



## North Carolina Cooperative Extension Service

NORTH CAROLINA STATE UNIVERSITY  
COLLEGE OF AGRICULTURE & LIFE SCIENCES

---

Extension Poultry Science • Scott Hall, Box 7608 • Raleigh, NC 27695-7608 • Tel: (919) 515-2621 FAX: (919) 515-7070

### 31st NORTH CAROLINA LAYER PERFORMANCE AND MANAGEMENT TEST

#### HATCH AND SEROLOGY SUMMARY

##### Entries:

Thirteen entries were accepted or acquired in accordance with the rules and regulations of the test. Eight white egg strains and four brown egg strains are participating.

##### Dates of Importance:

The eggs were set on November 16, 1993 and hatched on December 8, 1993. The chicks were all sexed according to their genetics (feather, color or vent) and vaccinated for Marek's disease before transfer to the brood/grow houses.

##### Date Collection:

The analysis of fertility and embryonic mortality was conducted on all eggs remaining in the hatch tray and on eggs removed at time of transfer. Tables 1 and 2 indicate the percentage of total eggs set. Table 1 shows the percent usable chicks, cull chicks, and residue of total eggs set. Table 2 shows the distribution of the residue by each embryonic category.

The serology report was obtained by collecting a blood sample from male chicks obtained from each strain. Samples were centrifuged and packaged for shipment to an independent lab. The following table gives the strain identification for the data contained in this report.

Piedmont Research Station  
31th North Carolina Layer Performance and Management Test  
February, 1994

Strain Letter	Computer Code	Strain Name
E	1	Hy Line (W-36)
F	2	Hy Line (W-77)
G	3	H & N (Nick Chick)
H	4	Bovans (White)
I	5	ISA (Experimental)
J	6	ISA (Babcock B 300)
K	7	Shaver (White)
L	8	Shaver 2000
M	9	Dekalb (Delta)
N	10	Hy Line (Brown)
O	11	ISA (Brown)
P	12	H & N (Brown Nick)
Q	13	Bovans (Brown)

**Hatch Comments:**

The eggs arrived at the Research Station in good condition. There were few broken eggs and the number of dirty eggs was greatly reduced compared to the previous test. The eggs from each of the strains were consistent in their size resulting in small chicks at the time of hatch.

**Serology Comments:**

Dr. David V. Rives  
Extension Veterinarian

We are able to get adequate serum from each of the 13 strains. The IBD titers were adequate in all the strains. Strains 5, 6, and 10 showed minimal variation among birds tested, indicating a very good breeder vaccination program.

Those strains with coefficients of variation (CV) above 50% level may want to reevaluate breeder vaccination programs.