## FORAGE RESEARCH UPDATES

## WISCONSIN– Alfalfa Yield & Persistence Project Update Mike Bertram, University of Wisconsin-Madison

WEX Team Forage initiated the Wisconsin Alfalfa Yield and Persistence (WAYP) Project in 2007 with two objectives. First, verify alfalfa yield and quality harvested from production fields over the life of stands beginning with the first production year (year after seeding). Second, quantify changes in stand productivity as fields age. Over 13 years, data has been collected/summarized from 109 fields in 16 counties, representing 257 site years, 6,752 acres, and 61,600+ tons of alfalfa dry matter (DM). All loads harvested on each field were weighed and two samples collected per cutting to determine DM and quality. No special management was required. MFA has funded this project since 2009.

Twenty-two fields were measured in 2019. The season started slowly with 1<sup>st</sup> cut averaging 8 days behind normal, a delay that continued through subsequent cuts. Alfalfa DM yield averaged 4.15 tons/ac, about a quarter ton per acre below the long-term average. Despite weather challenges the top field yielded 6.40 tons DM/ac, the second best yield seen in the study. However, five fields yielded under 3.0 tons DM/ac. Yield distribution by cut was  $47\% - 1^{st}$ ,  $29\% - 2^{nd}$ , and  $24\% - 3^{rd}$  in the 3-cut systems;  $34\% - 1^{st}$ ,  $28\% - 2^{nd}$ ,  $20\% - 3^{rd}$ , and  $18\% - 4^{th}$  in the 4-cut systems. Quality parameters averaged over all fields and cuttings in 2019 were: CP – 20.0%, NDF – 40.3%, NDFD – 51.4%, RFQ - 169, Milk/ton – 3,016 lbs.

The WAYP Project provides farmers and agricultural professionals a unique look at what is happening at the farm level. As more fields are entered and years pass, reliability of information increases. Environmental conditions have had a profound influence on yield with no two years exactly alike. This project would not be possible without the cooperation of farmers and UWEX coordinators to collect data. We plan to continue with new fields being added in 2020. Interested in participating? Contact your UWEX Office or Mike Bertram (mbertram@wisc.edu). View full report at midwestforage.org/pdfRschProj/19-Bertram.pdf.