

Obituary

Meinhard Michael Moser (1924–2002): doyen of European agaricologists

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The leading agaricologist Meinhard M. Moser died on 30 September 2002. He was a Centenary Fellow of the British Mycological Society, and the mentor of numerous students and colleagues throughout the world.



Fig. 1. Meinhard Michael Moser (1924–2002). Photo.: Marco Floriani, 27 July 2002.

Meinhard Moser was born in Innsbruck on 13 March 1924. He was the son of Margaretha Moser (*née* Heinricher) and Dr Josef Moser, a teacher at the City's Technical College. After completing his secondary education at the Humanistic Gymnasium in 1942 he entered the University of Innsbruck in the same year. His choice of subjects, botany, zoology, geology, physics and chemistry, was governed by his determination to devote himself to the study of fungi, a subject, which had already fascinated him throughout his youth. This broad interest in natural sciences was spurred and supported by his maternal grandfather Emil J. L. Heinricher (1856–1934), Professor of Botany at the University of Innsbruck. His decision to become a mycologist was at that time just as unusual as was his later scientific career.

However, in 1943 he was confronted with the harsh reality of World War II. As a 21 year-old soldier, Meinhard Moser was captured and made a prisoner of war in what was then Czechoslovakia, and subsequently imprisoned in a labour camp in Crimea, Ukraine.

In Spring 1948 he was able to resume his studies in Innsbruck, and his first publication in a scientific journal appeared in 1949: 'Über das Massenaufreten von Formen der Gattung *Morchella* auf Waldbrandflächen' [transl.: Mass-fruiting of forms of the genus *Morchella* on forest-fire areas] (Moser 1949). In 1950, supervised by Arthur Pisek, he completed his doctoral thesis at the Botanical Institute in Innsbruck: *Zur Wasserökologie der höheren Pilze, mit besonderer Berücksichtigung von Waldbrandflächen* [transl.: Water relations in higher fungi with special emphasize on forest-fire areas]. The quality of his work brought him a research grant from the British Council, enabling him to visit the

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laboratory of 'Jack' L. Harley in Oxford in 1951, where his research was concerned with the symbiosis between fungi and forest trees. In addition, he spent some time carrying out taxonomic studies on the collections of the Royal Botanic Gardens Kew. During this half-year long stay in Britain, Arthur A. Pearson (1874–1954) introduced Meinhard to numerous contemporary British mycologists and researchers on ectomycorrhizas. On his return from England, he was offered a research post at the Federal Institute for Forestry Research in Imst, Tirol, where he remained until 1968. During this time, Meinhard applied the knowledge he had acquired at Oxford concerning fungal symbionts of trees to his pioneering work on reforestation at and above the timberline in the Alps. The methods developed by him at this time for inoculating trees with ectotrophic mycorrhizal fungi have in the meantime become worldwide standard practice in forest management. In addition to his time-consuming engagement in mycorrhizal research, he continued his taxonomic studies on larger fungi and established new criteria for their determination in the German-speaking countries. In 1953 the first edition of what is warmly referred to as 'Moser' appeared: *Die Blätter und Bauchpilze (Agaricales und Gastromycetes)*, a monographic key to this enormous group of fungi in central Europe (Moser 1953). Many increasingly comprehensive editions followed in 1955, 1967, 1978 and 1983. Now out of print, the work has been at the top of the bestseller lists of mycological books ever since. The popularity of this book amongst specialists in the field resulted in their translation into various other languages from 1980 onwards. In the same *Kleine Kryptogamenflora von Mitteleuropa* series, edited by fellow Austrian Helmut Gams (1893–1976), Meinhard also published a companion volume on *Ascomycetes* (Moser 1963), which provided dichotomous keys for the identification of the commoner European discomycete species. The importance of these books for studies on the biodiversity of fungi, in- and outside Europe, cannot be overestimated.

However, it was *Cortinarius*, taxonomically one of the most complicated genera of agarics with roughly 2000 species worldwide, that he took up as his personal challenge throughout his career. His monographs *Die Gattung Phlegmacium* (Moser 1960; now regarded as a subgenus of *Cortinarius*) and *Cortinarius Fr. und nahe verwandte Gattungen in Südamerika* (Moser & Horak 1975) encouraged other mycologists to intensify their engagement with this difficult genus.

During this extremely active phase of his career, Meinhard found time, in 1956, for his 'Habilitation'. Having fulfilled the requirements for his recognition as University Lecturer in Botanical Microbiology, he henceforth lectured at the Botanical Institute on mycology and microbiology, receiving the title of Associate University Professor in 1964. In 1966, in view of the growing importance of mycology and microbiology, and the international recognition of Meinhard's untiring activity in these fields, the Faculty of Science of the

University of Innsbruck recommended to the Federal Ministry of Education the creation of a chair of microbiology at the Botanical Institute in Innsbruck. This recommendation was accepted and in 1967 a distinguished group of leading European botanists and mycologists unanimously named Meinhard *primo et unico loco*, for the appointment as full University Professor. The originality and vigour he showed in the development of his new Department met with wide recognition and support both at the Botanical Institute and in the Faculty. In 1972 the first Institute of Microbiology in Austria was founded, with Meinhard at its head. For many years, he instructed hundreds of students in classes and laboratory work on diverse fields of microbiology ranging from the taxonomy, ecology, and mycogeography of fungi, to bacteria and viruses, chemotaxonomy, molecular genetics, microbial toxicology, immunology and symbiosis.

In 1991, the earliest possible date, Meinhard chose retirement in order to avoid the administrative burden increasingly falling to the head of an institute, and in order to devote more time to his favourite area of research, the *Cortinari*. Indeed, his tireless engagement in mycology and microbiology remained unbroken up to his death. In August 2002 he lectured at the 7th International Mycological Congress in Oslo, and the latest of his more than 200 scientific publications are still in press. These papers reflect his major topics of research: classical morphotaxonomy, ectomycorrhizal research, chemotaxonomy, phylogeny of *Cortinarius*, and toxic constituents of *Agaricales*.

His enthusiasm for his subjects, his inexhaustible eagerness for knowledge, and his receptiveness for everything new accompanied him around the world. The mycological collection he started in Innsbruck now comprises 25 000 individual collections from all parts of the world, and includes 420 *Cortinarius* species that he himself described, together with 80 more new species of various other fungal genera. He collected in the UK during his stay in Oxford and during other visits to the country, for example to Devon in 1971 and Kent where he was the British Mycological Society's guest at the autumn foray in 1981. He also joined the Society's overseas foray to Vipiteno, Italy in September 2002 (specimens in IB). His first collections are preserved in München (M), and some material is also in K from his earlier visits to Britain.

Meinhard readily passed on his vast knowledge to a large number of students (including more than 60 doctoral candidates), many of whom are now themselves professors or leading research scientists in academic institutes or in industry. His scientific achievements combined with his unassuming manner and his convincingly humanitarian attitude were rewarded with numerous national and international honours. Amongst these awards were: the Clusius Medal (Budapest 1978), an honorary doctorate from the University of Lyon (1984), the Kardinal Innitzer Preis (Vienna 1985), corresponding member of the

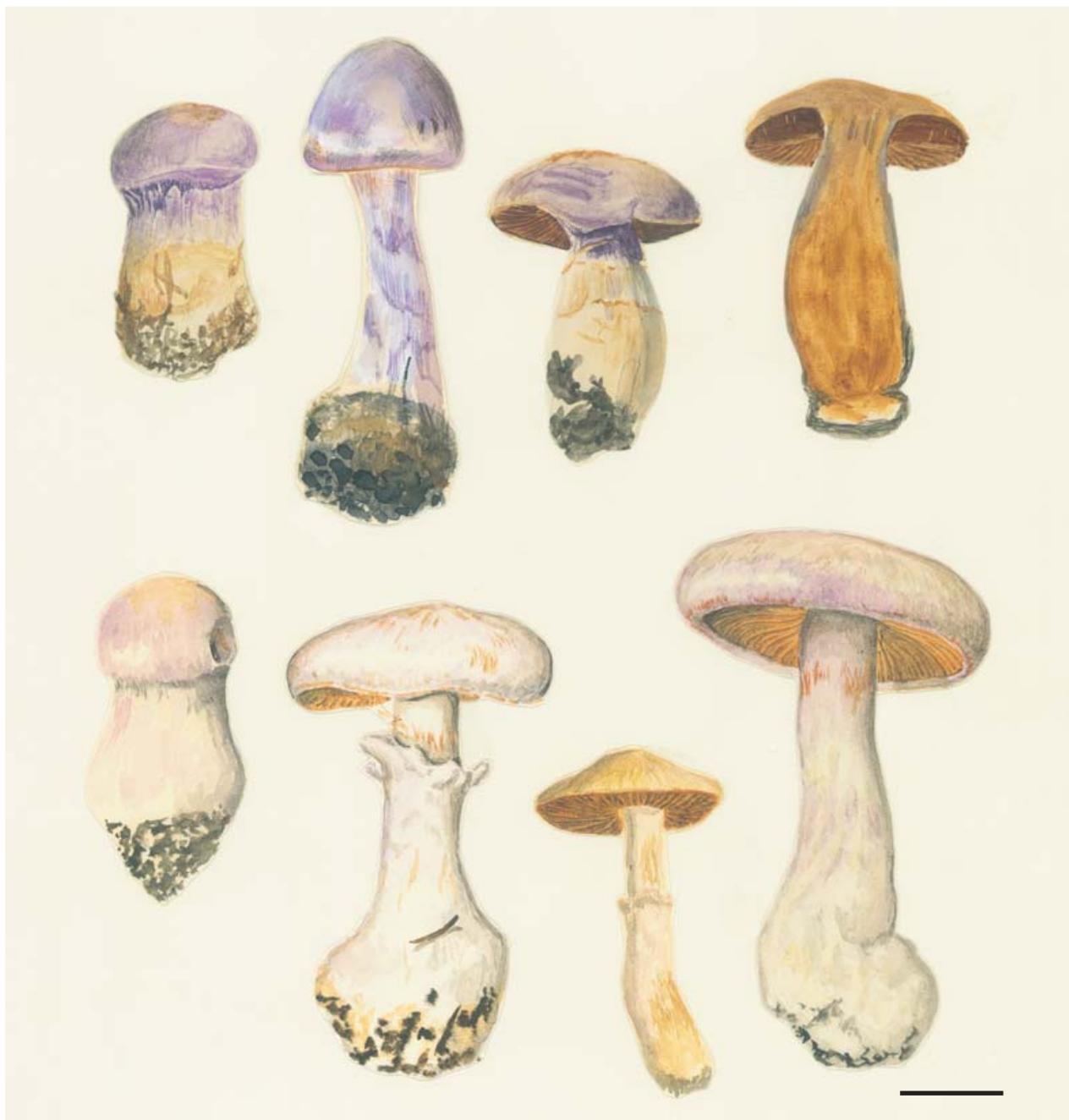


Fig. 2. Previously unpublished aquarelle showing morphological variation in *Cortinarius traganus* painted by M. Moser between 1949 and 1952 (voucher specimens IB19490116, IB19490137, IB19510152, IB19520083). Bar = 1 cm.

Austrian Academy of Sciences (1986), honorary citizenship of the city of Borgotaro, Italy (1990), honorary member of the American Mycological Society (1992), foreign member of the Ukrainian Academy of Sciences (1992), Centenary Fellow of the British Mycological Society (1996), and honorary membership of numerous other mycological societies. Moreover, the high personal and professional esteem he enjoyed amongst his colleagues is reflected in 22 species epithets reading *moseri*, *moserianus* or *meinhardii*, and two genera named after him: *Moserella* and *Chromosera*.

The death of Meinhard Moser is mourned as an irreplaceable loss to the international community of mycological science.

REFERENCES¹

- Moser, M. (1949) Über das Massenaufreten von Formen der Gattung *Morchella* auf Waldbrandflächen. *Sydowia* 3: 174–200.
- Moser, M. (1953) *Blätter- und Bauchpilze (Agaricales und Gastromycetes)*. [Kleine Kryptogamenflora, Bd. II.] Verlag G. Fischer, Stuttgart.
- Moser, M. (1960) *Die Gattung Phlegmacium (Schleimköpfe)*. Verlag Julius Klinkhardt, Bad Heilbrunn.
- Moser, M. (1963) *Ascomyceten*. [Kleine Kryptogamenflora, Bd. IIa.] Verlag G. Fischer, Stuttgart.
- Moser, M. & Horak, E. (1975) *Cortinarius* Fr. und nahe verwandte Gattungen in Südamerika. *Nova Hedwigia Beihefte* 52: 1–628.

¹ A full list of publications is not presented here as one will be appearing in *Sydowia*, hopefully during 2003.