Liang, G. H., Skinner, D.Z.: **Genetically Modified Crops. Their Development, Uses and Risks.** - The Haworth Press, New York - London - Oxford 2004. 593 pp. Paperback USD 49.90. ISBN 1-56022-281-6.

This book consists of 14 chapters written by mostly American and Canadian, but also Chinese authors and it gives an overall picture of the current state of different aspects of plant transgenosis.

The situation of the demands for the use of transgenic crops looks differently from American and Czech point of view. In USA, large number of people are glad to consume food and beverages produced from crops and using enzymes that have been genetically modified: soybean, maize, potato, fruits, plant oils, cheese, milk, beer. In the Czech Republic as well as whole Europe Union food from genetically modified crops is exceptional. Genetically modified products and food has to be labelled and people are afraid to eat any, despite no undesirable effect on human health have been described.

There is very good reason why more information on genetically modified plants are generally desirable and this book was meant not only for scientists, but also for information of general public. The demand for producing higher yields by the use of transgenic crops is given by ever-increasing world human population. To meet food demand in the year 2020, 60 % increase of the food supply will be necessary. Transgenosis of crop plants can not only increase the yield, but also can give new qualities to culture crops.

The introductionary chapters give all the basic essential information necessary for understanding the basis principles of plant transgenosis and further chapters give deep insight into individual science and application problems of transgenic plants. There are general chapters on the mechanism of transgenosis from contemporary point of view, on site specific recombination and its use in plant transgenosis. All the chapters are reviews of up-to-date literature. Some are of more general character, dealing with different types of transgenes, like that on transgenics by plant hormone genes or stress genes and their use in horticultural crops. Other chapters are rather specialized and they deal with transformation of specific crops, like wheat, alfalfa, sorghum, rice, cotton, soybean, vegetable crops, turfgrass. Concerning transgenosis of vegetable species, unbelievable number of plant species has already been transformed, mostly by *Agrobacterium* but also by microprojectile bombardment: chicory, lettuce, red beet, spinach, sweet potato, broccoli, cabbage, cauliflower, chinese cabbage, cucumber, sqash, bean, pea, asparagus, onion, eggplant, pepper, tomato, carrot. The number of transgenes introduced is also considerable. Not less than 25 transgenes have been introduced into tomato genome. Several very interesting breeding improvements of vegetable species are described. The reviews often give both the lists of transgenes introduced and the transformation protocols. There is also chapter dealing with legal, ecological and health risks associated with transgenic plants. Each overview is accompanied by large number of up-to-date references.

The book can serve to help the interested public to gain a better understanding of this important contemporary trend of plant breeding, but also as manual for plant and molecular genetics, and plant breeders.

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