Milo for Laying Hens Efficient

no significant differences between corn and milo in rations for laying hens were found in two on-the-farm feeding trials

R. H. Adolph and C. R. Grau

Feeding trials—extending over two six-weeks periods—indicate that milo and corn are of equal value for laying hens, as measured by egg production, egg weight, mortality, culling, and feed efficiency. Although both grains are widely used, corn is usually more expensive than milo in California.

Because there was no available data on the extensive use of milo in a ration for laying birds a study was conducted to test the relative values of corn and milo in rations.

On each of five cooperating ranches two groups of birds of comparable age and stock were established. Total average number of hens on test was 2371 White Leghorns. There were two test periods of six weeks each. At the end of the first period, the group of birds on the five farms receiving the corn ration was switched to the milo ration; the other group of birds on the five farms was changed to the corn ration.

The only difference between the corn and milo rations was in the amounts of these two grains. The corn ration had 46.4% corn and 17.1% milo. The milo ration had 53.7% milo and 9.8% corn. The corn and milo portion of each ration thus comprised 63.5% of the total ration. The balance of 36.5% was the same for both rations and included meat scraps, soybean oil meal, barley, fish meal, alfalfa, and mineral and vitamin ingredient sources. The ration contained no wheat by-products, and the alfalfa was at a minimum level.

Chemical analysis showed an 18.03% protein content for milo ration and 17.43% protein for corn ration. The cost of the milo ration was 30¢ per 100 pounds less than the cost of the corn ration.

At the close of the first six weeks period the egg production of the birds on the corn ration was 71.7%; that of the birds on milo ration was 72.1%. After the second six weeks period—on switched rations—the corn ration group egg production was 69%; that of the milo ration group was 70.7%.

The average egg production for the 12 weeks of the trial was 70.4% by the corn ration group and 71.4% by the milo ration group. Production averaged 59.1 eggs of 1.96 ounces per bird for the corn ration group and 60 eggs at 1.98 ounces per bird for the milo ration group.

During the 12 weeks, 1.4% of the corn ration fed birds died and 4.3% were culled; in the milo ration group, 2.2% died and 5.6% were culled.

An average of 18 pounds of corn ration per bird and 17.9 pounds of milo ration per bird were used in the 12 weeks of the trial.

On the basis of mash consumed, the trial birds ate 3.7 pounds of corn base ration per dozen eggs and 3.6 pounds of milo base ration per dozen eggs produced.

This feeding trial indicates no marked differences in the results were obtained between the two rations. A detailed statistical analysis of egg production in which only the last ten days of each period were considered—to eliminate any carry-over effects from one ration to another—revealed no significant difference between the corn and the milo rations tested in these studies.

R. H. Adolph is Farm Advisor, University of California, San Diego County.
C. R. Grau is Associate Professor of Poultry Husbandry, University of California, Davis.

Feeding trials with laying hens on wire indicated milo in ration to be equal to corn in feed efficiency.