

AGRICULTURAL EXTENSION SERVICE
NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

SCHOOL OF AGRICULTURE AND LIFE SCIENCES

OFFICE OF EXTENSION POULTRY SCIENCE

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I am enclosing the report of the growing period for the Ninth 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. S. J. Childs, Jr., Piedmont Research Station, Route #6, 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, 2 pens of 50 birds are housed in half slat-half litter pens at $1\frac{1}{2}$ sq. ft. and 4 blocks of 26 birds are placed in 10"x18" cages at 2 birds per cage.

Very truly yours,

Grady A. Martin
Grady A. Martin
Extension Poultry Specialist

NINTH NORTH CAROLINA RANDOM SAMPLE LAYING TEST

Growing Report

March 24, 1967, through August 20, 1967.

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. S. J. Childs, Jr., 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.



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

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. 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.

The tables list the combined data for the entry (Table 9 G-C) and the data for each type of housing (Tables 9 G-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 the feed consumed by birds that died against survivors. 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. Department of Agriculture. Chick prices are the 3-year averages of prices quoted by the distributors. Average eggs per pullet at 150 days indicates the general maturity level of the entry at housing.

Combined data		GROWING PERIOD - TABLE 9 G-C					
Entry No.	Breeder	Net Pullets at one week	Mortality 8-150 da. %	Av. lbs or Feed/pul-let 150 da.	Av. Body Wt. at 150 da.	Feed & Chick Cost/Pullet Housed	Av. Eggs per pullet to 150 da.
1	Davis (Sex Lk.)	284	2.4	21.4	4.7	\$1.29	0.04
2	Kimber (K-137)	340	1.8	16.7	3.1	1.11	0.23
3	Whelp's (937)	287	1.7	16.9	3.0	1.11	0.12
4	Shaver (*X288)	278	5.4	18.5	3.5	1.20	0.29
5	Ind.Fm.Bu(Prin.55)	292	4.8	16.7	3.1	1.15	0.04
6	Garber (GX 291)	291	5.4	18.8	3.8	1.19	0.32
7	Hubbard (Gld.Comet)	328	1.5	20.7	4.2	1.26	0.15
8	Colonial (365-B)	303	4.9	17.2	3.2	1.18	0.41
9	Cashman (Hi-Cash)	269	4.8	18.4	3.4	1.20	0.02
10	Heisdorf&N (Nick Ck)	351	2.9	16.1	3.0	1.03	0.03
11	Kimber (K-141)	298	6.8	16.8	3.2	1.15	0.08
12	Stone (H-56)	300	5.7	17.5	3.3	1.09	0.12
13	Hy-Line (934-E)	333	2.4	17.1	3.0	1.23	0.02
14	Ideal (236)	328	3.6	17.0	3.1	1.15	0.10
15	Babcock (B-300)	337	4.8	17.1	3.2	1.13	0.69
16	Hy-Line (934)	334	1.8	16.6	3.0	1.20	0.13
17	Honegger (Layers)	317	3.8	17.8	3.3	1.16	0.31
18	Davis (RIR)	306	2.7	21.7	4.5	1.25	0.04
19	Sturtevant (Sex Lk)	286	3.8	22.0	4.7	1.30	0.07
20	Parks (Keystone)	348	4.6	17.9	3.5	1.17	0.06
Average		311	3.8	18.1	3.5	1.18	0.16

GROWING PERIOD - TABLE 9 G - S&L

Slats

Entry No.	Breeder	Net Pul-lets at 1 week	Mortality 8-150 da. (%)	Av. lbs. Feed/Pullet (150 da.)	Av. Body Wt. at 150 da.	Feed & Chick Cost/Pullet Housed	Av. Eggs/Pullet to 150 days
1	Davis (Sex Lk)	143	3.3	21.0	4.8	\$1.30	0.00
2	Kimber (K-137)	169	2.4	17.1	3.3	1.13	0.24
3	Welp's (937)	145	1.4	17.0	3.1	1.11	0.13
4	Shaver (*X288)	139	8.7	18.7	3.5	1.25	0.34
5	Ind.Fm.Bu (Prin.55)	146	6.9	16.7	3.1	1.17	0.02
6	Garber (GX291)	147	5.4	18.8	3.9	1.19	0.22
7	Hubbard (Gld. Comet)	172	1.7	20.7	4.3	1.25	0.11
8	Colonial (365-B)	154	3.9	17.3	3.2	1.18	0.36
9	Cashman (Hi-Cash)	136	5.9	18.3	3.5	1.21	0.01
10	Heisdorf & N (Nick Ck)	176	3.4	16.0	3.0	1.03	0.00
11	Kimber (K-141)	145	7.6	16.9	3.2	1.16	0.11
12	Stone (H-56)	149	6.8	18.0	3.3	1.11	0.18
13	Hy-Line (934-E)	172	1.7	17.5	3.1	1.24	0.01
14	Ideal (236)	165	4.3	16.8	3.1	1.15	0.15
15	Babcock (B-300)	166	6.0	17.2	3.3	1.14	0.86
16	Hy-Line (934)	172	2.9	17.1	3.1	1.23	0.07
17	Honegger (Layers)	158	3.8	18.3	3.4	1.18	0.34
18	Davis (RIR)	155	1.9	21.8	4.5	1.21	0.03
19	Sturtevant (Sex Lk)	144	4.9	22.4	4.8	1.34	0.02
20	Parks (Keystone)	168	4.8	17.7	3.5	1.16	0.02
Average		156	4.4	18.3	3.6	1.19	0.16

Litter-Slats

1	Davis (Sex Lk)	141	1.4	21.8	4.7	1.29	0.07
2	Kimber (K-137)	171	1.2	16.3	3.0	1.08	0.23
3	Welp's (937)	142	2.1	16.8	2.9	1.11	0.10
4	Shaver (*X288)	139	2.1	18.3	3.5	1.14	0.24
5	Ind.Fm.Bu (Prin.55)	146	2.7	16.7	3.2	1.13	0.06
6	Garber (GX291)	144	5.5	18.8	3.7	1.18	0.42
7	Hubbard (Gld. Comet)	156	1.3	20.7	4.2	1.26	0.18
8	Colonial (365-B)	149	6.0	17.1	3.3	1.18	0.46
9	Cashman (Hi-Cash)	133	3.8	18.4	3.4	1.18	0.02
10	Heisdorf&N (Nick Gk)	175	2.3	16.1	2.9	1.03	0.06
11	Kimber (K-141)	153	5.9	16.8	3.1	1.14	0.06
12	Stone (H-56)	151	4.6	17.1	3.2	1.06	0.05
13	Hy-Line (934-E)	161	3.1	16.6	2.9	1.21	0.02
14	Ideal (236)	163	3.0	17.3	3.2	1.16	0.05
15	Babcock (B-300)	171	3.5	17.0	3.1	1.12	0.52
16	Hy-Line (934)	162	0.6	16.1	3.0	1.17	0.19
17	Honegger (Layers)	159	3.8	17.4	3.3	1.13	0.29
18	Davis (RIR)	151	3.4	21.6	4.5	1.29	0.04
19	Sturtevant (Sex Lk)	142	2.8	21.6	4.6	1.27	0.12
20	Parks (Keystone)	180	4.4	18.2	3.4	1.18	0.09
Average		154	3.2	18.0	3.5	1.17	0.16

Breeder	Stock Identification	Sample Proced.*	Source of Sample
Babcock Poultry Farm, Inc. Box 280, Ithaca, N. Y.	Babcock B-300 WL 3wX	A	Harrold's Hatchery Winterville, Ga.
Cashman Leghorn Farms Webster, Kentucky	Cashman Hi-Cash WL INX	A	Cashman Leghorn Farms Webster, Ky.
Colonial Poultry Farms, Inc. Pleasant Hill, Missouri	True-Line 365-B WL INX	A	Colonial Poultry Farms Inc., Cullman, Ala.
Joe K. Davis Hatchery Earl, N. C.	Davis RIR SX	A	Joe Davis Hatchery Earl, N. C.
Joe K. Davis Hatchery Earl, N. C.	Combiner Sex-Link RIRxBPR BX	A	Joe Davis Hatchery Earl, N. C.
Garber Poultry Breeding Farm Modesta, California	Garber GX 291 CGxWL	A	Joe Davis Hatchery Earl, N. C.
Heisdorf & Nelson Farms Kirkland, Washington	H&N "Nick Chick" WL SX	A	J. C. Castlebury Poultry Farm, Apex, N. C.
Honegger Farms Co., Inc. Forrest, Illinois	Honegger Layers WL 3wX	A	Fred Haley Hatchery, Inc. Canton, Ga.
Hubbard Farms, Inc. Walpole, N. H.	Hubbard Golden Comet NHxSyn. BX	A	Hubbard Farms, Inc. Statesville
Hy-Line Poultry Farms Des Moines, Iowa	Hy-Line 934 IBX	A	Tar Heel Chicks, Inc. Monroe, N. C.
Hy-Line Poultry Farms Des Moines, Iowa	Hy-Line 934-E IBX	A	Tar Heel Chicks, Inc. Monroe, N. C.
Ideal Poultry Breeding Farms, Inc. Box 710, Cameron, Texas	Ideal 236 4wBX	A	Ideal Poultry Breeding Farm, Cameron, Texas
Ind. Farm Bureau Cooperative, Indianapolis, Ind.	Princess 55 WL SX	A&B	Cooperative Breeding Re- search Fm. Lafayette, Ind.
Kimber Farms, Inc. Fremont, California	Kimber K-137 WL SX	A	Hubbard Farms, Inc. Statesville, N. C.
Kimber Farms, Inc. Fremont, California	Kimber K-141 WL SX	A	Kimber Farms, Inc. Fremont, California
Parks Poultry Farm Altoona, Pa.	Parks Keystones B-1 WL SX	A	Parks Poultry Farm Altoona, Pa.
Shaver Poul. Breeding Fms. Ltd. Galt, Ontario, Canada	Shaver Starcross 288 WL 3wX	B	Mid-Valley Hatchery Dayton, Va.
Stone's Poultry Breeding Farm Dinuba, California	Stone's H-56 WL SX	A	E. H. Underwood Bogart, Ga.
Sturtevant Farms Halifax, Mass.	Sturtevant Black Sex Links RIRxBPR	B	Sturtevant Farms Halifax, Mass.
Welp's Breeding Farm Bancroft, Iowa	Welp Line 937 WL SX	A	R. G. Smith Flowery Branch, Ga

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