



"PORCELAIN" EGG ALBUMIN (?) IN RINGNECK DOVES

by

Wilmer J. Miller

In times past (20-30 years) I boiled extra ringneck dove eggs from holding pens for a variety of reasons including eating, testing keeping quality, etc. I noticed that some egg whites were clear nearly glass-like and some were "chalky", or better, an opaque white, nearly like porcelain. During the last 15 years, I boiled more frequently for a protein boost to feed the finches and still noticed the sporadic porcelain like whites of some eggs. I kept attributing it to old versus fresh eggs or different boiling times, or predator stress, or whatever environmental happenstance might fit.

Why not postulate genetic differences of egg albumin? Chickens are known to differ in albumin tested by gel electrophoresis. I standardized my "boiling time" to 30 minutes at a medium high setting on the electric stove coil in the same pan every time. This takes about 12 minutes to even start a slow boil with the eggs in the tap water to start with. I collected eggs more often - as 3 times a week. There is still some environmental variation. How many eggs did I put in. Nevertheless, I now believe that the difference is genetic.

Most of the eggs from doves in holding pens are cracked, broken, or otherwise unsuitable. But still, I have tested 69 eggs in 3 months (April -Jun, 91). Nine of the 69 were "porcelain" type! About 13 %. Three of my 12 holding pens had females laying porcelain eggs. I even identified one female individual, 647E, a tangerine silky.

I need to identify more female doves and test the inheritance. Since males don't lay eggs for classification as porcelain type or not, such genetic tests are not easy. It is a "sex-limited" situation. But it can be tested. This is likely a 10 year project with my other commitments. Any one want to help? Test your female doves after you finish the breeding season. Can you classify your female doves?.....Call (515) 292-2308. Or write to

Wilmer J. Miller
218 Parkridge Circle
Ames, Iowa 50010

ADAN July/Aug 1991