

## NUTRIENT EFFICIENCY: FEEDING BMR MAY CUT MANURE OUTPUT

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### HIGHLIGHTS

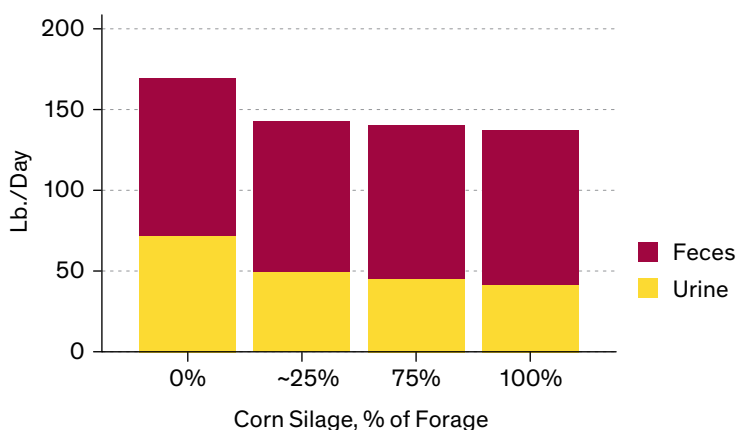
- Higher levels of corn silage in a dairy diet can significantly reduce manure output.
- Research shows that feeding highly digestible BMR corn silage reduces manure output compared with conventional corn silage.
- By reducing the volume of waste output, dairy producers can cut hauling and storage costs.

Feed efficiency — turning feed into milk — is critical in a dairy operation. But what about measuring efficiency at the other end of the cow — in manure output? As more feed is converted into milk, this theoretically should reduce waste output and potentially reduce hauling and storage costs as well as the number of acres needed for manure application.

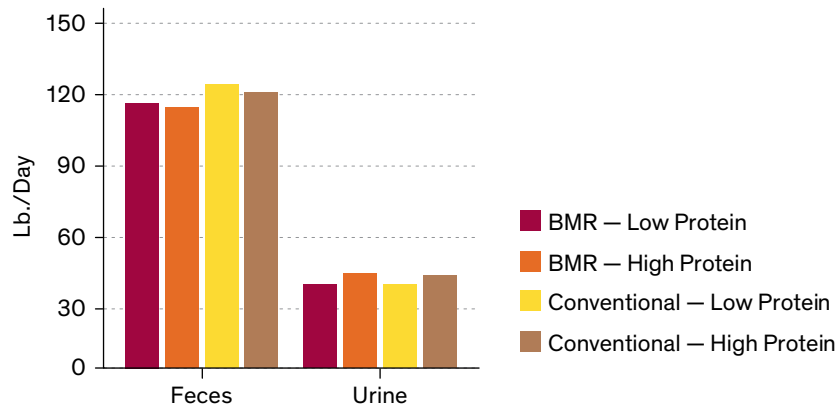
Some producers who feed their cows Mycogen<sup>®</sup> brand BMR corn silage have reported greater efficiency in nutrient (waste) management. Data confirms these observations.

Higher levels of corn silage in a dairy diet can lead to significantly less manure output. Ohio University research shows how waste output decreases when cows are fed more corn silage and less hay crop forage<sup>1</sup> (Figure 1).

**FIGURE 1. FORAGE AND MANURE OUTPUT**



Earlier research showed higher digestibility and lower waste output with brown midrib (BMR) corn silage.<sup>2</sup> The study compared manure output for cows fed either dual-purpose (conventional) or BMR corn silage with high or low metabolizable protein treatment groups. All cows received rations with 55 percent corn silage as the forage.

**FIGURE 2. MANURE OUTPUT WITH CORN SILAGE DIETS**

Researchers concluded that a highly digestible diet can reduce manure output (Figure 2). Weiss and Wyatt reported that feeding early harvested hay crop forages and highly digestible corn silage hybrids also influence manure output.

Furthermore, dry matter yield of corn silage usually is more consistent and higher from year to year than hay and haylage. Therefore, growing BMR corn silage means that fewer acres may be needed compared with growing hay crop forages.

**For more information on how Mycogen® brand BMR corn silage can improve a dairy's bottom line, visit the Mycogen Seeds website at [www.mycogen.com](http://www.mycogen.com) or contact your local Mycogen Seeds representative.**

<sup>1</sup>Weiss, W. P., and N. R. St-Pierre. 2010. Feeding strategies to decrease manure output of dairy cows. *WCDS Adv Dairy Technol.* 22: 229-237.

<sup>2</sup>Weiss, W. P., and D.J. Wyatt. 2006. Effect of corn silage hybrid and metabolizable protein supply on nitrogen metabolism of lactating dairy cows. *J. Dairy Sci.* 89: 1644-1653.

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