## Book reviews

## Books on alternative methods in agriculture

Commissie Onderzoek Biologische Landbouwmethoden: Alternatieve landbouwmethoden. Inventarisatie, evaluatie en aanbevelingen voor onderzoek. Eindrapport – oktober 1977 (Alternative methods of agriculture. Inventorization, evaluation and suggestions for research. Final report, in Dutch). Pudoc, Wageningen, 398 pp. 1977, price Dfl. 47.50.

While official agricultural research has brought about spectacular improvements and a strongly intensified production during the 100 years of its development, the interest in alternative, 'biological', and less chemical management is steadily increasing. A commission was established in 1971 to inventorize the alternative methods used in the Netherlands and surrounding countries. A preliminary report by this commission (main reporter R. Boeringa) was published in 1974, and is followed here by an official document which is almost three times the size of the previous publication. It incorporates all the suggestions and corrections received from numerous contributors after the appearance of the first issue. In the preliminary version eight groups of alternative agronomists were listed and their methods and achievements were each briefly discussed. In the present book these eight movements are also separately described but otherwise mostly considered as a whole. They are placed in a framework of: the basic ideas of the alternative movements and their methods - animal husbandry - diseases, pests and weeds - quality of the production - economical aspects - the change from conventional to alternative management - environmental pollution – and the potentiality of extended alternative agriculture. The book is concluded by 987 references, the tabulated techniques of seven groups and descriptions of the preparations used. The special text is preceded by an introductory section (44 pp.) with general considerations followed by some conclusions and suggestions for critical research, which summarizes the rest of the book. The chapters in which the various techniques are described were written by experts from the respective schools, and evaluations by the commission are included after the explanatory texts.

It is clear that the mixture of vague observations, philosophical ideas and superstition associated with the alternative movements calls for critical examination. In this way sound ideas can emerge which may have their repercussions in conventional agriculture. The authors have done their best to evaluate the methods of the alternative schools on a general basis and to collect published information and scattered experiences to establish the usefulness of the various techniques, without venturing to analyse the philosophical backgrounds. Their survey shows that a good deal of the instructions given have not yet been subjected to critical study. Obviously a practical test rather than theoretical analysis will show which methods are promising. The first conclusion drawn by the authors is quite justifiable in that certain forms of alternative agriculture have to be seriously considered.

The wealth of information in the present inventorization is an ideal base for further studies. It is likely to stimulate much research on alternative techniques and should thus be useful even in countries where Dutch is not spoken.

W. Gams

Commissie Onderzoek Biologische Landbouwmethoden: Alternatieve landbouwmethoden. Bijlage 3, Bedrijfsoverzichten van de bezochte telers (enclosure no. 3 to the above report: surveys of the farms visited by the commission). Pudoc, Wageningen, 85 pp. 1977, price Dfl. 5.

This survey is an appendix to the above report and gives detailed information about 26 farms visited by the commission; each farm is generally characterized and details are provided of chemical treatments, yields, and diseases and pests. The farms visited in the Netherlands are subdivided as follows:

Method	Number	Total surface (ha)	Main production
individual methods	13	189	mixed, vegetables in greenhouse, cattle, pigs, chicken
biologic-dynamical	10	190	mixed, fruit, vegetables in greenhouse, cattle
organic-biological	2	2.4	tomato
ANOG	1	50	mixed

A total of about 900 ha in the Netherlands are farmed by alternative methods (i.e. about 0.041% of the cultivated surface).

W. Gams

Dachverband wissenschaftlicher Gesellschaften der Agrar-, Forst-, Ernährungs-, Veterinär- und Umweltforschung e.V.: Alternativen der Landbewirtschaftung? Beiträge zur Bodenfruchtbarkeit (Alternatives of agricultural management? Contributions to soil fertility, in German). München, 1977. 96 pp. Free copies obtainable from: Geschäftsstelle der Deutschen Phytomedizinischen Gesellschaft, D-34 Göttingen, Grisebachstr. 6.

This booklet contains the contributions of three speakers at a colloquium held in Munich, 19 July 1976.

- H. Haushofer deals with the history of soil fertility and outlines the vast changes in management during the last two centuries, showing that it is quite impossible to speak of any period as having been the basis of a good farming tradition. Some changes brought about in conventional agriculture in recent decades can certainly be regarded as advances towards more biological management.
- G. Preuschen describes soil and plant health from the view of the alternative agronomist. The alternative movements go back to the great agronomist, Aereboe, who was followed by Römer in the 1930s and the present author, Preuschen, in his function as farm advisor in Saxony. Their method is regarded as the oldest and least dogmatic of alternative techniques and it mainly involves a maximal stimulation of soil life by the application of fermented manure. The numerous other organized groups of alternative agronomists are only briefly mentioned.
- R. Diercks discusses the health of soil and plants from the view of the agricultural scientist. As a phytopathologist, he adopts several ecological ideas proposed by alternative groups and begins to integrate them in conventional practice. He then concludes that soil fertility need not be deteriorated by the modern techniques of conventional agriculture, provided all scientific knowledge is taken into account. The application of chemicals must be critically considered with respect to their ecological justification. Carefully limited application needs more concern in practice, while the replacement of modern agronomy by alternative practices is not considered necessary.

The ideas discussed in this booklet contribute towards the mutual understanding and a practical compromise between conventional and biological movements in agriculture.

W. Gams