

OBITUARY

PROFESSOR KRYSZYNA JANOWICZ (1943–2007)

Prof. Dr. hab. Krystyna Janowicz was an entomologist and a specialist in nematology. Born on 13th March 1943 in Bydgoszcz, she attended secondary school No 6 in her home town and later moved to Szczecin to study biology in the Faculty of Agriculture at the Higher School of Agriculture (current name: University of Agriculture). Her thesis on the fauna and ecology of nematodes in sugar beet plantations, supervised by Dr. Marian Kisiel, Department of Plant Protection, earned her the degree of master of science and engineer in agriculture in 1968.

Professor Janowicz began her academic career as junior lecturer at the Department of Plant Protection immediately after her graduation in 1968. She was promoted to the position of lecturer four years later. Numerous research trainings in leading institutes in Poland and abroad (Research Institute of Vegetable Crops, Division of Nematology, Skierniewice, Poland; Institute of Plant Protection, Laboratory of Nematology, Poznań, Poland; University of Rostock, Division of Nematology, Rostock, Germany; University of Agriculture, Department of Plant Protection, Prague, Czechoslovakia) gave this young, promising scholar an opportunity to develop her knowledge of nematology.



Krystyna Janowicz obtained her Ph.D. upon presentation of a thesis “The biology and harmfulness of *Aphelenchoides saccharii* Hooper, 1958 (*Nematoda*, *Aphelenchoididae*) and its harmfulness to champignon” [Biologia i szkodliwość *Aphelenchoides saccharii* Hooper, 1958 (*Nematoda*, *Aphelenchoididae*) i jego szkodliwość dla

pieczarki] in 1975. She continued her academic career working as senior lecturer in the Department of Entomology from 1977 to 1991.

It was on 2nd February 1991 that K. Janowicz was conferred the degree of *doctor habilitatus* (with honours) in agricultural sciences in the field of agrotechnology, after defending her habilitation thesis "Interaction of *Ditylenchus destructor*, *Globodera rostochiensis* and parasitic fungi in potatoes" (Wzajemne oddziaływanie *Ditylenchus destructor* i *Globodera rostochiensis* oraz grzybów pasożytniczych na ziemniaku). She had a position of associated professor at the University of Agriculture in Szczecin from 1994 to 2002. She became full professor of agricultural sciences on 18th February 2002 and held the chair of applied entomology from 2002 to 2007.

A prolific researcher, Professor Janowicz published widely. She was an author and co-author of 135 publications: 54 original research studies, 26 research works intended for extension, 49 conference papers presented in Poland and abroad and 6 course books for students. She also participated in 12 expert analyses commissioned by a range of institutions. Her contributions, still cited in many books and journals, were published *i.a.* in *Archiv für Phytopathologie und Pflanzenschutz*, *Ecoprint on International Journal of Ecology*, *Acta Mycologica*, *Acta Microbiologica*, *Progress in Plant Protection*, *Microbiologia Polonica*, *Roczniki Nauk Rolniczych*, *Zeszyty Problemowe Postępów Nauk Rolniczych*, *Zeszyty Naukowe* of the Universities of Agriculture in Szczecin, Cracow and Olsztyn.

Pest control in plant protection was her main research interest. In particular, Professor Janowicz investigated phytophagous nematodes and the role of soil microorganisms in biological management of nematode populations. In the early years of her academic career her studies on biology and harmfulness of *Aphelenchoides saccharii* were focused on the adverse effect of nematodes in mushroom growing.

She devoted the following years to the study of a quarantine pest *Globodera rostochiensis* in potato crops. Her practical research work in the area revealed significant differences in the reaction of potato cultivars and effect of manure fertilisation (plant development and tuber yield) on *Globodera rostochiensis* and *Ditylenchus destructor*, another quarantine pest.

Studies conducted by Professor Janowicz were both practical and innovative. She investigated a range of reactions occurring between soil microorganisms and phytophagous nematodes characterised by a different degree of adaptation to parasitic lifestyles. The results of the analyses inspired Professor Janowicz to examine the role of fungi in natural control of populations of golden nematodes. She demonstrated a significant share of soil microorganisms in destruction of cysts and infective larvae of these nematodes. At the same time, Professor Janowicz conducted studies on gall formation by *Meloidogyne incognita* and *Meloidogyne hapla* in tomatoes and identified tomato cultivars resistant to these parasites.

Another research subject that is worth mentioning is the influence of pathogenic soil microorganisms on *Globodera rostochiensis*. Studies on interactions between microorganisms and golden nematodes conducted by Professor Janowicz showed that fungi such as *Fusarium oxysporum* and *Rhizoctonia solani* and an actinomycete *Streptomyces scabies* caused anatomical and morphological changes of nema-

tode larvae, eggs and cysts both in pot and field experiments. She demonstrated a double influence of *Rhizoctonia solani*, a particularly interesting microorganism, on cysts of *G. rostochiensis*: both cyst walls were damaged and larvae inside eggs died. Cyst density and the number of infective larvae decreased. Secretions of saprotrophic fungi such as *Aspergillus versicolor*, *Trichocladium asperum*, *Penicillium frequentans* and *Stachybotrys chartarum* caused physiological changes in the intestines of larvae found in the eggs and infective larvae of *G. rostochiensis*. She also found *P. frequentans* a particularly interesting antagonistic species of the golden nematode.

Professor Janowicz effortlessly joined her research work with teaching and administrative duties. She was particularly valued as a skilled teacher of many generations of young biologists and was greatly respected as an excellent lecturer. Krystyna Janowicz founded and presided a postgraduate programme in plant protection in 1987–1999. She was also a co-author of two text books on plant protection and methodology and an active member of many committees of the Faculty and of the University (Faculty Committee for Teaching Programmes, Faculty and University Admission Committees, Faculty Committee for Teaching, National Contest of Agricultural Knowledge and Skills, Symposium of Student Scientific Societies, etc.).

Professor Krystyna Janowicz belonged to many research and scientific organizations: The Polish Phytopathological Society, Polish Entomological Society, Polish Society for Horticultural Sciences, Polish Copernicus Society of Naturalists, Nematological Section, Ecological Society (ECOS, Tribhuvan University, Kathmandu, Nepal). She enthusiastically shared her knowledge and experience with other scholars and professionals. A sensitive and astute researcher, she was also a devoted promoter of science. The results of her studies were often applied into agriculture and horticulture.

Her research work, teaching achievements as well as her involvement in the promotion of science did not go unnoticed. She received a Silver Cross of Merit and a Gold Badge of the Association of Research and Applied Agriculture Specialists for her work in the Szczecin Voivodeship and was awarded for her contribution to the development of agriculture in the Koszalin region.

Professor Krystyna Janowicz died on 13th January 2007 in Szczecin. She was an extraordinary person, kind, cheerful and passionate about her work. Her optimism, enthusiasm and great warmth were magnetic. Always considerate, she treated others with respect and was a source of inspiration for her staff and students. Her enormous kindness, generous understanding and deep commitment to research were impressive. She will be remembered as an innovative scholar, an excellent teacher and a wonderful person.

Magdalena Dzięgielewska