

Laboratory of Cytogenetics and Molecular Biology

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Research topics:

- Studies on introgression of genes for frost and drought resistance from *Festuca arundinacea* and *F. pratensis* into *Lolium perenne* and *L. multiflorum*,
- Analyses of genomic structure, meiosis, and the number and localization of rRNA genes in intergeneric hybrids within the *Festuca-Lolium* complex by using genomic *in situ* hybridization (GISH) and fluorescence *in situ* hybridization (FISH),
- Analyses of the process of cold acclimation associated with frost tolerance within the *Festuca-Lolium* species by monitoring gene expression on the proteomic level by 2-D electrophoresis and mass spectrometry,
- Identification and functional analysis of selected aquaporin genes involved in drought and frost tolerance in *Festuca* species.