

**Dedicated to Professor Barbara Gumińska,
an outstanding mycologist, academic teacher,
cheerful and warm-hearted person,
on the occasion of her eighty-fifth birthday**



Professor Barbara Gumińska in the period of her academic activity

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Professor Barbara Gumińska Her life and achievements

WŁADYSŁAW WOJEWODA

W. Szafer Institute of Botany, Polish Academy of Sciences
Lubicz 46, PL-31-512 Kraków

CHILDHOOD AND EDUCATION

Barbara Apolonia Lubelska was born on September 25th, 1924 in Lwów (now Lviv in Ukraine). At the age of four she lost her father, who died in 1928. In Lwów she attended primary school, and after 6 years she continued her education in the A. Asnyk secondary school, until 1939. The next two years of education, namely the 8th and 9th grades, she continued in the secondary school no. 19 in Lwów, in that period being under Soviet authority. As under German occupation of Lwów from 1941 all teaching was forbidden, young Barbara Lubelska was forced to work in the cosmetic laboratory “Galico”. Attending secondary school was possible again after the Germans’ withdrawal, when the city was taken by Russians. She returned to the school no. 19 and continued her education in the 10th grade. However, after 9 months she left Lwów with her mother and, as a repatriate, came to Kraków in May 1945. In 1946, after completing her education in the J. Joteyko secondary school, she graduated and became a student of the Faculty of Mathematics and Natural Sciences of the Jagiellonian University in Kraków. She graduated from the University in December 1951 and became a Master of Philosophy with the speciality in botany.

WORK AND SCIENTIFIC CAREER

As mentioned above, Barbara Lubelska started to work quite early in Lwów under German occupation. In her 4th year of study at the Jagiellonian University she was employed at the Pedagogical University as an assistant, for the period of one year. In September 1950, still being a student, she was employed in the Institute of Botany of the Jagiellonian University, where she was working until she retired in 1997. On June 3rd, 1954 she married Jan Gumiński. Since then she published for a short time under the name Lubelska-Gumińska, and then under the name Gumińska. In the

years 1956-1959, besides working at the University, she was additionally a part-time employee in the Institute of Botany of the Polish Academy of Sciences in Kraków. At the Jagiellonian University she was first working as Assistant (1950-1953) and later Senior Assistant (1953-1963). During this time, in March 1962, she defended her PhD thesis “Mycoflora of the beech forests of Rabsztyn and Maciejowa”. In the years 1963-1972 she was working as postdoc (Adiunkt), and in the years 1972-1977 as Senior Lecturer. In December 1974 she was awarded the Doctor of Science degree (habilitation), after presenting the work entitled “Macromycetes of meadows in the Pieniński National Park”. In the years 1977-1985 she was employed as Assistant Professor and in the years 1985-1994, after being awarded a professorship, as Professor. She retired in 1994 but was still a part-time employee until 1997. All together, she was a member of the University staff for 47 years.

RESEARCH AND SCIENTIFIC ACHIEVEMENTS

The main subject of the research carried out by Barbara Gumińska was taxonomy, ecology and geographical distribution of macrofungi (macromycetes), which belong to Asco- and Basidiomycota. She was working mainly in Southern Poland, e.g., on the Kraków-Częstochowa Upland, and in Polish Carpathians: Beskid Niski Mts, Beskid Sądecki Mts, Bieszczady Mts, Gorce Mts and Pieniny Mts (especially Pieniny National Park).

During her research on ecology and mycosociology she investigated mainly the fungi of beech, beech-fir and linden-hornbeam forests, and mountain meadows. Especially interesting was a comparative study of the fungi occurring in the beech forests (*Dentario enneaphyllidi-Fagetum*) on the Kraków-Częstochowa Upland, and beech-fir forests (*Dentario glandulosae-Fagetum*) in the Beskid Niski Mts. She also participated in the research on mycobiota of the Bieszczady Zachodnie Mts (Polish East Carpathians). In Tyniec Forests (Kraków) she investigated the fungi of linden-hornbeam forest (*Tilio cordatae-Carpinetum betuli*). The most important, however, seems to be her work on the mycobiota of the Pieniny Mts and, especially, the Pieniny National Park. In this part of her research she concentrated on the diversity of macrofungi, their ecology and phenology in the forest and meadow associations. Thanks to her scientific activity, the Pieniny National Park is one of the best-investigated areas in Poland when fungi are concerned. In her ecological works, she also paid attention to morphology and taxonomy of fungi and used to include her own drawings and pictures. One of the most important achievements of Barbara Gumińska is a well illustrated monograph of the fungi from the family *Hygrophoraceae* occurring on the territory of Poland and adjacent areas, published in the series “Flora of Poland – Fungi”. During her research on fungi she also discovered several species new to Poland or very rare in our country (Szafer 1964). In 1956 she recorded a rare fungus – *Wawelia regia* in the University Botanical Garden, for the first time after it was described as a new species in this location in 1908 by Namysłowski. Till now, this is the only known location of this possibly exotic species, which most probably arrived to the Botanical Garden with tropical plants. Also the ecology of ring-forming macrofungi was the subject of her research, and this was the first such

detailed study on this phenomenon in Poland. After a fire that destroyed vast forest areas in Southern Poland, she carried out the investigation of post-fire fungi in these places. Together with Dr. Zofia Heinrich she studied the collection of Arctic and Antarctic fungi brought by Prof. M. Olech from her expeditions.

DIDACTICAL ACHIEVEMENTS, POPULARIZATION OF MYCOLOGY

Barbara Gumińska was a very active university teacher (Fig. 1). She held several courses and monographic lectures, seminars, practices and laboratory practicals with students in the areas of plant and fungal taxonomy and ecology. She also organized summer schools for the students of the Jagiellonian University. Many students and young scientists from other universities and scientific institutions in Poland were attending trainings and consultations under her supervision and tutorial.

She was the supervisor of two doctoral dissertations and several master degree theses in the area of mycology and lichenology. She was also a reviewer of numerous habilitation works, doctoral dissertations and master degree theses. In her popular science publications she promoted mycology. Her papers concerning illustrations of fungi on post stamps are the first ones published in Poland dealing with these artifacts.

In 1965 she was one of the organizers of the great fungal exhibition held at the Higher School of Agronomy (now Agricultural University) in Kraków, entitled: "Fungi in nature and economy" ("Grzyby w przyrodzie i gospodarce człowieka").



Fig. 1. Course of plant systematics, the laboratory classes. From left: B. Gumińska, A. Stengl.

FUNCTIONS AND MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Barbara Gumińska fulfilled important functions. She was the secretary of the Scientific Board of the Institute of Botany of the Jagiellonian University (1976-1988), member of the Biological Commission of the Polish Academy of Sciences (1976-1998), head of the Department of Plant Taxonomy and Phytogeography of the Institute of Botany (1977-1979), head of the Mycology Unit of the Institute of Botany (1979-1994), member of the Editorial Board of *Acta Mycologica* (1985-1998), member of the Scientific Board of W. Szafer Institute of Botany of the Polish Academy of Sciences (PAS) in Kraków (1990-1992), and member and vice-chairman of the Commission for Awards and Distinctions of the Faculty of Biology and Earth Sciences of the Jagiellonian University (1991-1993). Periodically she was also a member of the Commission for the Habilitation Courses of the Faculty of Biology and Earth Sciences, and vice-chairman of the Council of the Foundation for Polish Botany in the W. Szafer Institute of Botany of PAS. She is also a member of the Mycological Section of the Polish Botanical Society.

INTERNATIONAL COOPERATION, PARTICIPATION IN INTERNATIONAL CONGRESSES AND SYMPOSIA

Barbara Gumińska cooperated with several European mycologists, e.g., from former Czechoslovakia. In 1956 she studied fungi under the supervision of a famous Czech mycologist Dr. A. Pilát in the National Museum in Prague. In 1960 she participated in the 2nd Congress of European Mycologists in Prague, and in two Dreiländer Mykologische Tagung meetings: in Hungary in 1964 and in Austria in 1965. In 1966 she was one of the organizers of the 4th Congress of European Mycologists held in Poland (Fig. 2).

PUBLISHED BOOKS AND ATLASES

Together with Władysław Wojewoda, Barbara Gumińska prepared and published the first Polish textbook on the identification of macrofungi entitled “Grzyby owocnikowe i ich oznaczanie” (Macrofungi and their identification). The first edition of this very popular book appeared in 1968, had three re-editions (under a modified title “Grzyby i ich oznaczanie” – Fungi and their identification), and was printed in 90 000 copies. On the origin of the book writes Leńkowa (1992). For a long time it was the basic handbook, used both in schools and universities, to identify macrofungi. It was also widely used by hobbyists and amateurs of mushroom picking, and had a great impact on the popularization of the knowledge of fungi in Poland.

After several years of investigations on the fungi of the Pieniny National Park she published a colour atlas of macromycetes occurring in this interesting Carpathian range (“Atlas grzybów Pienińskiego Parku Narodowego”).



Fig. 2. Excursion during the 4th Congress of European Mycologists, 1966. From left: M. Ławrynowicz, J. Kućmierz, B. Gumińska, I. Hołownia.

STUDENTS, THE SCIENTISTS

A number of students of Barbara Gumińska followed her scientific career as mycologists working in universities and other scientific institutions.

DR. ANNA DROZDOWICZ. Member of the Department of Plant Taxonomy and Phytogeography of the Institute of Botany of the Jagiellonian University. PhD student of B. Gumińska. Her research activity includes the taxonomy and ecology of slime moulds (Myxomycetes). She is an author of the monographs of Myxomycetes of Popradzki Landscape Park and Ojcowski National Park, and co-author of the “Checklist of Polish Myxomycetes” and the red list of Polish Myxomycetes.

DR. ANNA ROKIER. MSc student of B. Gumińska, now employed in the Department of Mycology of W. Szafer Institute of Botany of the PAS in Kraków. In her research she deals with the diversity and ecology of slime moulds and macrofungi (mostly agaricoid and boletoid genera) of the high mountains in Europe (mainly Carpathians and Pyrenees) and in South America. The author and co-author of several important articles and monographs, including the “Checklist of Polish Myxomycetes”.

PROF. KATARZYNA TURNAU. MSc and PhD student of B. Gumińska. For many years employed in the Institute of Botany (after retirement of B. Gumińska the head of the Mycological Unit), now Professor in the Institute of Environmental Sciences of the Jagiellonian University. World-class specialist in mycorrhiza research and mycology, author and co-author of many important scientific papers published in leading botanical and mycological journals, as well as book chapters dealing with

taxonomy, ecology and ecophysiology of mycorrhizal and other fungi, especially the interactions of fungi and mycorrhizal plants with heavy metals. Member of the Polish Academy of Sciences.

PROF. WŁADYSŁAW WOJEWODA. The first MSc student of B. Gumińska. Although nominally the supervisor of the thesis was Prof. B. Pawłowski, B. Gumińska in fact supervised the project. Employed in the Institute of Botany of the Jagiellonian University for 10 years, from 1969 until his retirement in 2003 employed in the W. Szafer Institute of Botany of the PAS, head of the Department of Mycology in this Institute. Founder of the biggest collection of fungi in Poland, author and co-author of several papers dealing with taxonomy and ecology of macrofungi, e.g., the monograph of Polish tremelloid and auricularioid Basidiomycota, and the “Checklist of Polish larger Basidiomycetes”, first editor of the “Atlas of geographical distribution of fungi in Poland”.

SCIENTIFIC EXPEDITIONS

Barbara Gumińska was a very active member of the scientific field trips to the mycologically most precious areas in Poland. The trips were organized and led by Prof. Alina Skirgiełło from the Warsaw University. In 1955 B. Gumińska together with other Polish mycologists (A. Skirgiełło, M. Lisiewska and A. Nespiak) carried out the research on the biota of macrofungi in Beskid Sądecki, Gorce and Pieniny Mountains (Skirgiełło 1957, 2006).

In May 1959 Prof. Skirgiełło led an expedition to Puszcza Białowieska primeval forest. Barbara Gumińska was again a member of the team, and I accompanied her in this expedition as a young student. Thanks to her I was able to visit the most important wildlife area in Poland for the first time, but she also introduced me to the elite of the Polish mycologists: A. Skirgiełło, S. Domański, M. Lisiewska, A. Nespiak and W. Truskowska. I remember this visit very well; we used a horse carriage and were taking great delight in amazing fungal richness of that beautiful primeval forest.

However, possibly the most important for the Polish mycology were four expeditions to Western Bieszczady (Polish Eastern Carpathians) organized in the years 1958-1965. Barbara Gumińska took part in the first three of them: to Wetlina, Ustrzyki Górne and Baligród (Fig. 3). In that time the area of Bieszczady was a blank spot on the mycological map of Poland. Before the World War II this area was densely populated; however, after the war and displacement of indigenous inhabitants, it became almost empty and wild. Many villages, e.g., Ustrzyki Górne, were only accessible by horse carriages or on foot, with food carried in the backpack. In this village, we were living in the only house that survived the war, the former military station. Not infrequently during the whole day we did not meet a single man when walking around the mountains, looking for fungi and enjoying the beauty of the wild nature. Thanks to these expeditions, the Bieszczady Mts were, for a long time, one of the best mycologically investigated areas in Poland. The first expedition to Wetlina in 1958 was described by Skirgiełło (2006); the photos from the expeditions to the Białowieża primeval forest and to Bieszczady Mts, in which B. Gumińska took part, were published by Wojewoda (1997).



Fig. 3. A. Skirgiełło and B. Gumińska during an expedition to Western Bieszczady, Baligród 1960.

SCIENTIFIC EVALUATIONS

Barbara Gumińska prepared several scientific evaluations for many institutions and for industry, e.g., the Department of Forensic Medicine in Kraków, the Clinic of Children Illnesses of the Medical Academy in Krakow, and the Factory of Food Concentrates in Opole.

AWARDS AND DISTINCTIONS

Because of her scientific and didactic achievements Barbara Gumińska was given several awards and high distinctions:

Golden Cross of Merit for 20 years' teaching activity at the Jagiellonian University (1974), Knight's Cross of Polonia Restituta for 30 years of outstanding teaching and educational activity (1983), third grade team award of the Minister of Higher Education for excellent textbook for students (1969), third grade individual award for the achievements in scientific research for DSc dissertation (1978), second grade team award of the Minister of Science, Higher Education and Technology for excellent textbook for students (1984), individual award of the Minister of Science and Higher Education for the monograph of *Hygrophoraceae* (1998).

Also, Professor Gumińska was awarded and honoured by the Vice-Chancellor of the Jagiellonian University several times.

OUTSTANDING MYCOLOGIST, GREAT EDUCATOR, KIND PERSON

Summarizing the accomplishments of Professor Barbara Gumińska it should be emphasized that she contributed greatly to the Polish mycology as the author and co-author of many valuable scientific publications, popular science articles and textbooks. During her years at the University she educated many biologists and mycologists. A number of her students continue mycological research. She was very active and successful in propagating mycology among general public.

Barbara Gumińska is also a very kind and friendly person, always calm, composed, and ready to offer help and advice.

On the occasion of her 85th birthday we all wish Professor Barbara Gumińska good health and further scientific achievements.

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All photos: Archive of Prof. B. Gumińska.