

Chaloupek, O.: **Genetická diversita, šlechtění a semenářství.** [Genetic Diversity, Plant Breeding and Seed Technology.] - Academia, Praha 1995. 186 pp.

We have good reason to date the beginning of plant breeding with the beginning of agriculture. It started when the women gathering food for their families recognized variation and selected seeds from the best plants for the next generation. The introductory chapter of this publication describes the tradition of plant breeding in Bohemia and Moravia. Famous was especially E. Proskowetz who developed in 1875 to 1885 Hanna Pedigree, a popular malting barley cultivar. Perhaps this publication could mention also the results of our recent breeders, e.g. Bouma, who also achieved world-wide recognition for his new barley cultivars. The following chapters focus on the genetic diversity of plant crops, on the geographic centers where plant diversification took place, on methods to increase genetic variability (crossing, induction of mutations and polyploidy), and on quantitative characters in plant breeding. The core of the book deals with the general principles of plant breeding and covers topics as reproduction of plants and breeding of cultivars based on clones and lines, breeding of hybrid cultivars, breeding for resistance to pests, general mechanisms of resistance. Chapters 14 to 26 present criteria for breeding wheat, barley, peas, rapeseed, maize, potatoes, sugar beet, red and white clover, non food crops, etc. Modern methods of plant breeding such as *in vitro* methods and transfer of genes using Ti-plasmids of *Agrobacterium* are briefly described. This publication should serve as a textbook for undergraduate and graduate students. Plant breeders with more experience will find additional data in the references that follow each chapter. The publication is appended by a Glossary of scientific terms with English equivalents and by an English summary.

T. GICHNER (*Praha*)