Protein Intake of Laying Hens

two levels of protein in diet for laying hens compared in tests in southern California

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Hens in individual cages laid as well on a medium protein intake as on a diet with a high protein intake level during a six-month test on two ranches in the Pomona area.

Many southern California poultrymen using individual cage housing followed the practice of feeding 17% to 19% protein, all mash rations and some poultry sources, consistently fed rations containing 20% or more protein.

With two co-operating poultrymen a test was set up to make a comparison between rations containing about 16% and 19% protein. All conditions, including housing, age of birds and sources of stock, were as near the same for birds on each ration and on each ranch as was possible.

A total of 292 hens was used on each ration on the two ranches. On one ranch a two-row cage house of 448 4½-months-old White Leghorn pullets was used. Two small houses of 68 Rock-Leghorn Cross hens, were as near the same for birds on each ration and on each ranch as was possible.

The rations were compared for about six months, beginning early in June and ending early in December of 1949.

These rations were set up to utilize the ingredients which were readily available and economical in price at the time the test was started. Neither were considered as ideal rations for all time, but both had the advantage of being in general use in southern California at that time.

The extreme spacings of 16 inches did show a difference in sugar content in that all cases but two the average per cent sugar of all replications of the 16-inch spacings was lower than any of the other plant spacings in these tests. The yield in tons of sugar per acre of the 16-inch spacings was also lower than any of the other spacing groups.

The populations in the given spacing groups varied considerably depending upon the row width, ranch and the adherence to the distance set. The greatest variations were in the four- and six-inch groupings. The other groupings were all nearly uniform under similar conditions.

Continued on page 13