

Strategies of Pasture Supplementation on Organic and Conventional Grazing Dairies: Assessment of Economic, Production and Environmental Outcomes

USDA-CSREES Organic Agricultural Research & Extension Initiative Grant project
48 month project, beginning late 2009

Project Overview:

Pending USDA National Organic Program (NOP) standards for dairy and livestock production require that 30% or more of dry matter intake are provided by pastures on organic farms during the grazing season. Managed pastures provide abundant, high quality forage, but also present challenges when balancing dairy rations. Organic farms may have additional economic, production and environmental challenges when growing or purchasing supplemental feeds for grazing dairy herds. Organic and conventional grazing dairy producers have expressed the need for more information on use of pastures in combination with feed supplement ingredients with respect to impacts on production, economics and environment.

This project is designed to investigate the impacts of pasture supplementation decisions made by Wisconsin organic and conventional grazing dairies on selected economic, production and environmental variables. It is anticipated that organic dairy producers, transitioning producers and even conventional producers will benefit from this project as it identifies the farm level factors that influence pasture supplementation decisions and feed resource management on dairy farms. Project results will be utilized to develop outreach materials and decision aids that will be useful to farmers, extension agents and other agricultural professionals as they assist organic, transition, beginner or grazing dairy

producers with farm planning and risk management decisions.

Project results will benefit individual operations by optimizing farm profitability, production and environmental management and the Wisconsin dairy industry. Our results will also be of interest to organic and conventional dairy grazing producers across the Upper Midwest and Northeastern United States who operate under similar constraints.

Project Objectives:

1. Identify farm level factors contributing to pasture supplementation decisions on organic and comparable conventional dairy grazing farms;
2. Evaluate the economic, production, and environmental outcomes of pasture supplementation strategies;
3. Develop sustainability indexes to compare within and between organic and conventional grazing dairies;
4. Create decision support aids and consult one-to-one with participating farms on research results to assess long-term production, economic, and environmental sustainability;
5. Disseminate extension information and evaluate effectiveness of dissemination methods and impacts of changes of supplementation feeding strategies to organic, transition or grazing dairy producers with whole farm planning and risk management to optimize human, land, and capital resources for long-term farm sustainability.

Project Scope:

Approximately 50 commercial organic (ORG) dairies and 50 comparable non-organic grazing dairies (GRAZ) in Wisconsin will be recruited for this project. Dairy herds that have been utilizing management intensive grazing and shipping milk for at least 3 years will be eligible and invited to participate and further categorized as ORG (shipping certified organic milk) or GRAZ (not ORG). Once identified, all farms will be asked to define their preferred pasture supplementation strategy by peer category (no grain, grain—on farm sources, or grain—off farm sources). A stakeholder research advisory panel will be established for guidance on relevant data to be collected, expected outcomes, and delivery of results to interested individuals and groups. Relevant data on selected economic, production, and environmental variables will be collected during 6 scheduled visits over two grazing seasons, using a combination of questionnaires and physical samples, depending on the variable of interest.

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