## PREFACE

This issue of *Acta Biologica Szegediensis* involves the proceedings for the 8<sup>th</sup> Congress of the Hungarian Society for Plant Physiology and the 6<sup>th</sup> Hungarian Conference on Photosynthesis. The combined events are held in Szeged, August 22 to 25, 2005. It contains 75 contributions from four special fields of plant biology, namely, cell biology, stress biology, ecophysiology and photosynthesis.

Compared to the previous Congress (Acta Biol Szeged 46(3-4) 2002), progress can be seen in most sections. In cell biology, besides functional genomics and proteomics, nitric oxide as signal molecule in plants calls for attention. Stress biology is a dominating field again. Besides the traditional topics in abiotic and biotic stresses, the new aspects of phytoremediation and the role of mycorrhiza in heavy metal tolerance made the palette more colorful. Contributions in ecophysiology deal with the carbon balance of grasslands, acclimatization to drought and UV-B irradiation, biotypes in photosynthesis and more interesting subjects. Contributions

in photosynthesis are presented in common sessions with the participants to the VI<sup>th</sup>. Hungarian Conference on Photosynthesis. Compared to the earlier congresses, a new subject is the thermal stability of the photosynthetic apparatus the role of transporters in paraquat resistance. Special attention is paid for the tissue- and organ specific plastid differentiation under different circumstances in various species.

In this issue of Acta Biologica Szegediensis oral lectures and poster presentations are not distinguished. Instead of Author Index, a Table of Contents is presented in which contributions are grouped according to the above-mentioned four topics. Some of the abstracts needed shortening, modification or correction in English. In these cases, care was taken not to alter the content which remained the author's responsibility.

I express my gratitude and thanks to my colleagues, people and institutions who helped to organize this Congress and Conference.

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