Forage Research Updates

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NORTH DAKOTA - Quality Forage Improves Dairy Efficiency

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Dairy managers looking to reduce costs could benefit by evaluating their operation's efficiency. Dairy efficiency ("DE") is the pounds of milk produced per pound of dry matter (DM) intake. As cows eat more to support higher milk production, the proportion of digested energy captured in milk increases. As cows consume more feed, digestive efficiency decreases. Though feed costs usually increase as cows are fed for higher milk production, increased productivity also enhances profitability, partly due to increased efficiency, but also because fixed costs are decreased relative to total costs. Increasing production costs, such as escalating fuel charges, demand that producers improve efficiencies. Many factors can reduce a dairy operation's profit margin. It is critical that producers regularly review the overall operation and identify inefficiencies, of which forage quality is key.

Research has shown that profitable dairy diets can be 60-65% forage, provided forage is of sufficient quality. In an Illinois study, 30 dairy herds had increased milk production, lower DM consumption, and reduced manure production when fed highly digestible forages. In another trial, 400 herds demonstrated that higher forage digestibility translated into higher DE.

Farmers are busy, and records take time. To improve DE, animal health, and profitability, consider the following: 1) manage forages to maximize quality; 2) test forages for DM and fiber digestibility; 3) when appropriate, treat forages to increase DM and fiber digestibility; 4) balance and fortify rations to fully utilize the nutrients from forages.