Managing Legumes to Reduce Excess Nitrogen on Dairy Farms. (S04-russelle163527-Oral)

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Abstract:

Many dairy farms import excess N, primarily in feed and fertilizer. Surveys show that dairy farmers do not credit manure N fully when it is applied to nonlegumes. Legumes can utilize soil ammonium and nitrate, and symbioses between rhizobia and legumes typically are quite sensitive to uptake of combined N. Spreading manure on legumes would open a new application window, utilize manure N efficiently, reduce excess fertilizer N rates, and help balance the whole farm N supply. This strategy requires improved application methods and symbioses that are sensitive to N supply.

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