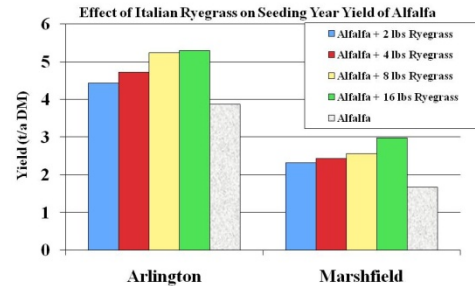


Alfalfa Grass Mixtures in Dairy Rations

by Dan Undersander

Benefits of mixing grass with alfalfa:

- 1) 30 to 40% grass mixed with alfalfa gives equal or higher yields than pure stands of alfalfa
 - a. Improved yield in seeding year.
 - b. Better yield in later years if alfalfa injured by winter, insects, disease.
- 2) Alfalfa grass mixtures provide stand and yield over broader range of environmental conditions.
 - a. Grass remains in low spots where water stands.
 - b. Grass may not suffer winterkill.
 - c. Suffer less traffic damage and tolerate manure application better.
- 3) If grass grows in later part of season, may widen harvest window.
- 4) 30% grass mixed with alfalfa dries faster than pure alfalfa.
- 5) Alfalfa-grass mixtures provide greater erosion control than pure alfalfa stands.
- 6) Alfalfa-grass mixtures produce more palatable haylage than pure alfalfa.
- 7) Adding some grass to alfalfa stands may benefit the dairy ration by lowering NFC because grass has less NFC.
 - a. Higher total fiber with grass/legume mixtures but faster rate of digestion of grass NDF.
 - b. Reduce lameness associated with too much nonfiberous carbohydrate (NFC).



Potential Milk Losses Due to Lameness				
Locomotion Score	2 (Mild)	3 (Moderate)	4 (Severe)	5 (Severe)
DM Intake Reduction, lb/d	1	3	7	15
Milk Yield Loss, lb/d	0	5	15	30

Adapted from P. Robinson, UC Davis Cooperative Extension

20 to 25% of milking cows are mildly to seriously lame in Midwest United States (Cook, Oetzel and Nordlund, 2003). This results in increased veterinary bills and reduced milk production (see table). **Causes:** 58 % due to disease or trauma, **42% due to nutrition (excessive grain and/or inadequate fiber).**

- c. Faster grass fiber digestion may allow increased NDF in ration without reducing intake or milk production.
- d. Possible good fit with high NFC diets (i.e. high corn silage diets).

