

BOOK REVIEW

MISCHANBAU VON GETREIDE- UND ANDERE KÖRNERFRUCHTARTEN. EIN BEITRAG ZUR NÜTZUNG VON BIODIVERSITÄT IM PFLANZENBAU

THE CULTIVATION OF CEREAL MIXTURES AND OTHER
GRAIN CROPS. THE CONTRIBUTION TO THE UTILISATION
OF BIODIVERSITY IN PLANT CULTIVATION

Walter Aufhammer

*Verlag Eugen Ulmer Stuttgart (Hohenheim), 1999. 305 pp., 200 tables,
8 figures and 8 colour panels.*

The successful book "Cereals and other Grain Crops" (Getreide- und andere Körnerfruchtarten, Bedeutung, Nutzung und Anbau), Ulmer Stuttgart, 1988, is soon succeeded by the author written by the same author, remarkable by its theme. It brings knowledge on cultivation of species mixtures and varieties. It is based on the fundamental natural situation, when the plant cover is composed of the stands of mixtures of species and cultivars. These stands are formed by different plant species in the community of plants and other organisms. The first part of the book specially studies the bases of the development of mixed stands, while the second part pays an attention to the issues of competition between components of mixtures and vegetation factors and the resistance to deleterious elements. The methods of description of properties and behaviour of components of mixtures derived from these studies are very valuable.

The second half of the book is composed of the methods of cultivation of species mixtures and varieties. There are summarised the results of the trials with cultivation of different species and cultivars in the agrarian field of the Central Europe. The stands of mixtures are concentrated as on grain production, as on forage as well as on mulching biomass. The cultivar mixtures are specialised above all on the grain production, particularly on cereals. The results of known combinations, such as the mixture of wheat and rye, or barley and oats, and also some untraditional combinations are presented. For example, beside cereals, legumes and oil crops should be suitable to be introduced into practical cultivation with respect to extension of biodiversity.

Many of them may be certainly appropriate for ecological (organic) agriculture, or into zones of hygienic protection of water resources. There is valuable knowledge on the combination of crops, when one of the components (e.g. the legume) leaves excessive amount of nitrogen and the second component makes use of this nitrogen. The stands of cultural crops as a section of conditions of natural biodiversity are described in the final part.

The book of Prof. W. Auhammer represents a remarkable publishing action of the author and the publisher Ulmer, which has no equivalent in the agricultural literature in view of the theme as well as the content. It is a remarkable contribution to put through the sustainable development of agriculture by its acquisition to the extension of biodiversity of cultivated crops.

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