



In optimal alfalfa-grass mixtures like this one, the grass accounts for 30-50% of the dry matter.

type of grass being used in the mixture.” For example, 2-4 lbs of orchardgrass or 8 lbs of tall fescue could be seeded with 10 lbs of alfalfa per acre.

To help growers determine seeding rates for their grass-legume mixtures, Undersander developed a spreadsheet available at tinyurl.com/32xhhcj.

Undersander seeded alfalfa at 60 seeds per square foot (13 lbs/acre) with varying grass seeding rates. “Seeding rate of the grass had little effect on plant counts taken 30-40 days after seeding,” he says. However, grass establishment did vary by location, probably due to weather during stand establishment.

“In general, as grass seeding rate increased, the alfalfa declined as a percent of the total stand,” the forage agronomist says.

“Fifty to 75 seeds per square foot are usually adequate for a good stand. Rates up to 150 seeds per square foot give faster initial ground cover but no more yield.”

Stand establishment also means having proper seeding depth and good seed-to-soil contact for alfalfa and grass seed, says Undersander.

Hay & Forage Grower's November 2008 story, “Grass May Help Balance Hot Dairy Diets,” offers a dairy scientist’s views on the benefits and challenges of adding grass to high-energy dairy rations. He also suggests what grasses work well with alfalfa. See it at tinyurl.com/3573j7q. ♦

PHOTOS: MARK MOORE

Mixes That Milk

Establish the right alfalfa-grass balance

by Mark Moore

Grass-legume mixes in dairy rations are becoming more popular as producers look to cool hot rations and provide effective fiber. Adding grasses helps lower the amount of non-fibrous carbohydrates in an overall dairy

ration, says Dan Undersander, University of Wisconsin Extension forage agronomist.

Yet, establishing the right balance of grasses and legumes requires careful attention to detail, he warns.

“There is an optimal seeding rate, but it depends on the



Silage made from mixtures with less than 30% grass provide little non-fiber carbohydrate benefit in rations.



This more-than-50%-grass stand won't yield well due to lack of nitrogen.