# SIGNIFICANCE OF GLUTATHIONE TO PLANT ADAPTATION TO THE ENVIRONMENT

# Plant Ecophysiology

Volume 2

Series Editors:

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University of Groningen, The Netherlands

### Aims & Scope:

The Kluwer Handbook Series of Plant Ecophysiology comprises a series of books that deals with the impact of biotic and abiotic factors on plant functioning and physiological adaptation to the environment. The aim of the Plant Ecophysiology series is to review and integrate the present knowledge on the impact of the environment on plant functioning and adaptation at various levels of integration: from the molecular, biochemical, physiological to a whole plant level. This Handbook series is of interest to scientists who like to be informed of new developments and insights in plant ecophysiology, and can be used as advanced textbooks for biology students.

The titles published in this series are listed at the end of this volume.

# Significance of Glutathione to Plant Adaptation to the Environment

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## Dedicated to our friend, colleague and teacher Prof. Dr. Hermann Esterbauer who died too early



Prof. Dr. Hermann Esterbauer, Institute of Biochemistry, University of Graz, Austria 1936 – 1997

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### **Preface**

The present volume of Plant Ecophysiology focuses on the biological significance of glutathione in plants. Glutathione or its homologues are present in nearly all living organisms and are directly or indirectly involved in many important metabolic reactions and in physiological functioning. The current ideas on the role of glutathione in plant metabolism and its significance in plant adaptation to biotic and abiotic stress is discussed in the different chapters of the volume. Occasional overlaps of information between chapters could not be avoided; moreover, they reflect the central and multiple role of glutathione in integrated plant metabolism.

The main aim of this volume is to raise the interest of advanced students and junior researchers in the role of glutathione in plants and to supply basic and comprehensive information for scientists already working on related topics. It must be emphasized that it was not the intention of the authors to present detailed scientific reviews about the various aspects of glutathione for specialists.

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