

PRELIMINARY RESULTS IN SELECTION OF NATIVE SALT TOLERATING PLANT SPECIES

Andrea Tilly-Mándy¹, Ildikó Kohut¹, Károly Ecseri², István D. Mosonyi¹, Zsuzsanna Turi-Farkas², Lajos Magyar¹

¹ MATE Department of Floriculture and Dendrology, Budapest

² Neumann János University, Kecskemét

Secondary salinity is spreading all over the world today approximately 20% of soils of the whole globe is more or less saline. This problem afflicts not only the agriculture but, even the green areas of the cities, because most of the ornamental species hardly or completely do not tolerate saline or sodic soils. More than 80% of saline areas of Europe belongs to Hungary, most of them are primary salinity. These areas are rich in salt and drought tolerant species, some of them can have high ornamental value.

In our research, we tried to select lines with high ornamental value of three Hungarian native taxa: *Inula Britannica* L., *Limonium gmelinii* subsp. *hungaricum* (Willd.) Kuntze and *Tripolium pannonicum* subsp. *pannonicum*. Best result we obtained with *Tripolium pannonicum* subsp. *pannonicum* (Jacq.) Dobrocz., a dwarf, richly flowering selection with short flower stems. The vegetative propagation of the plant is more or less easy from sprouts. The self-pollination is limited, most of the seeds are sterile. The progeny of very few seeds do not keep this short growing feature. The selection of special habitat of *Limonium gmelinii* subsp. *hungaricum* started with the seed collection from selected plants in the nature. From these populations we have dwarf and rounded leaf plants and lines. We selected dwarf and high, richly flowering lines from *Inula britannica* cultivated population as well. The examination of progeny did not show the expected features, further selection is needed.