

dhia



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UNIVERSITY PARK (Centre Co.) — The 1997 cropping season has left many producers with either no to very little haycrop forages. Corn silage will be the predominant, if not the total forage, fed on many farms. There are several issues to consider when managing corn silage rations for the dairy herd.

Due to the scattered rain showers that fell throughout the Northeast, corn growth was extremely variable. This means that the nutrient content and quality of corn silage will be far from consistent. Forage analyses will be essential in determining how to manage these high corn silage diets. All

silage samples should be tested for dry matter, crude protein, soluble and degradable protein, acid detergent fiber, neutral detergent fiber (NDF), ash, and minerals. Because of differences in ear and stalk development, requesting lignin and starch to the analyses may be warranted.

If corn silage is going to dominate the milking ration with no or minimal amounts of hay or haylage, then properly balancing rations based on forage NDF, total NDF, and particle size distribution will be critical. Byproduct ingredients that complement a heavy corn silage ration and that help balance fiber are corn gluten feed, brewers grain (wet or dry),

wheat midds, soyhulls, and cottonseed.
Particle size of corn silage will be important to help maintain good digestibility and normal rumen function. When corn silage makes up a greater proportion of the ration, it is recommended to have 5-10 percent of the particles greater than 0.75 inches, 40-50 percent of the particles between 0.75 and 0.31 inches, and 40-50 percent of the particles less than 0.31 inches (Penn State particle size separator, 1996). Corn silage that is chopped and rolled should have between 10-15 percent of the particles greater than 0.75 inches. The rest of the particle size distribution would be similar to what was stated previously.
Since corn silage normally tests around 8-9 percent crude protein, more supplemental protein will be needed compared to heavy hay or haylage diets. Ideal protein ingredients include both soy- and animal-based sources. A nonprotein nitrogen source like Feed grade urea can work well in corn silage diets. However, if appreciable amounts of urea are fed in the milk cow diet, then some urea should be included in the close-up dry cow diet. This allows the dry cows to become acclimated to having urea in the ration and minimize off-feed problems.

There will be mineral feeding changes that occur with increasing proportions of corn silage. More supplemental calcium will be included in the diet because of the low calcium content in corn silage. An added potassium source may be necessary to meet the milk cow's minimum potassium requirement of 1.20 percent (dry matter basis). If urea is included in the diet at substantial levels, then maintaining adequate sulfur levels in the diet will be important. Including a buffer in the ration at 0.8 percent of the total ration dry matter would be a sound recommendation.

There are other miscellaneous issues to consider if corn silage is going to be the predominate forage fed throughout the winter. Monitoring body condition on all animal groups being fed high corn silage diets will be critical. The potential exists for cows and heifers to become too fat. This can lead to disastrous problems in the future for ketosis, fatty livers, poor dry matter intakes, and low production to name a few.

Average Farm Feed Costs For Handy Reference

To help farmers across the state to have handy reference of commodity input costs in their feeding operations for DHIA record sheets or to develop livestock feed cost data, here's last week's average costs of various ingredients as compiled from regional reports across the state of Pennsylvania.

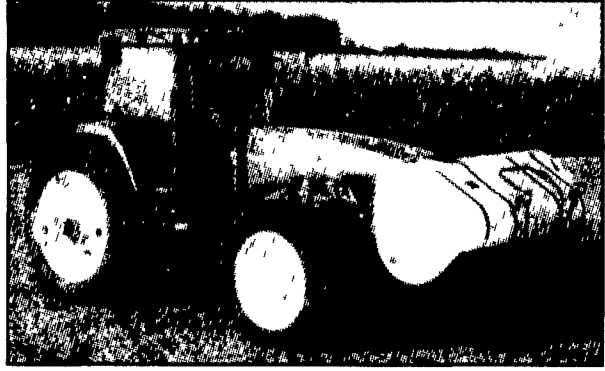
Remember, these are averages, so you will need to adjust your figures up or down according to your location and the quality of your crop.

- Corn, No.2y — 3.10 bu., 5.55 cwt.
- Wheat, No. 2 — 3.38 bu., 5.64 cwt.
- Barley, No. 3 — 2.33 bu., 4.99 cwt.
- Oats, No. 2 — 1.73 bu., 5.39 cwt.
- Soybeans, No. 1 — 6.71 bu., 11.21 cwt.
- Ear Corn — 81.40 ton, 4.07 cwt.
- Alfalfa Hay — 162.25 ton, 8.11 cwt.
- Mixed Hay — 151.25 ton, 7.56 cwt.
- Timothy Hay — 152.50 ton, 7.63 cwt.

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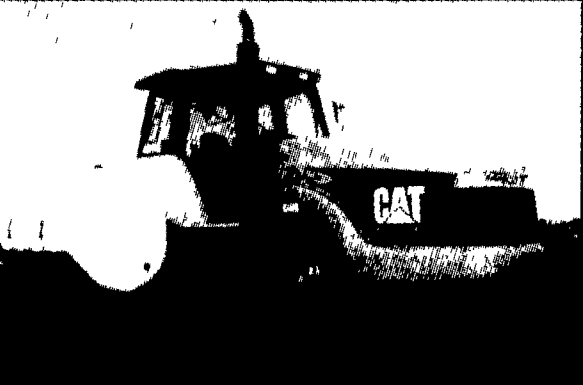


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