The importance of alfalfa in the dairy diet

Alfalfa Benefits – Why is alfalfa important in the dairy cow diet?

- Alfalfa NDF has a higher rate of digestion than most other forages, which allows it to clear the rumen more quickly, leaving more space for greater intake of the entire diet. Greater intake can lead to the potential for more production.
- Alfalfa adds dietary fiber without adding more starch (a major drawback of corn silage).
- Alfalfa has a higher protein and higher rumen degraded protein (RDP) content than other forages.
- Alfalfa stimulates cud chewing better than corn silage. This stimulates more salivary buffer production, which can help support greater milk fat production.
- Alfalfa works well in rotational cropping systems with corn to help improve soil health, soil drainage and disease resistance:
  - Through alfalfa’s ability to fix atmospheric nitrogen, alfalfa can provide 40-120 lbs. nitrogen/acre to support a subsequent corn crop.
  - Because of its deep taproot, alfalfa can change soil structure and improve soil drainage through the creation of macro-pores.
  - Alfalfa in rotation with corn can:
    - Help break the cycle of pests for both crops.
    - Reduce fungal and mycotoxin infestations that normally occur with corn-after-corn cropping systems.
    - Glyphosate-resistant alfalfa can help clean up fields with heavy weed infestations.

Corn silage is a competitor to alfalfa in the diet, but it is very different from alfalfa

- Corn silage is not able to be traded or transported like alfalfa hay – it is not easy to plug one for the other
- Corn silage has a lower protein level than alfalfa
- Corn silage has some drawbacks in today’s milk economics; the higher rumen available starch in corn silage increases lactose and water in milk which are of lower value than other milk components.
- Unlike corn silage, alfalfa has a high cation exchange capacity which helps increase milk fat, the highest valued component in milk today

What FGI will do to help educate sellers and customers

- FGI will continue to work with nutritionists, nutritionist groups, and feed companies that provide nutrition consulting to educate them on the advantages of alfalfa
- FGI intends to work with universities working in the forage space to promote the benefits of alfalfa
- FGI will continue to train our sellers at the farmgate – the goal is not to turn seed sellers into nutritionists, but a basic understanding of how alfalfa is used by customers will help the sales process
- FGI will continue to work with ration software vendors to more accurately show the value of alfalfa in a dairy diet

References:
- Smith, Ray. 2010. Value of Alfalfa in Rotation - UKnowledge - University of Kentucky uknowledge.uky.edu/cgi/viewcontent.cgi?article=1049&amp;context=ky_alfalfa