

# TAXONOMY AND DISTRIBUTION OF THE *FESTUCA OVINA* AGG. IN THE CARPATHIANS AND PANNONIA

by

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**Aims.** Taxonomic and chorological investigations on the *Festuca ovina* group in the Carpathians, Pannonia and S-W Ukraine, with particular regard to the ways of migration and problems of hybridization.

**Methods.** Taxonomic revision of the herbarium specimens, karyological, morphological and anatomical investigations, plotting of the maps of distribution.

**Results.** Revision of the herbarium specimens has been completed in the following herbaria: KRA, KRAM, KW, LW, LWS, W, WU, CLA, BUCA, BP, BPU, SAV, SLO, PR, PRC. The catalogue of localities was made with the help of a personal computer. The live materials for karyological investigations were collected from middle Pannonia. Till now, 30 species of *F. ovina* agg. have been found within the investigated area.

Particular attention was paid to the species group belonging to section *Psammosphylae* (*F. psammophila*, *F. polesica*, *F. pallens*, *F. vaginata*, *F. dominii*, *F. pannonica*), during the studies of mixed populations of *F. vaginata*-*F. dominii* along the Danube River valley. *F. dominii* increased in population size, going down the river.

Populations of endemic species of *F. pannonica* were also investigated in the Pilis Mts near Budapest, where *F. pannonica* grows on the dolomite rocks, together with *F. pallens* and *F. vaginata*. As indicated by morphological and anatomical studies, and karyological investigations, *F. pannonica* is a stabilized hybrid between those two species.

*F. rupicola* (= *F. sulcata*) also seems to be a stabilized hybrid, probably between *F. pseudovina* and *F. pallens*. This species might have been formed in the mountains of Banat. From there it expanded into Transylvania and Pannonia (as *for. rupicola*), and eastwards through the Włotzka Lowland reaching the West-Ukrainian steppes (as *for. hirsuta*). In Poland, *F. rupicola* occurs in two morphological forms. One of them presumably came from Pannonia through the "Moravian Gate", whereas the second one, encircling the Carpathians, came to us from the Ukraine.

Species from the section *Trachyphyllae* were the object of separate studies. *F. trachyphylla*, *F. wagneri*, *F. stricta*, *F. javorkae*, *F. pachyphylla*, *F. duvalii*, are probably also of hybrid origin. Some of them (*F. wagneri*, *F. pachyphylla*) have a very limited area of distribution; the other (f. i. *F. stricta*, *F. duvalii*) occurs sporadically, but within a large area. *F. trachyphylla*, however, is spreading over all Europe, mostly in the habitats remaining under human influence (roadsides, railway banks, waste-dumps).

## References

- Pawlus, M. 1985. Taxonomy and distribution of the *Festuca ovina* group in Poland. *Fragm. Flor. et Geobot.* 29(2): 219-295, (1983).
- Mizianty, M., Pawlus, M. 1984. Chromosome numbers of some Polish species from the genus *Festuca* L., group *ovina*. Part 1. *Fragm. Flor. et Geobot.* 28(1982): 363-369.