

AGRICULTURAL EXTENSION SERVICE
NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

SCHOOL OF AGRICULTURE AND LIFE SCIENCES

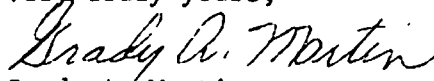
October 7, 1968

OFFICE OF EXTENSION POULTRY SCIENCE
SCOTT HALL
Box 5307 ZIP 27607

I am enclosing the report of the growing period for the Tenth North Carolina Random Sample Laying Test which you have requested. Please circulate it among your associates in order that maximum use of it may be made. If additional copies are needed, the request should be sent to Mr. T. R. Burleson, Piedmont Research Station, Route #6, Box 420, Salisbury, N. C., 28144.

The design of this test provides each entry with two pens of 88 sexed pullets reared on hardwood slat floors and two pens of 88 sexed pullets reared in an area that has about 37% hardwood slat floor and about 63% concrete floor with shavings litter. Floor space allowance is about one and $1\frac{1}{2}$ square feet per bird, respectively. At 150 days, two pens of 50 birds are placed on hardwood slats at one square foot, two pens of 50 birds are housed in half slat-half litter pens at $1\frac{1}{2}$ sq. ft. and four blocks of 26 birds are placed in 10"x18" cages at two birds per cage.

Very truly yours,



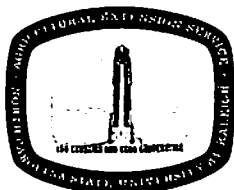
Grady A. Martin
Extension Poultry Specialist

TENTH NORTH CAROLINA RANDOM SAMPLE LAYING TEST
Growing Report
March 29, 1968, through August 25, 1968

The North Carolina Random Sample Laying Tests are conducted under the auspices of the Agricultural Extension Service of North Carolina State University and the North Carolina Department of Agriculture. Mr. T. R. Burleson is Resident Manager of the Tests, and Dr. G. A. Martin is Project Leader. The purpose of the Tests is to assist poultrymen in evaluating stocks of commercial layers.

Samples of 1,080 freshly gathered eggs were taken at randomly selected supply flocks or by random sampling from egg rooms when nest sampling was not feasible. Public employees in agriculture selected the samples, sealed the cases, and sent them to the test site where all eggs were incubated. 352 sexed pullets (when available) were placed in four pens as described above. First week mortality, sexing errors and accidental deaths were not charged against the entry.

All-mash rations were mixed at the test site. A starting ration was fed for the first 56 days and a growing ration for the last 94 days of the period.



COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS. NORTH CAROLINA STATE UNIVERSITY AT RALEIGH. 100 COUNTIES AND U. S. DEPARTMENT OF AGRICULTURE COOPERATING

All birds were debeaked early, vaccinated for Newcastle and bronchitis in water at 5 days, 5 weeks and 17 weeks, vaccinated for Pox via wing web at 14 weeks and vaccinated for Avian encephalomyelitis at 20 weeks. Birds having shavings litter were vaccinated for coccidiosis at 5 days and low level trithiodol was added to the feed to 9 weeks. Some mortality was experienced due to Blackhead and Coccidiosis in litter pens and birds were treated.

The tables list the combined data for the entry (Table 10G-C) and the data for each type of housing (Tables 10G-S & L). The entry number was drawn at random. The breeder is fully identified later with stock identification, availability of flock list, number of birds in flocks sampled, sampling procedure and source of sample. Net pullets at one week excludes first week mortality, sexing errors and accidental deaths. Mortality, 8 through 150 days, is the average of pen data. Average feed per pullet for 150 days is based upon bird days and does not charge against survivors the feed consumed by birds that died. Average body weight at 150 days is the average weight of the survivors. Feed and chick cost per pullet housed distributes the total cost of the net pullets at one week and the feed which they consumed equally among the survivors and, therefore, includes the cost of mortality. Feed costs are based upon 3-year averages of monthly price quotations from the N. C. Dept. of Agriculture. Chick prices are the 3-year averages of prices quoted by distributors. Average eggs per pullet at 150 days indicates general maturity level of the entry at housing.

COMBINED DATA GROWING PERIOD - TABLE 10 G-C

Entry No.	Breeder	Net Pullets at 1 week	Mortality 8-150 da. %	Av. lbs of Feed/pullet 150 days	Av. Body Wt at 150 days	Feed & Chick Cost/Pullet Housed	Av. Eggs per Pullet to 150 days
1	NCRPB (CRB)	320	15.0	16.5	3.1	1.21	0.04
2	Welps (937)	309	4.2	16.2	3.1	1.07	1.15
3	Tatum (T-100)	331	9.8	16.9	3.2	1.21	0.23
4	Hubbard (Gld. Com.)	350	3.7	18.8	3.8	1.18	0.23
5	Kimber (K-137)	345	7.0	16.4	3.0	1.10	0.17
6	Experimental A	311	4.6	16.3	3.1	1.02	0.09
7	Kimber (K-141)	326	8.5	15.3	3.0	1.06	0.28
8	Hy-Line (934-E)	331	6.8	16.0	2.9	1.18	0.09
9	Sturtevant (Sex Lk.)	255	3.5	21.0	4.5	1.24	0.03
10	Arbor Acres (Harco SL)	332	3.6	20.2	4.2	1.20	0.06
11	Shaver (*X288)	346	8.6	16.8	3.4	1.12	0.33
12	Parks (Keystone B-1)	305	7.7	17.8	3.4	1.17	0.44
13	Ideal (236)	316	2.2	16.6	3.2	1.12	0.15
14	Cashman (Hi-Cash)	344	8.3	16.9	3.1	1.12	0.02
15	Davis (Sex Link)	286	5.3	19.9	4.3	1.23	0.08
16	Stone (H-56)	332	6.0	17.1	3.2	1.05	0.20
17	Ind.Fm.Bu. (P-55)	302	8.6	16.4	3.0	1.13	0.18
18	Davis (RIR)	346	3.8	19.6	4.1	1.20	0.05
19	Babcock (B-300)	345	11.1	16.6	3.0	1.13	0.61
20	Garber (GX291)	346	6.4	17.5	3.5	1.12	0.44
	Average	324	6.7	17.3	3.4	1.14	0.24

GROWING PERIOD - TABLE 10G - S&L

Entry No.	Breeder	Net Pullets at one week	Mortality 8-150 da. %	Av. lbs of Feed/pullet 150 days	Av. Body Wt. at 150 days	Feed & Chick Cost/Pullet Housed	Av. Eggs per Pullet to 150 days
<u>Slats</u>							
1	N C R P B (CRB)	161	3.8	16.8	3.2	1.07	0.08
2	Welps (937)	153	3.9	17.1	3.2	1.10	1.60
3	Tatum (T-100)	161	5.0	17.1	3.2	1.15	0.35
4	Hubbard (Gld. Comet)	175	0.0	18.4	3.7	1.12	0.07
5	Kimber (K-137)	173	1.7	16.4	3.1	1.04	0.11
6	Experimental A	159	1.2	16.5	3.1	1.00	0.05
7	Kimber (K-141)	160	4.3	16.3	3.1	1.05	0.28
8	Hy-Line (934-E)	159	4.3	16.5	3.0	1.17	0.04
9	Sturtevant (Sex Link)	127	3.9	21.0	4.6	1.24	0.02
10	Arbor Acres (Harco SL)	168	1.8	19.9	4.1	1.17	0.02
11	Shaver (*X288)	172	2.9	17.7	3.5	1.04	0.41
12	Parks (Keystone B-1)	152	3.9	17.5	3.4	1.11	0.46
13	Ideal (236)	157	1.3	17.0	3.2	1.10	0.02
14	Cashman (Hi-Cash)	174	1.8	17.2	3.2	1.07	0.02
15	Davis (Sex Link)	174	1.7	19.2	4.2	1.16	0.03
16	Stone (H-56)	165	4.3	16.9	3.2	1.02	0.14
17	Ind.Fm. Bu. (P-55)	150	5.3	16.2	3.0	1.09	0.04
18	Davis (RIR)	174	1.7	19.3	4.0	1.17	0.01
19	Babcock (B-300)	172	7.0	16.3	2.9	1.06	0.61
20	Garber (GX 291)	172	4.1	18.0	3.4	1.10	0.60
	Average	163	3.2	17.6	3.4	1.10	0.25

Litter-Slats

1	N C R P B (CRB)	159	26.2	16.2	3.1	1.35	0.01
2	Welps (937)	156	4.5	15.3	3.0	1.04	0.69
3	Tatum (T-100)	170	14.7	16.8	3.2	1.26	0.12
4	Hubbard (Gld. Comet)	175	7.4	19.2	3.9	1.24	0.39
5	Kimber (K-137)	172	12.2	16.4	3.0	1.15	0.22
6	Experimental A	152	7.9	16.1	3.1	1.05	0.13
7	Kimber (K-141)	166	12.6	14.4	2.9	1.06	0.27
8	Hy-Line (934-E)	172	9.3	15.6	2.8	1.20	0.14
9	Sturtevant (Sex Lk)	128	3.2	21.1	4.4	1.24	0.04
10	Arbor Acres (Harco SL)	164	5.4	20.5	4.4	1.24	0.10
11	Shaver *X 288)	174	14.4	16.8	3.3	1.20	0.24
12	Parks (Keystone B-1)	153	11.6	18.1	3.4	1.23	0.43
13	Ideal (236)	159	3.1	16.2	3.2	1.13	0.28
14	Cashman (Hi-Cash)	170	14.8	16.7	3.1	1.18	0.02
15	Davis (Sex Link)	112 ^a	8.9	20.6	4.4	1.29	0.13
16	Stone (H-56)	167	7.8	17.3	3.2	1.08	0.25
17	Ind.Fm.Bu (Prin.55)	152	11.8	16.6	3.0	1.18	0.32
18	Davis (RIR)	172	5.8	19.9	4.1	1.24	0.09
19	Babcock (B-300)	173	15.1	16.8	3.1	1.20	0.61
20	Garber (GX 291)	174	8.7	17.0	3.6	1.13	0.27
	Average	161	10.3	17.4	3.4	1.18	0.24

^aa now-departed dog killed 64 chicks on April 19.

Breeder	Stock Identification	Sample Procedure*	Source of Sample
Arbor Acres Farm, Inc. Glastonbury, Conn. 06033	Harco Sex Link RIRxBPR BX	B	Arbor Acres Farm, P.O.Box 2928 Asheville, N. C. 28802
Babcock Poultry Farm, Inc., P.O. Box 280, Ithaca, N.Y. 14850	Babcock B-300 WL 3wX	A	Harrold's Chicks, Inc. Winterville, Ga. 30683
Cashman Leghorn Farms Webster, Kentucky 40176	Cashman Hi-Cash WL IN	A	Cashman Leghorn Farms, Webster, Ky. 40176
Joe K. Davis Hatchery P.O.Box 27, Earl, N.C. 28038	Davis RIR RIR 3wX	A	Joe K. Davis Hatchery Box 27, Earl, N. C. 28038
Joe K. Davis Hatchery P.O.Box 27, Earl, N. C. 28038	Combiner Sex Link RIRxBPR BX	A	Joe K. Davis Hatchery Box 27, Earl, N. C. 28038
Experimental	WL SX	-	Selected by Breeder
Garber Poultry Breeding Farm Modesta, Calif. 95351	Garber GX-291 CGxWL BX	A	Joe K. Davis Hatchery Box 27, Earl, N. C. 28038
Hubbard Farms, Inc. Walpole, N. Hamp. 03608	Hubbard Golden Comet NHxSyn BX	A	Hubbard Farms Statesville, N. C. 28677
Hy-Line Poultry Farms Des Moines, Io. 50309	Hy-Line 934-E 4wX INX	B	Wallace Hatchery, Inc. Box 2006 St. Petersburg, Fla. 33702
Ideal Poultry Breeding Farm, Inc. P.O.Box 710, Cameron, Tex. 76520	Ideal 236 SynxWL 4wBX	C	Ideal Poultry Breeding Farm, Inc Box 710, Cameron, Texas 76520
Ind. Fm. Bu. Coop. Assn, Inc. Indianapolis, Inc. 46204	Princess 55 WL SX	B	Co-op Breeding & Research Farm Lafayette, Ind. 47900
Kimber Farms, Inc., P.O.Box 2008 Fremont, Calif. 94536	Kimber K-137 WL SX	A	Nichols Poultry Farm, Inc., R#2, Jefferson City, Tenn. 37760
Kimber Farms, Inc., P.O.Box 2008 Fremont, Calif. 94536	Kimber K-141 WL SX	C	Nichols Poultry Farm, Inc., R#2, Jefferson City, Tenn. 37760
North Central Poul. Breeding Lab. Lafayette, Ind. 47900	Cornell Randombred WL RB	-	Selected at Lafayette, Inc.
Parks Poultry Farm Altoona, Pa. 16601	Parks Keystone B-1 WL 4wX	C	Parks Poultry Farm Altoona, Pa. 16601
Shaver Poultry Breeding Farm, Ltd. Box 400, Gault, Ontario, Canada	Starcross 288 WL SX	A	Mid-Valley Hatchery Dayton, Va. 22821
Stone's Poultry Breeding Farm Dinuba, Calif. 93618	Stone's H-56-E WL SX	A	Stone's Poultry Breeding Farm Dinuba, Calif. 93618
Sturtevant Farms, Inc. Halifax, Mass. 02338	Sturtevant Sex Link RIRxBPR BX	B	Sturtevant Farms, Inc. Halifax, Mass. 02338
Tatum Farms Dawsonville, Ga. 30534	Tatum's T-100 WL SX	A	Tatum Farms Dawsonville, Ga. 30534
Welp's Breeding Farm Bancroft, Io. 50517	Welp Line 937 WL 3wX	A	Welp's Breeding Farm Bancroft, Io. 50517

*A = nest sample; B - egg room sample; and C - incubator tray sample.