

Evaluation of AM Vs PM Cuttings of Alfalfa for TDN and Protein.

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Abstract

Alfalfa samples were taken from three replications of the varieties WL-320 and Sutter PGI, which were in their fourth year. These varieties were grown in Stockton adobe clay located at Kaiser Road, Farmington, California. A comparison between the morning and evening cutting times was done to determine which had the higher TDN and protein values. The cuttings were taken in June, August, and September of 1992. Harvest sample sizes of 18" x 24" were taken at each plot using hand clippers between 7:00 AM and 9:00 AM, and 6:00 PM and 8:00 PM. The cuttings were made 2" above the soil surface to simulate a growers condition. Samples were cut at an average of 30 days between cuttings. Samples were then air dried to appropriate dryness, and taken to JL Analytical Lab in Modesto to be analyzed using the wet chemistry method.

The June cutting showed that the AM timing was significantly higher in TDN at the 4.3% level than the PM timing. The AM timing was also significantly higher in protein levels than the PM timing at the 0.85%. The August cutting shows that there was no significant difference in TDN (13.57%) in the AM timing than the PM. The protein was significantly higher for the AM timing than the PM at the 2.81% level in August. September values showed slight differences in the PM timing being higher at the 2.78% level for TDN. The protein values between the AM timing and the PM timing were not different for September.

There were varietal interactions in the August and September cuttings for TDN. There were no varietal interactions for the June cuttings. There were no varietal interactions in the protein values for all three months.