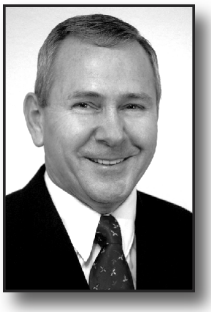
PEAQ Determines Alfalfa First Harvest Date



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Producing high-quality alfalfa is essential to a profitable forage enterprise. Alfalfa producers are encouraged to begin monitoring spring alfalfa growth in order to determine the optimum harvest date for the first cutting. Predictive Equation for Alfalfa Quality (PEAQ), an in-field predictor of forage quality, can be used by growers to monitor plant height and stage of maturity.

It is well documented that alfalfa quality decreases as the plant matures from the bud stage to full flower. At the same time, the pounds of plant material harvested per acre increases as the plant matures. Thus, the optimum harvest date is the compromise between the forage quality and forage quantity desired. From year to year, the optimum date to harvest premium quality alfalfa can vary by 21 calendar days, depending on spring temperatures and moisture availability.

University of Illinois Extension is in its 12th consecutive year of conducting the annual Illini PEAQ study throughout the state. This program assists alfalfa producers in monitoring plant growth and quality. Progress reports on the plant development and nutrient quality is reported twice weekly for approximately four weeks at each location.

The PEAQ monitoring results are available on the Illini PEAQ web site at http://peaq.traill.uiuc.edu. This web site allows you to monitor the PEAQ values for different regions in Illinois and will also assist you in calculating and tracking your own PEAQ values. Refer to the PEAQ table on the web site for determining the proper plant height and maturity related to Relative Feed Value (RFV) quality.

Alfalfa producers are encouraged to harvest the first cutting based on the RFV of the standing alfalfa. A common goal for high-quality alfalfa is to have 20 percent or higher crude protein, 30 percent or lower acid detergent fiber, and 40 percent or lower neutral detergent fiber which, based on the fiber content, will equate to a RFV of near 150. Keep in mind that the nutrient analysis in the field does not include harvesting and storing losses. Field and storage losses account for 15 to 20 RFV points. Therefore, in order to strive for 150 RFV, the first cutting needs to be harvested as soon as the RFV in the field reaches 170. This first cutting must be taken in the bud stage since quality quickly reduces as the plant matures. In addition, this first harvest date also sets up the cutting schedule for the rest of the growing season. Subsequent cuttings should be taken every 26 to 30 days.

It may be difficult to make top-quality, first-cutting alfalfa due to weather factors, coarse plant material, and possible weed and insect infestations. However, by monitoring the PEAQ values and prioritizing hay harvesting over all other cropping chores, many dairy and hay producers are able to make excellent first-crop alfalfa. Δ

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