and jasmonic acid on plant pathogenic fungi.

Professor Saniewska was also a co-author of six new cultivars (registered in 1994) of China aster: 'Izabela', 'Jadwiga', 'Jolanta', 'Małgosia', 'Jaś' and 'Polo', having contributed to their increased resistance to *F. oxysporum* f. sp. *callistephi*.

Beside the research activity within statutory activity of the Institute, in 1995–2008 she was in charge of four research grants and, starting from 2008, participated in another one – all funded by State Committee for Scientific Research and Ministry of Science and Higher Education.

Professor Saniewska was an author or co-author of over 170 publications (including over 100 original research papers, 2 books and 4 review articles).

During 1995–2000 Professor Alicja Saniewska was an elected member of the Scientific Council of the Research Institute of Pomology and Floriculture.

A member of The Polish Phytopathological Society from 1994, she was a member of the Board (2002–2005) and took part in organization of several international conferences of the Section for Biological Control of Plant Diseases.

Professor Alicja Saniewska passed away on 10th July, 2008, after a short but severe disease. Her sudden death was a shock to all her friends and colleagues.

She will be remembered as a noble person of great culture and kindness, always full of great enthusiasm for her research.

Małgorzata Mańka