
VPLYV NIEKTORÝCH VNÚTORNÝCH A VONKAJŠÍCH FAKTOROV NA KONCENTRÁCIU CHLOROFYLU a + b (SPAD HODNOTY) V LISTOCH TRÁV

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ABSTRACT

Gáborčík N.: **Influence of some endogenous and exogenous factors on the chlorophyll concentration a + b (SPAD values) of leaf grass**

In this paper, results on chlorophyll concentration (SPAD values) of an assortment of grasses obtained over the years 1996–2002 are reviewed. The influence of endogenous and exogenous factors on SPAD values of forage and turf grasses was studied. Intergeneric and cultivar differences between species were found. The differences of SPAD values for tall fescue (*Festuca arundinacea* Schreb.) was 12,0 and 17,0 units for forage and turf type cultivars, respectively. Cultivation of grasses with red clover (*Trifolium pratense* L.) resulted in higher SPAD values (by 6 %) compared to a monoculture of grasses. A greater difference was indicated for individual plants (+ 12,5 %) in comparison to plants from a sward. The SPAD values were controlled by the influence of site (27,5 %) and by the impact of the year of sward establishment. The difference between dark – and light – green genotypes of timothy (*Phleum pratense* L.) cultivars was 32,2 % (9,3 SPAD units). A cessation of mineral fertilisation does not influence the SPAD values in leaves of cocksfoot (*Dactylis glomerata* L.) in the first year without N