

ANALYSIS OF FLUORESCENCE TRAIT OF SEMINAL ROOTS *LOLIUM MULTIFLORUM* AND *L. PERENNE*.

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L. multiflorum and *L. perenne* belong to the most precious grasses in agriculture. In countries with developed forage plants *L. multiflorum* and *L. perenne* are the more often used forage grass. Breeding of *L. multiflorum* and *L. perenne* cultivars is demanding special attentions so that cultivars will keep special identity. This is very difficult because *L. multiflorum* and *L. perenne* are crossing very easy.

The Gentner's test has used to definition *L. multiflorum* and *L. perenne* species identity for many years. This test leans against on occurrence of fluorescence in seminal roots. This method assume that fluorescence is characteristic for *L. multiflorum* whereas shouldn't to appear at *L. perenne* cultivars. However in practice percent of fluorescence in *L. perenne* cultivars attains seldom 0%. Occurrence of fluorescence at *L. perenne* cultivars has been interpreting as result of crossing with *L. multiflorum* cultivars. It has undermined fluorescence as diagnostic trait. Furthermore procedure of Gentner's test isn't full standaridaze.

Genetic condition of fluorescence isn't recognize yet. Fluorescence determining genes may be linked with genes of important and useful traits. In some popultaions of *L. perenne* apart from enlarged ability to fluorescence of seminal roots meet plants with enlarged biomasses and lowered permanence winter. These traits have negative influence on their economic value.

Aim of presented work was optimization of Gentner's test and estimation of fluorescence level in chosen *L. multiflorum* and *L. perenne* cultivars. Moreover correlation between fluorescence and useful tarit with DNA markers was made, too.