



## **COMMERCIAL EGG TIP . . .**

### **PEARL MILLET FOR LAYERS: A NEW OPPORTUNITY**

It is well known that Georgia and the entire southeastern United States is a grain deficient area. The dramatic increase in poultry production in this region following WWII far outstripped the ability of the region to produce grain and soy. This situation has necessitated importation of grain from the mid-west, and consequently has increased the price of feed.

Periodically, initiatives are undertaken to increase grain production in the southeast. Most recently, considerable research has been directed toward evaluating both the agronomic and nutritional characteristics of pearl millet. Previous studies at the University of Georgia have demonstrated that pearl millet is an excellent feed grain for broilers as it combines a high level of metabolizable energy with a 50% increase in protein as compared to corn. Most strikingly, the level of the critical amino acid lysine is approximately 65% higher in pearl millet than in yellow corn.

An impediment to the use of pearl millet in Georgia poultry feeds has been the fact that most mills do not have two post-grinding bins for grain. Thus, the question arose as to whether pearl millet could be fed without grinding, as it is quite small in size. Previous studies with broiler chickens suggested there was no problem in digesting moderate amounts of whole pearl millet in the feed. The pelleting of virtually all broiler feeds would further contribute to a breakdown of the pearl millet. To test whether whole millet seeds could successfully be incorporated into non-pelleted layer feeds, a series of three studies was conducted at the Poultry Science Department of the University of Georgia.

In the first study, whole pearl millet was included in laying hen diets up to a level of 40%. Examination of excreta detected only traces of whole seeds, indicating virtually complete breakdown of pearl millet in the digestive tract. A second study compared the digestion of starch when millet was fed in either ground or intact form. Once again, as no differences in digestibility were noted, it can be assumed that whole pearl millet is satisfactorily digested. A final study checked as to

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whether the incorporation of whole millet might increase or decrease feed intake. After a 1 week acclimation period, however, there was no effect of the form of pearl millet on feed intake.

These results confirm previous indications that pearl millet is an excellent feed ingredient for poultry. As high levels can be fed in unground form, producers can consider the use of millet without concern about grinding. However, it should be noted that pearl millet is not a good source of xanthophyl pigments. Thus, if high yolk color is desired, the level of inclusion of pearl millet should perhaps be limited to 10-15%.



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\*Consult with your poultry company representative before making management changes.\*  
“Your local County Extension Agent is a source of more information on this subject”