

SUMMARY OF HATCH

29th NORTH CAROLINA LAYER PERFORMANCE AND MANAGEMENT TEST

The overall hatch of the flock was disappointing. This was probably due to two criteria. Less than optimal performance by the incubators as seen in variable hatch (as seen mainly in number of pips) between the machines for the same strains and poor egg handling during shipment to the test site for a few of the strains. All hatch residue was examined macroscopically for stage of embryological death. All percentages are expressed as percent of total eggs set. No conclusions can be made because of the problems encountered.

Strain	Eggs Set	% Infertile	% ED	% MD	% LD	% Pipped	% Culls Chicks	% Good Chicks	% Contam.	% Crack
1	3599	6.56	3.56	0.31	4.20	7.92	1.42	76.05	2.53	0.50
2	2878	7.09	3.47	0.17	4.00	10.98	2.19	72.10	3.02	0.56
3	2880	6.46	3.09	0.31	2.47	7.71	1.91	78.06	2.26	0.56
4	3526	6.35	3.98	0.63	4.31	3.28	0.83	80.62	3.09	0.60
5	3576	6.87	4.01	0.08	2.98	9.60	1.64	74.82	2.48	0.28
6	2855	6.35	3.29	0.10	3.22	14.21	2.24	70.57	2.03	0.28
7	2851	6.83	4.24	0.24	2.14	26.47	3.25	56.82	2.10	0.42
8	2157	8.44	8.20	0.60	9.97	10.10	1.07	61.62	3.71	0.60
9	2148	7.77	8.54	0.19	8.99	8.20	1.48	64.83	2.69	0.19
0	2119	8.45	7.52	0.29	9.68	9.96	1.83	62.27	4.15	0.93
A	1997	6.20	11.00	0.32	9.86	6.79	2.57	63.26	4.58	1.11
B	2126	5.63	6.00	0.97	8.49	4.56	1.15	73.20	5.04	0.90
C	2159	7.92	8.57	0.37	8.61	10.28	1.99	62.26	3.80	0.65
D	2158	7.69	5.14	0.56	6.07	4.26	1.02	75.26	2.50	0.65

SUMMARY OF SEROLOGY RESULTS
29th N.C. Layer Performance and Management Test

Fifteen male chicks from each strain in the test were bled via cardiac puncture on day of hatch. Sera from these samples were tested by ELISA for antibodies for infections disease virus (IBD), Myocoplama gallisepticum (MG) and M. synoviac (MS).

IBD results are summarized in the table below:

STRAIN	GEOMETRIC MEAN TITER (GMT)	COEFFICIENT OF VARIATION (CV)
1	5465	35.6
2	1550	56.1
3	3377	38.4
4	3301	61.0
5	7336	20.1
6	5152	29.1
7	3965	48.7
8	6145	30.3
9	3744	32.2
0	2743	49.4
A	5154	21.1
B	3456	32.4
C	4570	49.5
D	3682	39.7

These results are difficult to interpret without breeder flock age and vaccination schedules. However, groups with GMT's below 3000 could be considered susceptible to early IBD challenge. A CV of greater than 25 indicates variability within the strain, with some chicks susceptible even though the GMT may be adequate.

All strains were negative for antibodies to MG. Four of fifteen Strain 7 chicks were positive for MS antibodies, suggesting the presence of MS in the breeders.