

More about Moisture

At Santa Ynez Research Farm, the efficacy of standard Loomix[®] #5 was compared to the efficacy of Loomix[®] #5 with moisture reduced from 50% and 20% of the original.

Rumen organisms digest feed for the host animal by fermenting the feeds in the rumen. This fermentation produces volatile fatty acids, which are sources of energy for the host animal.

Therefore, the efficiency of supplements may be compared by the effect they have on the function of rumen organisms. This effect is indicated by the amount of volatile fatty acids produced by the organisms in a specific amount of rumen fluid.

Treatments in the Santa Ynez Research Farm investigation were:

1. Rumen fluid plus straw
2. Rumen fluid plus straw plus Loomix[®] at 10% moisture
3. Rumen fluid plus straw plus Loomix[®] at 25% moisture
4. Rumen fluid plus straw plus Loomix[®] at 50% moisture

Results from the respective treatments were as follows:

1. 155.0 millimoles of volatile fatty acid per liter
2. 158.8 millimoles of volatile fatty acid per liter
3. 161.4 millimoles of volatile fatty acid per liter
4. 162.2 millimoles of volatile fatty acid per liter

It should be noted that the production of acetic acid, a volatile fatty acid produced by fiber fermentation, increased at a rate twice that of total volatile fatty acids.

The moisture in Loomix[®] apparently improves the availability of nutrients to rumen organisms. Because this is so, there is no reason to condense or dehydrate products like Loomix[®]. Condensation or dehydration only adds to the cost while reducing nutrient availability.

The improvement of fiber digestion is also a characteristic of Loomix[®], as shown by increased acetic acid production.

A true supplement should improve rumen function as well as supply specific nutrients. The results of this trial show that Loomix[®] does this.