

## Abstrac

The aim of this study was to evaluate nutritive value of Berseem clover (*Trifolium alexandrium*) in three harvest stage and also to determine their effects on protein fractions of berseem clover, based on AFRC system. Sampling was done from of Cultivated clover of Amol region Mazandaran province and Picked up during three consecutive cuttings with height of 30 cm. After collecting of samples, some of them dried in shade and some of them for silage chopped in to 3-4 cm pieces and ensiled after mixing with 15% sugar beet pulp in 5 Kg plastic baskets. The silages were opened after 45 day and chemical compositions including dry matter (DM), ash, organic matter (OM), ether extract (EE), crude protein (CP), cell well (NDF) and cell well without hemicelluloses (ADF) were measured according to the standard procedure. In order to measure the dry matter and crude protein degradability of studied samples were used *in situ* methods. Results showed there was a significantly difference between all treatments chemical compounds that in different stages of growth, (0/05 > p). Degradability parameters and effective degradability at different growth stages showed significant differences (0/05 > p) Also, Results of estimating different fractions of clover forage metabolizable protein showed that with progress of growth stage of quickly degradable Protein (QDP), Slowly Degradable Protein (SDP), Undegradable Protein (UDP) and Metabolizable Protein (MP) contents reduced (0/05 > p). also MP of silages, showed a significantly decrease compared with control treatment.

Key Words: *Trifolium alexandrium*, Degradation, Crude Protein, Metabolizable Protein



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**Protein evaluation of *Trifolium alexanderium* forage  
in different harvesting base on AFRC system**

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