Preface

The 62.000+ species of Monocotyledons constitute only a tiny fraction of the Earth's guesstimated 1.8 million described species, but nonetheless they includes not only the world's most important cereal crops in the Poaceae (the Grass Family), but also a large number of economic plants of global importance in families such as the Arecaceae (the Palm Family), the Araceae (the Arum Family), the Bromeliaceae (the Pineapple Family), the Musaceae (the Banana Family), and the Orchidaceae (the Orchid Family).

The Monocotyledons are the largest traditionally recognized, monophyletic group of angiosperms and indisputably the most thoroughly investigated, largely due to early works by R. M. T. Dahlgren (1932-1987) and collaborators who laid the basis for its investigation in two volumes dedicated to this fascinating group of plants, "The Monocotyledons: A Comparative Study" (Dahlgren and Clifford 1982) and "The Families of the Monocotyledons. Structure, Evolution, and Taxonomy" (Dahlgren, Clifford, and Yeo 1985). Hence, it was only natural that the 1st Monocot conference at Kew in 1993 was dedicated to Dahlgren's memory, Subsequent congresses on the same basic topic were bound to reflect scientific trends. Thus, at the first monocot meeting at Kew there were still a substantial number of papers dealing with morphology only, and the papers that included molecular data used relatively few taxa and were based on few sequences. At the subsequent congresses the number of papers that presented molecular evidence in support of phylogenetic hypotheses steadily increased. This applies in particular to papers dealing with phylogeny at the family level within the Monocotyledons. Surprisingly this aspect was lacking from the Monocot IV meeting in Copenhagen, perhaps a sign that the next generation of studies based on evidence from whole genome sequences will soon make their appearance.

The Fourth International Conference on Comparative Biology of the Monocotyledons and the Fifth International Symposium on Grass Systematics and Evolution was organized by a committee consisting of members from The Natural History Museum of Denmark and the biological departments of the Universities of Aarhus and Copenhagen, and took place at the H.C. Ørsted Institute, University of Copenhagen from August 11 to 15, 2008 in Copenhagen. The meeting was attended by around 275 participants representing 43 countries. A total of 170 talks were given and approximately 80 posters presented. The talks were distributed under 15 different headings and invited and contributed talks were mixed in each session.

The organizing committee consisted of Professor Ole Seberg (Chairman), Professor Henrik Balslev, Associate Professor Anders S. Barfod, Associate Profes-

sor Finn Borchsenius, Associate Professor Signe Frederiksen, Professor Ib Friis, Associate Professor Bo B. Johansen, Professor Gitte Petersen, and Associate Professor Finn N. Rasmussen.

The practical aspects of the meeting were organized by Van Hauen Conferences Aps and during the conference a number of students made valuable contributions to the logistics. The success of the conference was due to their contributions, but also to those of the organizers of sessions and the session chairs, and the banquet speaker, Professor Henrik Enghoff. It is also a great pleasure for us to thank the City of Copenhagen for hosting a welcome reception at the Town Hall for all conference participants.

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This volume has been edited by:

Ole Seberg (editor-in-chief)
Natural History Museum of Denmark, University of Copenhagen

Gitte Petersen
Natural History Museum of Denmark, University of Copenhagen

Anders S. Barfod
Institute of Biology, University of Aarhus

Jerrold I. Davis
L. H. Bailey Hortorium and Department of Plant Biology, Cornell University