



MEZINÁRODNÍ TESTOVÁNÍ DRŮBEŽE
státní podnik, ÚSTRAŠICE

390 02 Tábor 2

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**2nd part fattening test of the final product of LI.
international test of parents from of broilers**

1. 2. 2023 - 5. 3. 2023

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Ing. Markéta Krekulová

Ústrašice, April 2023

1 List of participants

| Sample | Cross | Breeding organization | State |
|--------|--------|-----------------------|---------|
| 1 | xxxxxx | xxxxxxx | xxxxxxx |
| 2 | xxxxxx | xxxxxxx | xxxxxxx |
| 3 | xxxxxx | xxxxxxx | xxxxxxx |
| 4 | xxxxxx | xxxxxxx | xxxxxxx |
| 5 | xxxxxx | xxxxxxx | xxxxxxx |
| 6 | xxxxxx | xxxxxxx | xxxxxxx |
| 7 | xxxxxx | xxxxxxx | xxxxxxx |
| 8 | xxxxxx | xxxxxxx | xxxxxxx |
| 9 | xxxxxx | xxxxxxx | xxxxxxx |
| 10 | xxxxxx | xxxxxxx | xxxxxxx |
| 11 | xxxxxx | xxxxxxx | xxxxxxx |
| 12 | xxxxxx | xxxxxxx | xxxxxxx |
| 13 | xxxxxx | xxxxxxx | xxxxxxx |
| 14 | xxxxxx | xxxxxxx | xxxxxxx |
| 15 | xxxxxx | xxxxxxx | xxxxxxx |

2 Basic tests information

2.1 The basic dates

setting in the hatchery:

10 January 2023

beginning of test:

1 February 2023

end of the test:

5 March 2023

2.2 Location of the test

Mezinárodní testování drůbeže, s.p. Ústrašice, Czech Republic

3 Material and methods

3.1 Material

There were 15 different breeds in this test. Each sample consisted of 810 hatching eggs. 560 broilers were sexed and placed always 280 females (in two pens) and 280 males (in two pens).

The parent flock is 43 weeks old at the time of hatching eggs collection.

3.2 Housing system

Pullets were kept in windowless house with full control of the environment. They were kept in deep litter system. Manually filled tube feeders and nipple automatic drinkers were used.

3.3 Lighting programme

Pullets were kept in windowless house. All the birds were submitted to the following lighting programme.

| Age | Hours of light | Hours of darkness |
|-------------|----------------|-------------------|
| Day 1 – 7 | 23 | 1 |
| Day 8 – 29 | 18 | 6 |
| Day 30 – 32 | 23 | 1 |

3.4 Stocking density

17,2 broilers per square meter

3.5 Feeding

Feed was produced in xxxxx

Day 1 – 10 Starter (BR1)

Day 11 – 21 Grower (BR2-A)

Day 22 – 28 Grower (BR2-B)

Day 29 – 32 Finisher (BR3)

Diet formulas

| | Starter BR1 | Grower BR2-A | Grower BR2-B | Finisher BR3 |
|--------------------------------|--------------------|---------------------|---------------------|---------------------|
| Age | Days 1 - 10 | Days 11 - 21 | Day 22 - 28 | Day 29 - 32 |
| Components (%) | | | | |
| Wheat | 41.42 | 48.42 | 50.08 | 57.12 |
| Maize | 15.00 | 13.00 | 13.00 | 10.00 |
| Soybean extr. groats | 31.50 | 31.85 | 29.95 | 24.80 |
| Soybean extr. | 4.00 | - | - | - |
| Fish meal | 1.50 | - | - | - |
| MCP – monocalciumphosphate | 0.47 | 0.30 | 0.17 | 0.16 |
| Calcium carbonate | 1.47 | 1.13 | 1.12 | 1.13 |
| Salt | 0.28 | 0.24 | 0.22 | 0.26 |
| Soybean oil | 2.46 | 2.50 | 2.50 | 2.62 |
| Animal fat | - | 0.87 | 1.28 | 2.50 |
| Sodium sulfate | 0.13 | 0.10 | 0.11 | 0.08 |
| Premixes of amino acid | 0.85 | 0.83 | 0.73 | 0.86 |
| Vitamin and mineral supplement | 0.92 | 0.76 | 0.84 | 0.47 |
| Nutrient content | | | | |
| Crude protein (g/kg) | 230.21 | 212.94 | 206.19 | 188.42 |
| Fat (g/kg) | 51.60 | 52.10 | 56.13 | 68.62 |
| Lysine dig. (g/kg) | 12.82 | 11.68 | 11.30 | 10.34 |
| Methionine dig. (g/kg) | 6.27 | 5.68 | 5.44 | 4.97 |
| Ca phyt. (g/kg) | 9.76 | 7.81 | 7.52 | 7.37 |
| P dig. (g/kg) | 4.51 | 3.90 | 3.61 | 3.50 |
| Vitamin A (IU/kg) | 15000 | 10000 | 10000 | 10000 |
| Vitamin D3 (IU/kg) | 5000 | 5000 | 5000 | 5000 |
| ME (MJ/kg) | 12.45 | 12.70 | 12.90 | 13.46 |

3.6 Veterinary precautions

The chicken house was disinfected by xxxxx before the chick placement. On the first days old chickens was applied to the water solution of permanganate. On days 1 and 12 chickens were vaccinated with xxxxx. xxxxx treatment was initiated on day 3 due to higher mortality.

4 Parameters recorded

4.1 Live weight

Live weight was measured on days 1 (all the birds in each pen were weighed altogether), 7 and 14 (20 % of the birds were weighed altogether, without fasting). On day 32 birds were weighed individually, after 12 hours of fasting.

4.2 Feed conversion ratio (FCR)

Feed conversion ratio was calculated as feed consumption per 1 kg of live weight for the periods 1 – 14 days and 1 – 32 days.

4.3 Mortality

All pens were checked three times a day to see if there were any dead or ill birds. Dead chickens were registered by date and reason of mortality on the day of death.

4.4 Carcass analysis

The carcass analysis was done on 20 cocks and 20 hens per each genotype on day 32. Breast muscles was weighed without skin and thigh muscles with bone and skin.

4.5 Statistical analyses

Performance results of live weight at the age of 32 days were statistically evaluated.

5 Results

| | |
|------------|---|
| Tab. No. 1 | Hatchability |
| 2a | Broiler results at the age of 7 days |
| 2b | Broiler results at the age of 14 days |
| 2c | Broiler results at the age of 32 days |
| 3a | Mortality during growing period at the age of 14 days |
| 3b | Mortality during growing period at the age of 32 days |
| 4 | Results of carcass analysis |
| 5a | Statistical analysis – cocks |
| 5b | Statistical analysis – hens |

Hatchability**Tab. No. 1**

Test: 51

Part fattening: 2

| Cross | Sample | Fertility | Hatchability | | Birds housed | Average weight | | |
|-------|--------|-----------|--------------|-------|--------------|----------------|-------|-------|
| | | | Set | Fert. | | hatch. eggs | 1-day | |
| | | % | % | % | | | ♂ | ♀ |
| | | | | | | g | g | g |
| XXXXX | 1 | 99.14 | 87.28 | 88.04 | 560 | 64.67 | 45.91 | 45.31 |
| XXXXX | 2 | 99.14 | 89.01 | 89.79 | 560 | 67.57 | 45.39 | 45.53 |
| XXXXX | 3 | 97.41 | 88.64 | 91.00 | 560 | 66.70 | 44.30 | 43.74 |
| XXXXX | 4 | 98.40 | 83.46 | 84.82 | 560 | 64.49 | 44.96 | 44.55 |
| XXXXX | 5 | 97.90 | 88.89 | 90.79 | 560 | 66.07 | 43.29 | 43.04 |
| XXXXX | 6 | 96.42 | 84.69 | 87.84 | 560 | 67.43 | 45.94 | 45.94 |
| XXXXX | 7 | 96.54 | 83.83 | 86.83 | 560 | 64.56 | 46.33 | 45.56 |
| XXXXX | 8 | 97.78 | 83.46 | 85.35 | 560 | 66.37 | 46.40 | 45.70 |
| XXXXX | 9 | 97.04 | 86.42 | 89.06 | 560 | 66.89 | 45.53 | 45.59 |
| XXXXX | 10 | 98.77 | 89.63 | 90.75 | 560 | 63.28 | 42.83 | 43.01 |
| XXXXX | 11 | 98.52 | 87.16 | 88.47 | 560 | 63.43 | 43.78 | 43.71 |
| XXXXX | 12 | 97.53 | 83.95 | 86.08 | 560 | 67.31 | 45.59 | 45.88 |
| XXXXX | 13 | 96.91 | 82.10 | 84.71 | 560 | 67.23 | 45.59 | 46.01 |
| XXXXX | 14 | 99.01 | 89.63 | 90.52 | 560 | 64.01 | 44.86 | 44.93 |
| XXXXX | 15 | 98.02 | 82.22 | 83.88 | 560 | 67.36 | 47.41 | 46.92 |

This is the true fertility (broken eggs) not the candling fertility.

Broiler results at the age of 7 days

Tab. No. 2a

Test: 51

Part fattening: 2

| Cross | Sample | Average live weight at 7 days | | | | | | | | |
|-------|--------|-------------------------------|-------|-------------|-----------|-------|-------------|-----------|------|-------------|
| | | male | | | female | | | average | | |
| | | mortality | | live weight | mortality | | live weight | mortality | | live weight |
| | | birds | % | g | birds | % | g | birds | % | g |
| XXXXX | 1 | 1 | 0.71 | 204.17 | 17 | 12.14 | 181.67 | 18 | 3.21 | 193.25 |
| XXXXX | 2 | 12 | 8.57 | 205.83 | 9 | 6.43 | 198.33 | 21 | 3.75 | 202.06 |
| XXXXX | 3 | 6 | 4.29 | 203.33 | 5 | 3.57 | 195.00 | 11 | 1.96 | 199.16 |
| XXXXX | 4 | 2 | 1.43 | 202.50 | 10 | 7.14 | 191.67 | 12 | 2.14 | 197.16 |
| XXXXX | 5 | 9 | 6.43 | 206.67 | 25 | 17.86 | 198.33 | 34 | 6.07 | 202.63 |
| XXXXX | 6 | 15 | 10.71 | 205.00 | 15 | 10.71 | 195.83 | 30 | 5.36 | 200.42 |
| XXXXX | 7 | 3 | 2.14 | 201.67 | 6 | 4.29 | 194.17 | 9 | 1.61 | 197.94 |
| XXXXX | 8 | 7 | 5.00 | 201.67 | 11 | 7.86 | 196.67 | 18 | 3.21 | 199.19 |
| XXXXX | 9 | 8 | 5.71 | 205.00 | 20 | 14.29 | 200.00 | 28 | 5.00 | 202.56 |
| XXXXX | 10 | 1 | 0.71 | 165.00 | 3 | 2.14 | 161.67 | 4 | 0.71 | 163.34 |
| XXXXX | 11 | 0 | 0.00 | 158.33 | 3 | 2.14 | 151.67 | 3 | 0.54 | 155.02 |
| XXXXX | 12 | 6 | 4.29 | 205.83 | 12 | 8.57 | 199.17 | 18 | 3.21 | 202.54 |
| XXXXX | 13 | 5 | 3.57 | 203.33 | 34 | 24.29 | 193.33 | 39 | 6.96 | 198.61 |
| XXXXX | 14 | 0 | 0.00 | 204.17 | 3 | 2.14 | 194.17 | 3 | 0.54 | 199.19 |
| XXXXX | 15 | 14 | 10.00 | 204.17 | 19 | 13.57 | 195.00 | 33 | 5.89 | 199.63 |

Broiler results at the age of 14 days

Tab. No. 2b

Test: 51

Part fattening: 2

| Cross | Sample | Average live weight at 14 days | | | | | | | | |
|-------|--------|--------------------------------|-------------|---------|--------|-------------|---------|---------|-------------|---------|
| | | male | | | female | | | average | | |
| | | birds | live weight | FCR | birds | live weight | FCR | birds | live weight | FCR |
| | | | g | g | | g | g | | g | |
| XXXXX | 1 | 277 | 578.33 | 1002.51 | 262 | 540.00 | 981.06 | 539 | 559.70 | 992.45 |
| XXXXX | 2 | 267 | 580.83 | 1062.66 | 265 | 535.83 | 1148.63 | 532 | 558.42 | 1103.75 |
| XXXXX | 3 | 274 | 580.83 | 1072.58 | 271 | 539.17 | 1084.77 | 545 | 560.11 | 1078.42 |
| XXXXX | 4 | 277 | 590.83 | 967.24 | 263 | 545.83 | 988.48 | 540 | 568.92 | 977.17 |
| XXXXX | 5 | 267 | 572.50 | 1042.80 | 250 | 523.33 | 1089.94 | 517 | 548.73 | 1064.54 |
| XXXXX | 6 | 261 | 579.17 | 1038.62 | 263 | 523.33 | 1106.54 | 524 | 551.14 | 1070.99 |
| XXXXX | 7 | 276 | 589.17 | 953.20 | 274 | 541.83 | 1028.54 | 550 | 565.59 | 989.16 |
| XXXXX | 8 | 272 | 568.33 | 1037.61 | 266 | 543.33 | 1060.01 | 538 | 555.97 | 1048.43 |
| XXXXX | 9 | 270 | 577.50 | 1033.19 | 255 | 539.17 | 1065.55 | 525 | 558.88 | 1048.35 |
| XXXXX | 10 | 279 | 441.00 | 1038.70 | 275 | 436.67 | 1060.93 | 554 | 438.85 | 1049.68 |
| XXXXX | 11 | 279 | 430.00 | 1098.61 | 276 | 390.00 | 1130.62 | 555 | 410.11 | 1113.75 |
| XXXXX | 12 | 271 | 571.67 | 1083.13 | 266 | 535.00 | 1080.04 | 537 | 553.50 | 1081.65 |
| XXXXX | 13 | 272 | 573.33 | 1043.95 | 243 | 539.17 | 1055.58 | 515 | 557.21 | 1049.26 |
| XXXXX | 14 | 280 | 592.50 | 972.88 | 274 | 545.00 | 977.70 | 554 | 569.01 | 975.16 |
| XXXXX | 15 | 263 | 571.67 | 1038.26 | 252 | 529.17 | 1032.62 | 515 | 550.87 | 1035.61 |

Broiler results at the age of 32 days

Tab. No. 2c

Test: 51

Part fattening: 2

| Cross | Sample | Average live weight at 32 days | | | | | | | | |
|-------|--------|--------------------------------|-------------|---------|--------|-------------|---------|---------|-------------|---------|
| | | male | | | female | | | average | | |
| | | birds | live weight | FCR | birds | live weight | FCR | birds | live weight | FCR |
| | | | g | g | | g | g | | g | |
| XXXXX | 1 | 271 | 2311.99 | 1427.34 | 261 | 1953.87 | 1424.62 | 532 | 2136.30 | 1426.12 |
| XXXXX | 2 | 264 | 2302.50 | 1450.00 | 258 | 2132.05 | 1490.36 | 522 | 2218.26 | 1469.17 |
| XXXXX | 3 | 263 | 2344.49 | 1459.94 | 268 | 2147.35 | 1477.18 | 531 | 2244.99 | 1468.26 |
| XXXXX | 4 | 271 | 2287.16 | 1426.54 | 260 | 2024.04 | 1407.51 | 531 | 2158.32 | 1417.80 |
| XXXXX | 5 | 261 | 2295.48 | 1480.34 | 244 | 2062.34 | 1507.52 | 505 | 2182.83 | 1492.75 |
| XXXXX | 6 | 251 | 2348.13 | 1417.59 | 258 | 2063.22 | 1448.59 | 509 | 2203.71 | 1432.30 |
| XXXXX | 7 | 275 | 2309.96 | 1394.75 | 270 | 2041.19 | 1428.36 | 545 | 2176.81 | 1410.36 |
| XXXXX | 8 | 266 | 2308.01 | 1452.77 | 265 | 2123.66 | 1467.03 | 531 | 2216.01 | 1459.59 |
| XXXXX | 9 | 258 | 2363.95 | 1457.62 | 252 | 2115.24 | 1492.20 | 510 | 2241.06 | 1473.74 |
| XXXXX | 10 | 276 | 1731.23 | 1482.15 | 274 | 1584.93 | 1488.47 | 550 | 1658.35 | 1485.16 |
| XXXXX | 11 | 276 | 1572.75 | 1618.60 | 276 | 1377.72 | 1538.99 | 552 | 1475.24 | 1581.42 |
| XXXXX | 12 | 262 | 2293.74 | 1509.09 | 257 | 2070.04 | 1521.24 | 519 | 2182.97 | 1514.79 |
| XXXXX | 13 | 253 | 2339.41 | 1442.04 | 238 | 2111.89 | 1496.93 | 491 | 2229.12 | 1467.25 |
| XXXXX | 14 | 273 | 2303.66 | 1403.40 | 273 | 1996.85 | 1417.98 | 546 | 2150.26 | 1410.17 |
| XXXXX | 15 | 259 | 2295.87 | 1453.17 | 245 | 1985.84 | 1527.55 | 504 | 2145.16 | 1486.64 |

Mortality in the age 14 days

Tab. No. 3a

Test: 51

Part fattening: 2

| Cross | Sample | Mortality in the period | | | | | | Mortality according causes | | | | | | | | | | | | | |
|-------|--------|-------------------------|------|--------|-------|-------|------|----------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|
| | | male | | female | | total | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | | birds | % | birds | % | birds | % | | | | | | | | | | | | | | |
| XXXXX | 1 | 3 | 1.07 | 18 | 6.43 | 21 | 3.75 | | | | | | | | | | 2 | 2 | | 16 | 1 |
| XXXXX | 2 | 13 | 4.64 | 15 | 5.36 | 28 | 5.00 | | | | | | | | | | | 4 | | 21 | 3 |
| XXXXX | 3 | 6 | 2.14 | 9 | 3.21 | 15 | 2.68 | | | | | | | | | | 1 | 2 | | 10 | 2 |
| XXXXX | 4 | 3 | 1.07 | 17 | 6.07 | 20 | 3.57 | | | | | | | | | | 2 | 5 | | 10 | 3 |
| XXXXX | 5 | 13 | 4.64 | 30 | 10.71 | 43 | 7.68 | | | | | | | | | | | 6 | | 32 | 5 |
| XXXXX | 6 | 19 | 6.79 | 17 | 6.07 | 36 | 6.43 | | | | | | | | | | 1 | 5 | | 29 | 1 |
| XXXXX | 7 | 4 | 1.43 | 6 | 2.14 | 10 | 1.79 | | | | | | | | | | 1 | 1 | | 8 | |
| XXXXX | 8 | 8 | 2.86 | 14 | 5.00 | 22 | 3.93 | | | | | | | | | | | 1 | | 17 | 4 |
| XXXXX | 9 | 10 | 3.57 | 25 | 8.93 | 35 | 6.25 | | | | | | | | | | 1 | 3 | | 28 | 3 |
| XXXXX | 10 | 1 | 0.36 | 5 | 1.79 | 6 | 1.07 | | | | | | | | | | | 2 | | 4 | |
| XXXXX | 11 | 1 | 0.36 | 4 | 1.43 | 5 | 0.89 | | | | | | | | | | | 2 | | 3 | |
| XXXXX | 12 | 9 | 3.21 | 14 | 5.00 | 23 | 4.11 | | | | | | | | | | 1 | 4 | | 17 | 1 |
| XXXXX | 13 | 8 | 2.86 | 37 | 13.21 | 45 | 8.04 | | | | | | | | | | | 3 | | 39 | 3 |
| XXXXX | 14 | 0 | 0.00 | 6 | 2.14 | 6 | 1.07 | | | | | | | | | | 1 | 2 | | 3 | |
| XXXXX | 15 | 17 | 6.07 | 28 | 10.00 | 45 | 8.04 | | | | | | | | | | 1 | 7 | | 30 | 7 |

- Causes: 1 – Viral diseases
 2 – Bacterial diseases
 3 – Moulds diseases
 4 – Parasitary diseases
 5 – Tumors

- 6 – Wounds
 7 – Digestive track diseases
 8 – Respiratory tract diseases
 9 – Reproduction tract diseases
 10 – Locomotion apparatus diseases

- 11 – Sudden death syndrome
 12 – Cannibalism
 13 – Yolk sac. infam.
 14 – Culling and other causes

Mortality during the masts in 32 days

Tab. No. 3b

Test: 51

Part fattening: 2

| Cross | Sample | Mortality in the period | | | | | | Mortality according causes | | | | | | | | | | | | | |
|-------|--------|-------------------------|------|---------|------|--------|-------|----------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|
| | | 1 - 14 | | 15 - 32 | | 1 - 32 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | | birds | % | birds | % | birds | % | | | | | | | | | | | | | | |
| XXXXX | 1 | 21 | 3.75 | 7 | 1.25 | 28 | 5.00 | | | | | | | | | | 3 | 7 | | 16 | 2 |
| XXXXX | 2 | 28 | 5.00 | 10 | 1.79 | 38 | 6.79 | | | | | | | | | | | 8 | | 21 | 9 |
| XXXXX | 3 | 15 | 2.68 | 14 | 2.50 | 29 | 5.18 | | | | | | | | | | 1 | 11 | | 10 | 7 |
| XXXXX | 4 | 20 | 3.57 | 9 | 1.61 | 29 | 5.18 | | | | | | | | | | 2 | 11 | | 10 | 6 |
| XXXXX | 5 | 43 | 7.68 | 12 | 2.14 | 55 | 9.82 | | | | | | | | | | 1 | 14 | | 32 | 8 |
| XXXXX | 6 | 36 | 6.43 | 15 | 2.68 | 51 | 9.11 | | | | | | | | | | 1 | 17 | | 29 | 4 |
| XXXXX | 7 | 10 | 1.79 | 5 | 0.89 | 15 | 2.68 | | | | | | | | | | 1 | 1 | | 8 | 5 |
| XXXXX | 8 | 22 | 3.93 | 7 | 1.25 | 29 | 5.18 | | | | | | | | | | | 7 | | 17 | 5 |
| XXXXX | 9 | 35 | 6.25 | 15 | 2.68 | 50 | 8.93 | | | | | | | | | | 1 | 11 | | 28 | 10 |
| XXXXX | 10 | 6 | 1.07 | 4 | 0.71 | 10 | 1.79 | | | | | | | | | | | 4 | | 4 | 2 |
| XXXXX | 11 | 5 | 0.89 | 3 | 0.54 | 8 | 1.43 | | | | | | | | | | | 4 | | 3 | 1 |
| XXXXX | 12 | 23 | 4.11 | 18 | 3.21 | 41 | 7.32 | | | | | | | | | | 1 | 19 | | 17 | 4 |
| XXXXX | 13 | 45 | 8.04 | 24 | 4.29 | 69 | 12.32 | | | | | | | | | | | 21 | | 39 | 9 |
| XXXXX | 14 | 6 | 1.07 | 8 | 1.43 | 14 | 2.50 | | | | | | | | | | 2 | 8 | | 3 | 1 |
| XXXXX | 15 | 45 | 8.04 | 11 | 1.96 | 56 | 10.00 | | | | | | | | | | 1 | 14 | | 30 | 11 |

- Causes: 1 – Viral diseases
 2 – Bacterial diseases
 3 – Moulds diseases
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 5 – Tumors

- 6 – Wounds
 7 – Digestive track diseases
 8 – Respiratory tract diseases
 9 – Reproduction tract diseases
 10 – Locomotion apparatus diseases

- 11 – Sudden death syndrome
 12 – Cannibalism
 13 – Yolk sac. infam.
 14 – Culling and other causes

Results of carcass analysis in 32 days

Tab. No. 4 (page 1)

Test: 51

Part fattening: 2

| Cross | Sample | Sex | Weight | | | | Ratio of abd. fat to live weight | Breast meat without skin | | | Thigh meat with bone and skin | | | Breast meat and thighs | | | Carcass | |
|--------|--------|-----|-------------|-------------|------------|-------------|---|-----------------------------|-----------------|-----------------|----------------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|--------------|--------------|
| | | | Total | Body | Gibl. | Abd. fat | | weight | percentage | | weight | percentage | | weight | percentage | | value | quality |
| | | | | | | | | | total weight | body carcass | | total weight | body carcass | | total weight | body carcass | | |
| | | | g | g | g | g | | % | g | % | % | g | % | % | g | % | % | % |
| xxxxxx | 1 | ♂ | 2452 | 1726 | 149 | 30 | 1.22 | 597 | 24.34 | 34.58 | 521 | 21.24 | 30.16 | 1117 | 45.58 | 64.74 | 70.40 | 76.47 |
| | | ♀ | 2026 | 1405 | 123 | 26 | 1.28 | 469 | 23.18 | 33.42 | 419 | 20.71 | 29.86 | 889 | 43.88 | 63.28 | 69.35 | 75.41 |
| | | ♂ | 2239 | 1565 | 136 | 28 | 1.25 | 533 | 23.82 | 34.06 | 470 | 21.00 | 30.03 | 1003 | 44.81 | 64.09 | 69.93 | 75.99 |
| xxxxxx | 2 | ♂ | 2425 | 1693 | 153 | 35 | 1.46 | 548 | 22.58 | 32.34 | 522 | 21.54 | 30.85 | 1070 | 44.12 | 63.19 | 69.82 | 76.12 |
| | | ♀ | 2141 | 1484 | 130 | 35 | 1.63 | 477 | 22.27 | 32.13 | 450 | 21.03 | 30.34 | 927 | 43.31 | 62.47 | 69.33 | 75.42 |
| | | ♂ | 2283 | 1589 | 142 | 35 | 1.54 | 512 | 22.44 | 32.24 | 486 | 21.30 | 30.61 | 999 | 43.74 | 62.85 | 69.59 | 75.79 |
| xxxxxx | 3 | ♂ | 2422 | 1703 | 148 | 38 | 1.57 | 565 | 23.34 | 33.21 | 507 | 20.93 | 29.78 | 1072 | 44.28 | 62.98 | 70.30 | 76.42 |
| | | ♀ | 2132 | 1492 | 124 | 39 | 1.83 | 493 | 23.13 | 33.04 | 441 | 20.69 | 29.56 | 934 | 43.82 | 62.61 | 69.99 | 75.80 |
| | | ♂ | 2277 | 1597 | 136 | 38 | 1.69 | 529 | 23.24 | 33.13 | 474 | 20.82 | 29.68 | 1003 | 44.06 | 62.81 | 70.15 | 76.13 |
| xxxxxx | 4 | ♂ | 2253 | 1565 | 141 | 27 | 1.18 | 518 | 22.98 | 33.07 | 479 | 21.24 | 30.57 | 996 | 44.22 | 63.64 | 69.48 | 75.71 |
| | | ♀ | 2042 | 1423 | 123 | 26 | 1.26 | 484 | 23.72 | 34.04 | 425 | 20.80 | 29.85 | 909 | 44.53 | 63.88 | 69.70 | 75.74 |
| | | ♂ | 2147 | 1494 | 132 | 26 | 1.22 | 501 | 23.33 | 33.53 | 452 | 21.03 | 30.23 | 953 | 44.36 | 63.76 | 69.58 | 75.72 |
| xxxxxx | 5 | ♂ | 2388 | 1658 | 145 | 37 | 1.53 | 538 | 22.53 | 32.45 | 506 | 21.18 | 30.50 | 1044 | 43.71 | 62.95 | 69.44 | 75.51 |
| | | ♀ | 2177 | 1511 | 132 | 35 | 1.59 | 491 | 22.54 | 32.46 | 458 | 21.06 | 30.33 | 949 | 43.60 | 62.79 | 69.44 | 75.52 |
| | | ♂ | 2282 | 1585 | 139 | 36 | 1.56 | 514 | 22.54 | 32.46 | 482 | 21.12 | 30.42 | 996 | 43.66 | 62.88 | 69.44 | 75.51 |
| xxxxxx | 6 | ♂ | 2334 | 1596 | 148 | 34 | 1.44 | 509 | 21.80 | 31.87 | 489 | 20.97 | 30.66 | 998 | 42.77 | 62.53 | 68.40 | 74.74 |
| | | ♀ | 2071 | 1429 | 129 | 33 | 1.57 | 457 | 22.09 | 32.01 | 433 | 20.92 | 30.32 | 891 | 43.01 | 62.33 | 69.01 | 75.23 |
| | | ♂ | 2202 | 1512 | 139 | 33 | 1.50 | 483 | 21.93 | 31.94 | 461 | 20.95 | 30.50 | 944 | 42.88 | 62.44 | 68.68 | 74.97 |

Results of carcass analysis in 32 days

Tab. No. 4 (page 2)

Test: 51

Part fattening: 2

| Cross | Sample | Sex | Weight | | | | Ratio of abd. fat to live weight | Breast meat without skin | | | Thigh meat with bone and skin | | | Breast meat and thighs | | | Carcass | |
|-------|--------|-----|-------------|-------------|------------|-------------|---|-----------------------------|-----------------|-----------------|----------------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|--------------|--------------|
| | | | Total | Body | Gibl. | Abd. fat | | weight | percentage | | weight | percentage | | weight | percentage | | value | quality |
| | | | | | | | | | total weight | body carcass | | total weight | body carcass | | total weight | body carcass | | |
| | | | g | g | g | g | | g | % | % | % | g | % | % | g | % | % | % |
| xxxxx | 7 | ♂ | 2280 | 1585 | 136 | 25 | 1.12 | 538 | 23.58 | 33.91 | 480 | 21.04 | 30.26 | 1017 | 44.62 | 64.17 | 69.54 | 75.49 |
| | | ♀ | 2034 | 1426 | 118 | 27 | 1.34 | 484 | 23.79 | 33.93 | 425 | 20.91 | 29.83 | 909 | 44.71 | 63.76 | 70.11 | 75.89 |
| | | ♂ | 2157 | 1506 | 127 | 26 | 1.22 | 511 | 23.68 | 33.92 | 453 | 20.98 | 30.06 | 963 | 44.66 | 63.98 | 69.81 | 75.68 |
| xxxxx | 8 | ♂ | 2391 | 1678 | 143 | 34 | 1.43 | 549 | 22.94 | 32.70 | 510 | 21.34 | 30.42 | 1059 | 44.28 | 63.12 | 70.15 | 76.14 |
| | | ♀ | 2192 | 1515 | 127 | 31 | 1.43 | 494 | 22.55 | 32.62 | 449 | 20.47 | 29.61 | 943 | 43.02 | 62.23 | 69.12 | 74.93 |
| | | ♂ | 2292 | 1596 | 135 | 33 | 1.43 | 521 | 22.75 | 32.66 | 480 | 20.92 | 30.04 | 1001 | 43.67 | 62.70 | 69.66 | 75.57 |
| xxxxx | 9 | ♂ | 2401 | 1673 | 146 | 32 | 1.33 | 549 | 22.86 | 32.80 | 512 | 21.33 | 30.61 | 1061 | 44.19 | 63.42 | 69.68 | 75.78 |
| | | ♀ | 2196 | 1534 | 129 | 33 | 1.52 | 518 | 23.59 | 33.76 | 455 | 20.72 | 29.66 | 973 | 44.32 | 63.42 | 69.88 | 75.73 |
| | | ♂ | 2298 | 1604 | 137 | 33 | 1.42 | 533 | 23.21 | 33.26 | 484 | 21.04 | 30.16 | 1017 | 44.25 | 63.42 | 69.78 | 75.76 |
| xxxxx | 10 | ♂ | 1745 | 1192 | 111 | 21 | 1.19 | 381 | 21.84 | 31.98 | 361 | 20.68 | 30.28 | 742 | 42.52 | 62.26 | 68.29 | 74.67 |
| | | ♀ | 1643 | 1128 | 102 | 22 | 1.34 | 374 | 22.74 | 33.12 | 330 | 20.10 | 29.28 | 704 | 42.85 | 62.40 | 68.67 | 74.88 |
| | | ♂ | 1694 | 1160 | 107 | 21 | 1.26 | 377 | 22.28 | 32.54 | 346 | 20.40 | 29.79 | 723 | 42.68 | 62.33 | 68.47 | 74.77 |
| xxxxx | 11 | ♂ | 1637 | 1134 | 111 | 22 | 1.34 | 350 | 21.38 | 30.86 | 361 | 22.03 | 31.80 | 711 | 43.42 | 62.65 | 69.30 | 76.05 |
| | | ♀ | 1464 | 1002 | 95 | 17 | 1.15 | 316 | 21.61 | 31.58 | 300 | 20.49 | 29.96 | 616 | 42.10 | 61.54 | 68.41 | 74.92 |
| | | ♂ | 1551 | 1068 | 103 | 19 | 1.25 | 333 | 21.49 | 31.20 | 330 | 21.31 | 30.93 | 664 | 42.79 | 62.13 | 68.88 | 75.51 |
| xxxxx | 12 | ♂ | 2351 | 1634 | 147 | 37 | 1.59 | 521 | 22.18 | 31.91 | 506 | 21.54 | 31.00 | 1028 | 43.72 | 62.91 | 69.50 | 75.76 |
| | | ♀ | 2175 | 1506 | 133 | 39 | 1.79 | 477 | 21.93 | 31.67 | 454 | 20.86 | 30.13 | 931 | 42.79 | 61.81 | 69.23 | 75.36 |
| | | ♂ | 2263 | 1570 | 140 | 38 | 1.68 | 499 | 22.06 | 31.80 | 480 | 21.22 | 30.58 | 979 | 43.27 | 62.38 | 69.37 | 75.57 |

Results of carcass analysis in 32 days

Tab. No. 4 (page 3)

Test: 51

Part fattening: 2

| Cross | Sample | Sex | Weight | | | | Ratio of abd. fat to live weight | Breast meat without skin | | | Thigh meat with bone and skin | | | Breast meat and thighs | | | Carcass | |
|-------|--------|-----|-------------|-------------|------------|-------------|---|-----------------------------|-----------------|-----------------|----------------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|--------------|--------------|
| | | | Total | Body | Gibl. | Abd. fat | | weight | percentage | | weight | percentage | | weight | percentage | | value | quality |
| | | | | | | | | | total weight | body carcass | | total weight | body carcass | | total weight | body carcass | | |
| | | | g | g | g | g | | g | % | % | % | g | % | % | g | % | % | % |
| xxxxx | 13 | ♂ | 2426 | 1706 | 148 | 39 | 1.62 | 569 | 23.45 | 33.34 | 515 | 21.23 | 30.19 | 1084 | 44.68 | 63.53 | 70.32 | 76.43 |
| | | ♀ | 2250 | 1559 | 131 | 37 | 1.63 | 507 | 22.54 | 32.53 | 469 | 20.86 | 30.10 | 977 | 43.40 | 62.64 | 69.29 | 75.13 |
| | | ∅ | 2338 | 1632 | 140 | 38 | 1.63 | 538 | 23.01 | 32.96 | 492 | 21.05 | 30.15 | 1030 | 44.06 | 63.10 | 69.83 | 75.80 |
| xxxxx | 14 | ♂ | 2395 | 1694 | 141 | 24 | 0.99 | 580 | 24.23 | 34.26 | 506 | 21.14 | 29.89 | 1087 | 45.38 | 64.16 | 70.73 | 76.63 |
| | | ♀ | 2078 | 1440 | 127 | 29 | 1.38 | 493 | 23.73 | 34.24 | 417 | 20.05 | 28.93 | 910 | 43.78 | 63.17 | 69.31 | 75.44 |
| | | ∅ | 2236 | 1567 | 134 | 26 | 1.17 | 537 | 24.00 | 34.25 | 461 | 20.64 | 29.45 | 998 | 44.64 | 63.70 | 70.07 | 76.08 |
| xxxxx | 15 | ♂ | 2227 | 1537 | 137 | 34 | 1.53 | 479 | 21.50 | 31.17 | 483 | 21.67 | 31.40 | 961 | 43.17 | 62.57 | 68.99 | 75.13 |
| | | ♀ | 2082 | 1441 | 126 | 33 | 1.60 | 457 | 21.96 | 31.73 | 437 | 21.00 | 30.34 | 895 | 42.97 | 62.08 | 69.22 | 75.29 |
| | | ∅ | 2155 | 1489 | 131 | 34 | 1.56 | 468 | 21.73 | 31.44 | 460 | 21.35 | 30.89 | 928 | 43.07 | 62.33 | 69.10 | 75.20 |

Statistical analysis - Cocks on the age of 32 days

Tab. No. 5a

Test: 51

Part fattening: 2

| Cross | Sample | Sample size | Average | Standard deviation | Coefficient of variation | Standard error of mean | Precision select. average | Standard error of coeff. of variation |
|--------|--------|-------------|---------|--------------------|--------------------------|------------------------|---------------------------|---------------------------------------|
| | | | g/birds | g/birds | % | g/birds | % | % |
| XXXXXX | 1 | 271 | 2311.99 | 248.32 | 10.74 | 15.08 | 0.65 | 0.47 |
| XXXXXX | 2 | 264 | 2302.50 | 244.15 | 10.60 | 15.03 | 0.65 | 0.47 |
| XXXXXX | 3 | 263 | 2344.49 | 310.20 | 13.23 | 19.13 | 0.82 | 0.59 |
| XXXXXX | 4 | 271 | 2287.16 | 226.42 | 9.90 | 13.75 | 0.60 | 0.43 |
| XXXXXX | 5 | 261 | 2295.48 | 258.66 | 11.27 | 16.01 | 0.70 | 0.50 |
| XXXXXX | 6 | 251 | 2348.13 | 265.36 | 11.30 | 16.75 | 0.71 | 0.51 |
| XXXXXX | 7 | 275 | 2309.96 | 232.46 | 10.06 | 14.02 | 0.61 | 0.43 |
| XXXXXX | 8 | 266 | 2308.01 | 282.97 | 12.26 | 17.35 | 0.75 | 0.54 |
| XXXXXX | 9 | 258 | 2363.95 | 241.12 | 10.20 | 15.01 | 0.64 | 0.45 |
| XXXXXX | 10 | 276 | 1731.23 | 240.78 | 13.91 | 14.49 | 0.84 | 0.60 |
| XXXXXX | 11 | 276 | 1572.75 | 202.15 | 12.85 | 12.17 | 0.77 | 0.56 |
| XXXXXX | 12 | 262 | 2293.74 | 272.42 | 11.88 | 16.83 | 0.73 | 0.53 |
| XXXXXX | 13 | 253 | 2339.41 | 299.81 | 12.82 | 18.85 | 0.81 | 0.58 |
| XXXXXX | 14 | 273 | 2303.66 | 285.61 | 12.40 | 17.29 | 0.75 | 0.54 |
| XXXXXX | 15 | 259 | 2295.87 | 261.45 | 11.39 | 16.25 | 0.71 | 0.51 |

Statistical analysis - Hens on the age of 32 days

Tab. No. 5b

Test: 51

Part fattening: 2

| Cross | Sample | Sample size | Average | Standard deviation | Coefficient of variation | Standard error of mean | Precision select. average | Standard error of coeff. of variation |
|-------|--------|-------------|---------|--------------------|--------------------------|------------------------|---------------------------|---------------------------------------|
| | | | g/birds | g/birds | % | g/birds | % | % |
| xxxxx | 1 | 261 | 1953.87 | 226.49 | 11.59 | 14.02 | 0.72 | 0.52 |
| xxxxx | 2 | 258 | 2132.05 | 263.67 | 12.37 | 16.42 | 0.77 | 0.55 |
| xxxxx | 3 | 268 | 2147.35 | 236.19 | 11.00 | 14.43 | 0.67 | 0.48 |
| xxxxx | 4 | 260 | 2024.04 | 260.40 | 12.87 | 16.15 | 0.80 | 0.57 |
| xxxxx | 5 | 244 | 2062.34 | 266.16 | 12.91 | 17.04 | 0.83 | 0.60 |
| xxxxx | 6 | 258 | 2063.22 | 240.04 | 11.63 | 14.94 | 0.72 | 0.52 |
| xxxxx | 7 | 270 | 2041.19 | 203.04 | 9.95 | 12.36 | 0.61 | 0.43 |
| xxxxx | 8 | 265 | 2123.66 | 272.61 | 12.84 | 16.75 | 0.79 | 0.57 |
| xxxxx | 9 | 252 | 2115.24 | 226.68 | 10.72 | 14.28 | 0.68 | 0.48 |
| xxxxx | 10 | 274 | 1584.93 | 178.19 | 11.24 | 10.77 | 0.68 | 0.49 |
| xxxxx | 11 | 276 | 1377.72 | 196.77 | 14.28 | 11.84 | 0.86 | 0.62 |
| xxxxx | 12 | 257 | 2070.04 | 288.00 | 13.91 | 17.97 | 0.87 | 0.63 |
| xxxxx | 13 | 238 | 2111.89 | 245.68 | 11.63 | 15.93 | 0.75 | 0.54 |
| xxxxx | 14 | 273 | 1996.85 | 212.00 | 10.62 | 12.83 | 0.64 | 0.46 |
| xxxxx | 15 | 245 | 1985.84 | 233.21 | 11.74 | 14.90 | 0.75 | 0.54 |