Phot. E. Zastawniak

This volume is dedicated to

Professor ***KRYSTYNA WASYLIKOWA***

Professor Krystyna Wasylikowa – in seventieth anniversary of birthday

We dedicate this volume of Acta Palaeobotanica to Professor Krystyna Wasylikowa as a sign of our respect to her as an eminent scientist, a wonderful colleague and invaluable member of our palaeobotanical community.

Krystyna Wasylikowa, née Pstrokońska, was born on 7th February 1932 in Warsaw. She started to attend her primary school in Lwów just before the beginning of the 2nd World War, and finished it in a small village Biały Kościół close to Cracow in 1944. Then she attended the secondary school in Cracow, and after having achieved its final certificate in 1950, she entered the Faculty of Biology and Earth Sciences of the Jagiellonian University to study biology. She specialized in botany, and soon she has been recognized by the Old Master Professor Władysław Szafer as a brilliant student. Getting interested very early in the relationships between the prehistoric human populations and the natural environment, she decided to choose the palaeobotany as the branch of her master studies, and practised in determination of macrofossil plant remains from archaeological sites. Her master thesis on the cultivated plant macrofossils from a Hallstadt stronghold excavated at Kamieniec near Toruń has been prepared under the guidance of Professor Szafer. She graduated from the University in 1955, but already a year earlier she was employed as a technical assistant at the Department of Palaeobotany Institute of Botany, Polish Academy of Sciences in Cracow.

She advanced very fast, getting position of (scientific) assistant in 1956, and senior assistant in 1957. But then, she decided to extend her interests and scientific methods applied, and started to learn pollen analysis. It happened so, because she got involved in a project lead by archaeologists Waldemar and Maria Chmielewski at a palaeolithic site at Witów near Łęczyca. At this site some very promising sediments of a subfossil lake (supposed to origin from the Vistulian Late Glacial) were found in a dune area. She studied those materials with great care, using both macrofossil and pollen analyses. In the process of research she reconstructed in detail full history of vegetation in cool and warmer oscillations of the Late Glacial, analysing the climatic changes, the patterns of dune-forming processes, the differences in the reaction to the climate changes between the aquatic and terrestrial vegetation, what resulted finally in a big manuscript which became her doctoral dissertation. Krystyna Wasylikowa was promoted as Professor Władysław Szafer's Ph.D. student in 1963, being given the title of doctor of biological sciences. One year later the paper was published as "Vegetation and climate of the Late Glacial in Central Poland, based on studies at Witów near Łęczyca". This classical paper known widely in Poland and abroad, remained topical till today, and it is still very useful and cited very often.

The habilitation procedure at the Jagiellonian University in 1973, based on the dissertation "Cereals from the Early Medieval castle at Lubomia, near Wodzisław Śląski, p.II. Palaeoethnobotany", gave her habilitated doctor degree with the following dozent position.

In 1988 Dr. hab. Krystyna Wasylikowa became Professor of Biological Sciences.

The interests of Professor Wasylikowa remained focused in two fields, connected with each other, but differing in the methodology and the interpretation of basic data achieved. One speciality includes the investigations of late-Quaternary vegetation and the impact of climate and man on its changes. The other speciality – archaeobotany – closely connected with archaeology interprets the history of plants used by human populations of different prehistoric and early historic cultures, both planted by man or occurring in natural plant communities – edible, applied as medicines, or used as fodder for domestic animals and for many other practical purposes. In the first case the sequences of samples from peat or lake sediment profiles are analysed for

pollen and plant macrofossils, in the second the research material comes mostly from the archaeological excavations.

Krystyna Wasylikowa became a mature independent scientist very early, but her scientific personality was fully shaped by close and long-lasting contacts with outstanding individualities of her foreign Masters, scientists of world-wide importance: Dr. J. Troels-Smith, Dr. J. Iversen and Professor H. E. Wright Jr. During the scholarship stays in Copenhagen in 1958–1963, lasting together 6 months, she studied the problems and methods used during the palaeobotanical investigations connected with archaeological sites, with the special emphasis on the detailed analysis of sediments of different types. Her teacher Dr. J. Troels-Smith, was an archaeologist and palaeobotanist who taught her how to combine the knowledge coming from those two scientific fields. His original handbook for sediment analysis and description has been world-wide known and used till today. She also learned a lot about the ecological approach to the interpretation of pollen diagrams from Dr. Iversen, one of the greatest pioneers in field of palynology.

In 1964–1965 K. Wasylikowa was employed for a full year as a research-fellow in the Limnological Research Center of the Minnesota University in Minneapolis, USA, working under the guidance of Professor H. E. Wright Jr., a famous palaeolimnologist, were she developed her knowledge and competencies. During this time she analysed a late-glacial profile from Blackhoof mire in Minnesota, published in 1970, however a much more important prolongation of her cooperation with Professor Wright and his team was the participation in an expedition to Iran, and the studies of sediments from Lake Zeribar in Iran in 1964–1975. Basing on data obtained by analysing plant macrofossils she could follow the development of aquatic and lake-shore plant communities and reconstruct the oscillations of water-level in the lake in respect to the general changes of climate. Quite recently she resumed again the work on data from Lake Zeribar due to the new developments in the dating methods.

Another important contribution of Professor Wasylikowa to the palaeobotanical studies carried on outside Europe resulted from her investigations of archaeobotanical materials collected during American-Polish expeditions to south-western Libya and south Egypt. In both areas she studied plant remains connected with the activities of pastoral nomadic populations living there around 9000–7000 years ago. Those tribes did not know any agricultural activities, and their food was based chiefly on gathering products (seeds, roots) of wild plants, mostly grasses, the commonest vegetation surviving then in Saharian environment. Professor Wasylikowa discovered the oldest known remains of wild sorghum dated at ca. 8000 years ago. Those investigations and discussions on their meaning resulted in over 20 publications in books and periodicals abroad.

As to her scientific activities in Poland, one has difficulties what to select as most important, because her achievements are so numerous and diverse. Among her archaeobotanical investigations particularly interesting are studies on Early Medieval flora and vegetation of Wawel castle hill (1978, 1991). Professor Wasylikowa reconstructed here the synanthropic and natural plant communities very similar to the recent ones.

Unquestionably worth mentioning is her significant contribution to a multidisciplinary study executed by a team of scientists representing archaeology, geomorphology, pedology, malacology etc., at Pleszów near Cracow – in the region where a group of Neolithic sites was found on the terrace of Vistula valley and its loess edge. The results of both pollen and macrofossil analyses of biogenic deposits filling the palaeochannel depressions, together with all other multiproxy data, gave fascinating picture of local-scale transformation of natural environment in the loess area into the cultural landscape, caused by the activities of the oldest agricultural populations around 6000–5000 years ago (1985, 1987). She carried out similar studies in the dune area near Witów. These studies evidenced the devastation of vegetational cover and activation of dune-forming processes, following each time the presence of hunter-gatherer or agricultural populations in the examined region (1999–2001).

Professor Wasylikowa is a very active scientist. The list of her publications just exceeded the number of 120 positions, around the half of them being original scientific studies.

She travelled a lot, and participated in many international meetings, giving ca. 25 lectures at different conferences. She was invited to teach students and assistants as visiting professor in

Bergen, Lund, Umea and Frankfurt on the Main. Broadly known as a devoted teacher, always ready to help young scientists, she is constantly busy with didactics; she was leading scientific practices for young archaeobotanists from Poland and abroad (ca. 20 persons altogether), she was the curator of 5 master theses, she promoted 3 doctors, and 2 other students are close to promotion.

The organization of three Summer Schools of Archaeobotany and five Archaeobotanical Workshops was due to her idea and hard organizational work. She initiated also the meetings of archaeobotanists dealing with African materials, and organized first such a workshop in Poland. Those workshops held every three years contributed to the rise of quality of African archaeobotanical studies, and called attention of expeditions organizers to the meaning of this speciality.

Professor Wasylikowa was the author of chapters on methods in 2 handbooks (1973, 1986), and co-editor with Professor W. van Zeist of a book summarizing the progress of archaeobotanical studies on the occasion of 20th anniversary of founding the International Palaeoethnobotanical Work-team. The volume was published by A. A. Balkema in Rotterdam (1991).

Known as an excellent leader and organizer she was often elected to leading positions at the Institute, in editorial boards of scientific periodicals, scientific societies etc.

From 1 January 1979 till 31 December 1981 she acted as the Head of the Palaeobotanical Department at the Institute of Botany of the Polish Academy of Sciences, her home institution where she belonged during her whole scientific career.

From 1 April 1990 till 30 March 1993 she overtook the duties of the assistant director of the Institute of Botany for managing the scientific matter.

She has been a member of doctoral commission at the Institute of Botany from 1982. She is the assistant editor of *Acta Palaeobotanica* from 1978, the member of Editorial Advisory Board of *Folia Quaternaria* and of *Studia Quaternaria*, the latter from 2000.

She was the head of Palaeobotanical Section of Polish Botanical Society in 1984–1990 and the Head of Cracow Branch of this Society in 1989–1995.

Besides, she is or was the member of different scientific organisations like Committee of Quaternary Research in 1972–1998, Committee of Botany of Polish Academy of Sciences from 1993, Commission of Quaternary Palaeogeography from 1979, Holocene INQUA Commission in 1974–1977.

In appreciation of her work and merits she was awarded with the prize of the Department of Biological Sciences Polish Academy of Sciences in 1980, with Golden Distinction “For the Social Work for Cracow City” in 1980, with Golden Cross of Merit in 1990, and Jubilee Medal presented at a ceremony to mark the centenary of W. Szafer’s birth and the Thirtieth Anniversary of the Founding of the Institute of Botany Polish Academy of Sciences in Cracow in 1986. From 1998 she is a honorary member of Polish Botanical Society. In 1992 she became the corresponding member of Polish Academy of Arts and Sciences.

There were the facts. But as a Krystyna’s colleague of the same generation, working with her door to door for nearly a half of century, I like to end this contribution with some more private words. Krystyna is a person of a great heart, and with her cool objective mind being never subjected to unnecessary emotions, she gets always fully engaged when needed. Now she is being retired, though with her fully intensified knowledge, she seems to be in her best creative time – the best for the synthetic scientific work. And still full of enthusiasm for such work. Just recently, she has been writing, together with her colleague – archaeobotanist, a Polish handbook of archaeobotany to facilitate the work and encourage for this speciality those young persons who still have linguistic difficulties. I am absolutely sure the book will be of the highest scientific level, and when edited in English, would be her great international success. But she prefers to help young Polish colleagues. It is just typical for Krystyna. Let us hope she will still work with full intensity for many years.

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