

Foreword

While for several decades chemicals have played an ever increasing role in crop production not only in Europe and the USA but also in several developing countries, the utilization of manure and agricultural by-products as fertilizers was far from optimum. High rate mineral fertilization together with the application of various herbicides, pesticides, fungicides and insecticides have resulted in spectacular increases in crop yields but, as a consequence, we are now faced with ever worsening environmental problems. This explains the attention paid recently by scientists and laymen alike to these vital questions:

- How does the biosphere respond to the soaring use of chemicals? How does food produced this way affect the health of men and animals?
- Is it possible to replace chemicals with biofertilizers and still retain high crop yields?

As the problems become more and more obvious and pressing, governmental and non-governmental organizations launch research programs at both the national and international levels to find satisfactory solutions as soon as possible.

In order to promote international cooperation and to discuss the advantages and drawbacks of various approaches, a one-day seminar on Technologies for Sustainable Agriculture was co-sponsored by the Balaton Group and the Hungarian Society of Soil Science and held at the Hungarian Academy of Sciences on September 10, 1984.

More than 300 experts - quite a few of them from abroad - participated in the meeting which was chaired jointly by Profs. D. MEADOWS, Chairman of the Balaton Group, and I. SZABOLCS, President of the Hungarian Society of Soil Science.

The Western-European and American participants reported mainly on the practical possibilities of organic agriculture.

The Hungarian participants outlined our problems. They pointed out that although at the present level of economic development in Hungary chemicals cannot be dispensed with either as fertilizers, or as plant protecting agents in agricultural production, their use must be kept within reasonable limits to prevent the further deterioration of the biosphere, and whenever possible organic matters should be used as substitutes.

The presentation of the papers was followed by a lively and extensive discussion.

The Editorial Board of AGROKÉMIA ÉS TALAJTAN is pleased to present the papers of the Seminar as submitted by the authors.

I. SZABOLCS
Editor-in-Chief