Book review

Hess, D.: Die Blüte – Struktur, Funktion, Ökologie, Evolution. Stuttgart: Ulmer 1983. 458 pp., 157 photographs in color, 152 drawings, 28 tabs. DM 68,—.

The relationships between flower and animal leads professional realistic scientists to connections as surprising as identical DNA reduplication. With this comparison, the author characterizes the complex function of the flower, the most important plant organ for communication. The content and composition of this book provokes this previous comparison and leads to a higher biological complexity than on molecular DNA level. In this book the structure and sexuality of the flower precedes the main topic: the function of the flower as attractiveness and a source of nutrients. Its relation with the environment is described clearly and it is logically followed by flower oecology and evolution. Within these subjects, modern in vitro technics and hybridization experiments have also received attentions. Each chapter ends with a number of different experiments which are easy to realize. The composition and its originality invites the reader to do observations and experiments.

In the attractive and well-ordered composition of this book, a lot of data and clear explanations are presented, as well as questions, which introduce gradually the complexity in the function of the flower. Different approaches and theories are discussed and the content is supported by data and visions of many famous flower biologists. New data are added, although the source cannot easily be detected for only a general list of literature is added. Only in some cases does the brevity of the text lead to some simplifications as can be noted in the presentation of incompatibility and phylogenetic contemplations, which are restricted to the spermatophyta only. In the description of the experiments, some data are not correct and incomplete. An interesting view is offered on the development of the flower structure in relation to insect evolution, which results in a strong functional relationship.

For biologists, this book on flower biology is very valuable and up-to-date, therefore the content is recommended to students. Because of the composition and very attractive edition, with nice photographs and drawings, this book probably reached a large interested German public and probably also politicians, which are especially mentioned in the introduction.

This splendid, original and well-documented book on flower biology will promote the flower as a very attractive and complex organ. The edition will also stimulate more professionals and amateurs to a greater admiration of the nature: one of the best ways to its preservation.

MT. M. Willemse, Wageningen

- Announcement -

International Symposium on Plant Improvement

From the 19th to the 23d August 1985 there will be held at Vienna, Austria, an International Symposium on Nuclear Techniques and in vitro Cultures for Plant Improvement. It is organized by the FAO of the UNO and the International Atomic Energy Agency. The list of topics includes, among others, the following items:

- Genetic variability in plant material during or after in vitro culture
- Application of mutagens before or during in vitro culture
- Selection of mutants under in vitro conditions including the possible use of tracer techniques
- Gene expression and gene interaction in the cultured cell versus the whole plant

- Use of haploids in mutation research and breeding
- Use of induced mutants as markers in genetic engineering
- Use of radiation or tracer techniques in connection with in vitro somatic hybridization, chromosome reconstruction, transformation and other forms of genetic engineering
- In vitro studies on symbiontic or parasitic systems using mutant plants and microorganisms or tracer techniques
- Protection of in vitro cultures plant material against undesired genetic alterations (in vitro germplasm preservation).

For more information contact the IAEA Conference Section, Dr. Alexander Micke, Joint FAO/IAEA Division, P.O. Box 100, A-1400 Vienna, Austria