Report on the Symposium „Biodiversity and Ecology of Fungi, Lichens and Mosses, in commemoration of Josef Poelt's death 20 years ago"

PAUL BLANZ

On the occasion of JOSEF POELT's death 20 years ago, a scientific symposium was arranged under the title "Biodiversität und Ökologie von Pilzen, Flechten und Moosen". It was held from August 31 to September 3 2015 at the Institute of Plant Sciences of Karl Franzen's University in Graz where POELT was professor for his last 23 years. About 30 participants from various countries had been invited to present oral contributions at the symposium. They are going to be published all together in elaborate versions this year. Selected participants were mainly gathered among POELT'S former students and again their students, together with a few former colleagues. The symposium was completed by a scientific excursion to one of POELT's favoured areas near Graz and by social events.
The oral presentations covered fields of research on which POELT's studies had focused between the 1950ies and 1995. In the first of two introductory lectures, HANNES HERTEL presented such a detailed overview of JOSEF POELT's life that even many of his closest former coworkers learned enlightening aspects, which they had not experienced before. HERTEL's talk was extensively illustrated by photos taken from many even remote archives.

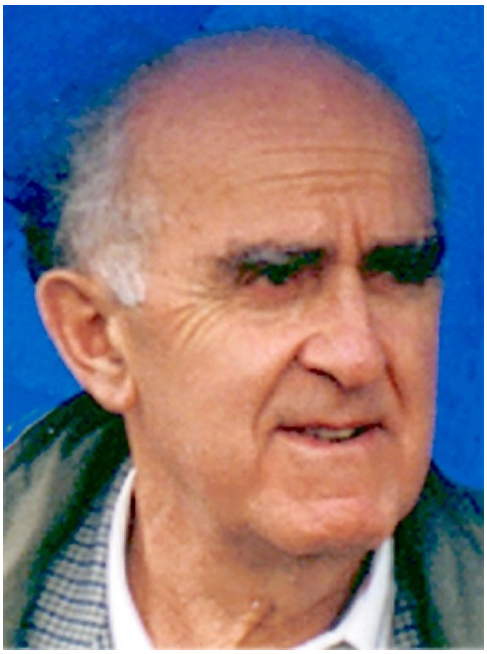

Fig. 1: Josef Poelt während des IAL-2 (1992), Båstad (Schweden). Foto H. Hertel.

In a comprehensive overview FRANZ OBERWINKLER spread out the research on biodiversity of cryptogams from its very beginning up to present days' knowledge in this field. With special respect to JOSEF POELT's share he outlined the most influential contributors as well as the work they had done and the methods they had used. OBERWINKLER added many figures illustrating complex correlations and details.
The following main section was grouped into fungi, lichens and mosses. PETER DÖBBELER reported on Hypocrealean hyperepiphyllous ascomycetes, a group of easily overlooked Ascomycetes on hepatics. JOSEF HAFELLNER focused on lichenicolous fungi: Diversity and taxonomy under the principle „one fungus – one name". REINHARD BERNDT's contribution

followed: Taxonomy of the polyphyletic family Pucciniosiraceae of the rust fungi (Uredinales). Also concentrating on rust fungi, PETER ZWETKO talked on the distinctiveness of aecia and aeciospores on conifers. PAUL BLANZ continued with remarks on European florae of smut and rust fungi, while DOMINIK BEGEROW pointed out the phylogeny, biology and specificity of taxa in smut fungi. A study on the ultrastructure in Basidiomycetes of which many data had been contributed by the late ROBERT BAUER, was put together and discussed by FRANZ OBERWINKLER. GERHARD KOST gave an overview on the phylogeny of the Agaricales, while ZHIU-LIANG YANG from Kunming, China, concentrated on the families Boletaceae and Amanitaceae. An applied aspect was added by JEE-CHEN CHEN, Taiwan, by reporting on mushroom development and cultivation in Taiwan. INGEBORG HAUG explained diversification in mycorrhizal fungi with special regard to South America, and DIRK HOFFMEISTER stressed fungal natural products and organismal diversity, seen from an (bio)chemical angle. ROLAND KIRSCHNER's contribution on interactions between fungi and plants was presented by MEIKE PIEPENBRING. EWALD LANGER talked on ecological aspects in the Aphyllophorales, while his wife GITTA LANGER focused on pathogenic fungi in forests of northwestern Germany, a theme which BERTHOLD METZLER broadened to new trends in forest pathology. At the end of the talks on fungi, MEIKE PIEPENBRING reported on challenging tropical fungi, while ANDREAS BRESINSKY by returning to Bavaria gave an overview of its fungal flora with reference to POELT's input to its exploration.

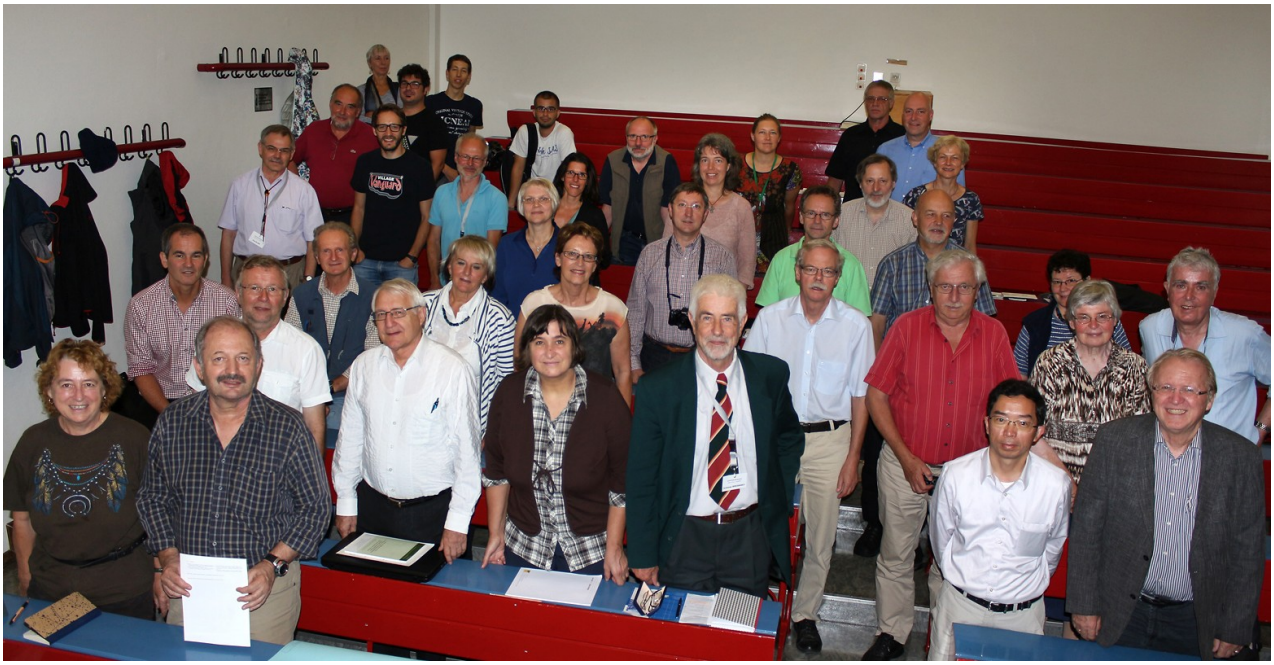

Fig. 2: Audience of the symposium. Foto: W. Obermayer.

JOSEF POELT's most prominent focus of research was dedicated to lichens. For this, allowance was made by talks to various aspects of this diverse group of organisms. ROSEMARIE HONEGGER showed data on early devonian fossile lichens and their bacterial and fungal epi- and endobionts. MARTIN GRUBE pointed out that lichens represent a rich habitat for many microorganisms. The following talks emphasized geographical aspects which POELT was very well familiar with because of his collecting lichens in many parts of the world. By doing so, the Graz herbarium of lichens was an especially privileged institution worldwide. VOLKMAR WIRTH gave a summary of the lichens of Germany, showing their diversification and biogeographic coordination. HELMUT MAYRHOFER

concentrated on alpine lichens, while WALTER OBERMAYER reported on the lichens in Tibet, the Himalayas and some neighboring areas. PIER-LUIGI NIMIS finally recounted the golden period of Italian lichenology between 1830 and 1861.

Bryology, a discipline with which POELT dealt only incidentally in his earlier years besides his main interest in lichens and fungi, was treated in one talk only, when MARTIN NEBEL reported on systematics and ecology of Hepaticae and Bryidae, praising POELT's influence to research in this field.

One major aspect was covered only casually in this symposium when HANNES HERTEL also referred to POELT as a general botanist with profound knowledge of biodiversity and ecology of higher plants as well. This was a key issue in his teaching. In research it was especially helpful in his work on parasitic fungi, mainly the rust fungi. For this, as well as for many other aspects of JOSEF POELT's scientific work not dealt with at the symposium, HANNES HERTEL's comprehensive portrayal will be a substitute.

The symposium was organized by PAUL BLANZ and MARTIN GRUBE, Graz, by HANNES HERTEL and PETER DÖBBELER, Munich, and by FRANZ OBERWINKLER, Tübingen. It was financially supported by the Austrian Academy of Sciences, the government of Styria, and Graz University. The volume containing the contributions of the symposium's participants is expected to be released by summer of this year.

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