# Forage Research Updates Compiled and edited by Paul Peterson, University of Minnesota Extension

## MFRP Project - Wisconsin Alfalfa Yield & Persistence (WAYP) Program

by Mike Rankin, UWEX-Fond du Lac County

### **Program Objectives**

- 1. Verify the yield and quality of alfalfa harvested from production fields over the life of the stand beginning with the first production year (year after seeding).
- 2. Quantify decreases in stand productivity of alfalfa fields as they age.

### 2010 Overview

The year 2010 marked the fourth year of this project. Once again, UW-Extension agents were asked to identify forage producers who would be willing to weigh and sample forage from a 2009-seeded field and continue to do so for the life of the stand. Six such fields were identified on two separate farms. Also included in this summary are the data for the second, third and fourth production years from fields entered into the program in 2007 (2006 seedings), 2008 (2007 seedings) and 2009 (2008 seedings). As is always the case in these types of studies, there is some attrition of fields over time. This is usually the result of not being able to obtain critical yield or forage quality data for a cutting or multiple cuttings. This year there were six 2006-seeded fields dropped from the project simply because the producers decided not to harvest a fourth production year from the stands. In total, production data were collected for 23 fields in 2010 (the same number as 2009). Over 6,500 tons of forage was harvested from the project fields in 2010.

#### 2010 Weather

The 2010 growing season was one of the best in recent memory with a relatively warm and dry spring allowing for early alfalfa growth. Growing degree units were above average across the state. Above average rainfall in June and July made for difficult and sometimes delayed harvests for the second and/or third cuttings, decreasing the overall quality of the harvested crop. Nevertheless, alfalfa yields were the highest measured since 2007.

#### **Data Collection**

Project fields were identified and an accurate measure of field size was determined (if not previously calculated). Forage yield from an entire project field was weighed (usually this was done with an on-farm drive-over scale). Both empty and full weights for all trucks/ wagons used were recorded. Beginning in 2008, two forage samples from each harvest were taken and submitted to the Marshfield Soil and Forage Analysis Laboratory (only one sample was submitted per harvest in 2007) for NIR analysis. Data from the two forage samples were averaged and recorded by the local coordinator. Information was input into a spreadsheet and shared with the producer following each harvest. At the end of the season, all data were collected and summarized for this report.

#### Summary

The Wisconsin Alfalfa Yield and Persistence Program is designed to provide forage growers and agricultural professionals a unique look at what is happening at the farm level. As more fields are entered and years pass, the reliability of information will increase. It's important to keep in mind that only four years of data have been collected. Environmental conditions have a profound influence on both yield and quality and during the course of the past four years there have been no two alike. Nevertheless, the information presented here can be contrasted and there certainly is enough information to begin to formulate possible trends and topics for discussion.