

- MURASHIGE, T., SKOOG, F.: A revised medium for rapid growth and bioassays with tobacco tissue cultures. – *Physiol. Plant.* **15** : 473–497, 1962.
- REED, D. J., BABSON, J. R., BEATTY, P. W., BRODIE, A. E., ELLIS, W. W., POTTER, W.: High-performance liquid chromatography analysis of nanomole levels of glutathione, glutathione disulphide, and related thiols and disulphides. – *Anal. Biochem.* **106** : 55–62, 1980.
- SEDLÁK, J., LIDSAY, R.: Estimation of total protein-bound and nonprotein sulphydryl groups in tissue with Ellman's reagent. – *Anal. Biochem.* **25** : 192–205, 1968.

BOOK REVIEW

SLEPER, D. A., ASAY, K. H., PEDERSEN, J. F. (ed.): *CONTRIBUTIONS FROM BREEDING FORAGE AND TURF GRASSES*. Proceedings of a Symposium of the Crop Science Society of America. – Crop Science Society of America, Inc., Madison, Wisconsin, USA. 1989. 122 pp., soft cover.

The systematic breeding of forage and crop grasses started to develop only about 30 years ago and it is still neglected in comparison with breeding of other cultivated plants, although they are of considerable importance for man in contemporary world. They have irreplaceable biological, esthetic and ecological functions cities and towns. In the countryside they are important as forage grasses. The demand for increased yield is not restricted only to the most important crops and vegetables, but is equally important also in forage grasses.

The booklet presents proceedings of the symposium of the Crop Science Society of Atlanta, Georgia, which was held in December 1987. With regard to the situation in the USA, grasses are divided into cool-season and warm-season ones. The first group covers most of important grain crop species, like wheat, rye, barley and oats. Other typical representatives are the genera *Agropyron*, *Festuca*, *Lolium*, *Poa* and others. The warm-season grasses mainly include plant genera which are not found in our geographical latitude, like *Axonopus*, *Cynodon*, *Euchlena*, *Paspalum*, *Stenophorus* and *Zoysia*.

The yield of grasses was considerably improved, sometimes even doubled, during the short history of grass breeding. Breeding for high yield is combined with the methods of disease resistance, pest tolerance, stress tolerance and seed yield. Breeding methods are limited to hybridization and selection. Genetics of forage and turf grasses has not yet been much studied. Allopolyploidy and autopolyploidy of most grass species contribute to the difficulties of genetic study. Application of tissue culture methods in grasses is not an easy task and transgenesis of differentiated grass plants has not yet been achieved. Of the biochemical and biophysical modern methods, determination of some toxic and undesirable compounds by HPLC and chlorophyll fluorescence analysis are often used in grass breeding. No rapid improvement in the research and breeding of grasses is expected as there is no great economic pressure on it.

This booklet will be of interest to the breeders of forage plants and also to those engaged in the garden architecture, to geobotanists and ecologists.

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