

Does Your Forage Measure Up?

Silage particle size is critical for optimal rumen function; thus, cow health and milk production. Signs that effective fiber may be insufficient in your cows' diet include:

1. Too little cud chewing
2. Variable dry matter intake on day to day basis.
3. Loose manure
4. Increase incidence of lameness, primarily laminitis.

Guidelines for formulating rations with adequate effective fiber all have their problems. To ensure that the ration has adequate forage, particle size should be measured objectively. Wisconsin researchers devised a method for such measurements and found only 30% of the hay silage and 31% of the TMR were adequate in particle size. The forage is placed in a large mechanical shaker with 6 tiers which divide the ration by forage particle size. The top two shelves or tiers collect particles over 1 1/2". These researchers recommend 15-20% of the forage particles be 1 1/2" or longer. Your forage may be tested with this system for 12\$ a sample by sending a 1-gal sample to Dairyland Labs, 217 E Main St, Arcadia, Wisconsin 54612; phone: 608/323-2123.

Penn State engineers have devised a field device for testing particle size. This is a 3 tier system in which the top box catches the same size particles as the top 2 tiers of the Wisconsin shaker. This device costs \$195 from NASCO (800/558-9595).

A homemade version of this box is being made in Fort Collins by Dr Les Ball, formerly of the CSU-VTH. Directions for this system are on page 2 of the newsletter. Dr Ball is always a reliable consultant!