Analyses of Forage Quality in Four Species of Grasses and Legumes by Using CA and NIR Methods at Semi-Arid Region of Northeastern Iran

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Key words : NIR , phenological stages , curd protein , ADF , digestibility .

Introduction The chemical composition and its evaluation during phonological stages of 4 grasses and legumes was studied . These forage species were growing in different parts of Golestan National Park located in northeastern Iran under natural condition of semiarid climates .

Material and Methods plant materials including aerial parts were collected in 3 different stages of 4 grasses and legumes . The percentages of ADF , NDF , CP , and DMD were determined by Colorimetric Analysis and Near Infrared Red . These criteria were analyzed by ANOVA in different stages . The CA and NIR were compared by ttest .

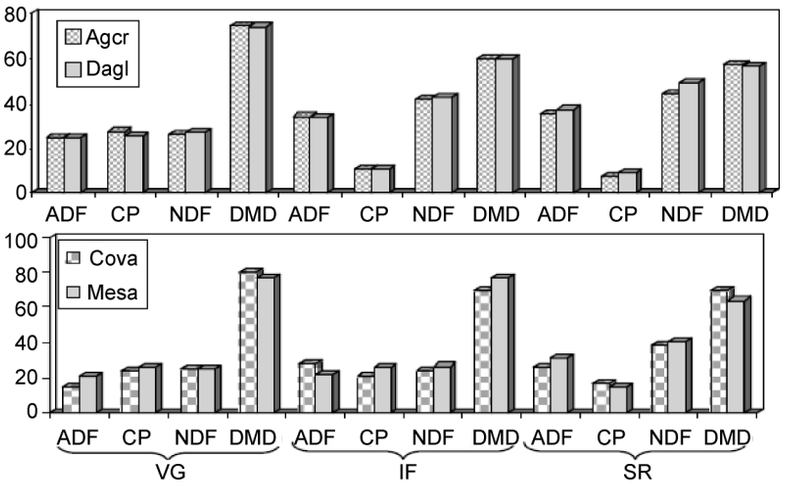

Figure 1 *Chemical composition of 2 grasses of* Agropyron cristatum *and* Dactylis glomerata *(top) and 2 legumes of* Cronella varia *and* medicago sativa *(bottom) at 3 different stages .*

Results As it is shown in Figure 1 , There were not any significant differences between 2 species of both grasses and legumes for chemical criteria ($p>0.05$) . But the chemical composition of grasses and legumes were different ($p<0.05$) .

Conclusion In general , chemical composition of both grasses and legumes were not changed during completion of growth so the maintenance requirement of sheep and goat were met .

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