MEZINÁRODNÍ TESTOVÁNÍ DRŮBEŽE
státní podnik, ÚSTRAŠICE

390 02 Tábor 2 Tel.: 381 200 320

3rd part fattening test of the final product of XLIX. international test of parents from of broilers

2. 4. 2021 - 10. 5. 2021

Study Investigator: Ing. Hana Horná
Ing. Markéta Krekulová

Ústrašice, June 2021

1 List of participants

Sample	Cross	Breeding organization	State
1	**xxxxxxxx**	**xxxxxxxx**	Germany
2	**xxxxxxxx**	**xxxxxxxx**	Germany
3	**xxxxxxxx**	**xxxxxxxx**	Netherlands
4	**xxxxxxxx**	**xxxxxxxx**	Germany
5	**xxxxxxxx**	**xxxxxxxx**	Netherlands
6	**xxxxxxxx**	**xxxxxxxx**	Netherlands
7	**xxxxxxxx**	**xxxxxxxx**	Germany
8	**xxxxxxxx**	**xxxxxxxx**	Netherlands
9	**xxxxxxxx**	**xxxxxxxx**	Netherlands
10	**xxxxxxxx**	**xxxxxxxx**	Germany
11	**xxxxxxxx**	**xxxxxxxx**	Netherlands
12	**xxxxxxxx**	**xxxxxxxx**	Germany

2 Basic tests information

2.1 The basic dates

setting in the hatchery: 10 March 2021
beginning of test: 1 April 2021 (day 0)
end of the test: 10 May 2021

2.2 Location of the test

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

3 Material and methods

3.1 Material

There were 12 different breeds in this test. Each sample consisted of 900 hatching eggs. 520 broilers were sexed and placed always 260 females (in two pens) and 260 males (in two pens).
The parent flock is 48 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 - 36	18	6
Day 37 - 39	23	1

3.4 Stocking density

16 broilers per square meter

3.5 Feeding

Feed was produced **xxxxxxxx**

Day 1 – 10 Starter (BR1)
Day 11 – 21 Grower (BR2-A)
Day 22 – 28 Grower (BR2-B)
Day 29 – 39 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 - 39
Components (%)				
Wheat	41.42	49.66	51.28	57.12
Maize	15.00	13.00	13.00	10.00
Soybean extr. groats	31.50	30.45	28.55	24.80
Soybean extr.	4.00	-	-	-
Fish meal	1.50	-	-	-
MCP – monocalciumphosphate	0.47	0.31	0.18	0.16
Calcium carbonate	1.47	1.21	1.20	1.13
Salt	0.28	0.24	0.23	0.26
Soybean oil	2.46	2.50	2.50	2.62
Animal fat	-	0.90	1.33	2.50
Sodium sulfate	0.13	0.10	0.11	0.08
Premixes of amino acid	0.92	0.86	0.86	0.86
Vitamin and mineral supplement	0.85	0.77	0.76	0.47
Nutrient content				
Crude protein (g/kg)	23.36	21.17	20.48	19.15
Fat (g/kg)	5.16	5.24	5.66	6.86
Lysine (g/kg)	1.30	1.17	1.13	1.05
Methionine (g/kg)	0.63	0.56	0.54	0.50
Ca (g/kg)	0.94	0.78	0.75	0.70
P (g/kg)	0.45	0.39	0.36	0.35
Vitamin A (IU/kg)	15000	10000	10000	10000
Vitamin D3 (IU/kg)	5000	5000	5000	5000
ME (MJ/kg)	12.40	12.70	12.90	13.40

3.6 Veterinary precautions

The chicken house was disinfected by **xxxxxxxx** 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 **xxxxxxxx**.

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 and 39 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, 1 – 32 days and 1 – 39 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 39 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
	2d	Broiler results at the age of 39 days
	3a	Mortality during growing period at the age of 14 days
	3b	Mortality during growing period at the age of 32 days
	3c	Mortality during growing period at the age of 39 days
	4	Results of carcass analysis
	5a	Statistical analysis - cocks
	5b	Statistical analysis - hens

Hatchability **Tab. No. 1**

Test: 49

Part fattening: 3

Cross	Sample	Fertility	Hatchability		Birds housed	Average weight		
			Set	Fert.		hatch. eggs	1-day	
							♂	♀
		%	%	%		g	g	g
xxxxxxxx	1	90.11	78.78	87.42	520	67.6	45.4	45.8
xxxxxxxx	2	94.89	85.89	90.52	520	67.1	46.4	46.0
xxxxxxxx	3	94.22	84.33	89.50	520	69.9	46.8	46.8
xxxxxxxx	4	94.78	85.00	89.68	520	66.4	46.3	46.0
xxxxxxxx	5	92.78	85.56	92.22	520	70.3	47.0	47.0
xxxxxxxx	6	92.67	83.11	89.69	520	70.3	47.3	46.8
xxxxxxxx	7	93.44	84.22	90.13	520	66.8	46.0	45.5
xxxxxxxx	8	92.89	83.67	90.07	520	69.2	46.0	46.4
xxxxxxxx	9	91.11	79.56	87.32	520	68.6	46.2	46.3
xxxxxxxx	10	92.67	76.33	82.37	520	68.7	46.9	46.5
xxxxxxxx	11	92.44	77.56	83.89	520	70.4	47.3	47.2
xxxxxxxx	12	90.44	71.44	78.99	520	68.6	46.5	45.9

Broiler results at the age of 7 days **Tab. No. 2a**

Test: 49

Part fattening: 3

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
xxxxxxxx	1	0	0.0	211.3	0	0.0	206.7	0	0.0	209.0
xxxxxxxx	2	0	0.0	211.2	0	0.0	208.3	0	0.0	209.8
xxxxxxxx	3	1	0.8	196.7	0	0.0	199.7	1	0.2	198.2
xxxxxxxx	4	0	0.0	209.2	3	2.3	204.0	3	0.6	206.6
xxxxxxxx	5	0	0.0	207.7	1	0.8	203.8	1	0.2	205.8
xxxxxxxx	6	0	0.0	206.8	0	0.0	201.5	0	0.0	204.2
xxxxxxxx	7	0	0.0	212.5	5	3.8	209.5	5	1.0	211.0
xxxxxxxx	8	0	0.0	208.2	1	0.8	204.7	1	0.2	206.4
xxxxxxxx	9	2	1.5	206.8	0	0.0	203.2	2	0.4	205.0
xxxxxxxx	10	6	4.6	212.0	5	3.8	207.3	11	2.1	209.7
xxxxxxxx	11	4	3.1	205.0	2	1.5	205.3	6	1.2	205.2
xxxxxxxx	12	0	0.0	209.7	4	3.1	205.5	4	0.8	207.6

Broiler results at the age of 14 days **Tab. No. 2b**

Test: 49

Part fattening: 3

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	g
xxxxxxxx	1	258	546.7	1073.5	258	542.5	1063.1	516	544.6	1068.3
xxxxxxxx	2	256	558.3	1112.4	260	535.0	1084.8	516	546.6	1098.8
xxxxxxxx	3	255	525.8	1087.3	260	540.8	1038.3	515	533.4	1062.2
xxxxxxxx	4	256	566.7	1035.4	256	540.8	1057.4	512	553.8	1046.1
xxxxxxxx	5	260	548.3	1080.2	252	541.7	1101.8	512	545.1	1090.8
xxxxxxxx	6	257	554.2	1163.5	257	537.5	1157.5	514	545.8	1160.5
xxxxxxxx	7	258	566.7	995.6	253	537.5	1077.3	511	552.2	1035.0
xxxxxxxx	8	259	550.0	1035.5	256	550.0	1063.9	515	550.0	1049.6
xxxxxxxx	9	256	558.3	1078.8	257	532.5	1107.0	513	545.4	1092.6
xxxxxxxx	10	252	555.0	1045.3	249	551.7	1046.1	501	553.3	1045.7
xxxxxxxx	11	255	544.2	1129.3	253	555.8	1082.3	508	550.0	1105.6
xxxxxxxx	12	259	541.7	913.8	256	531.7	1099.9	515	536.7	1005.4

Broiler results at the age of 32 days **Tab. No. 2c**

Test: 49

Part fattening: 3

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	g
xxxxxxxx	1	253	2407.0	1450.3	255	2107.4	1476.8	508	2256.6	1462.7
xxxxxxxx	2	253	2376.4	1455.7	259	2105.8	1420.1	512	2239.5	1438.7
xxxxxxxx	3	252	2391.2	1408.0	258	2112.2	1427.1	510	2250.1	1417.0
xxxxxxxx	4	252	2317.4	1419.9	256	2049.7	1441.7	508	2182.5	1430.2
xxxxxxxx	5	258	2348.1	1433.6	251	2136.0	1459.0	509	2243.5	1445.5
xxxxxxxx	6	251	2411.7	1473.6	255	2205.8	1436.9	506	2307.9	1455.9
xxxxxxxx	7	257	2322.6	1433.9	253	2006.0	1518.8	510	2165.6	1472.9
xxxxxxxx	8	250	2229.8	1533.4	252	2143.2	1498.1	502	2186.3	1516.1
xxxxxxxx	9	251	2356.5	1451.3	255	2163.3	1445.9	506	2259.1	1448.7
xxxxxxxx	10	245	2440.9	1446.8	247	2118.4	1487.7	492	2279.0	1465.8
xxxxxxxx	11	244	2418.7	1472.1	248	2114.5	1518.3	492	2265.4	1493.8
xxxxxxxx	12	255	2309.6	1421.3	256	2114.7	1440.4	511	2212.0	1430.5

Broiler results at the age of 39 days **Tab. No. 2d**

Test: 49

Part fattening: 3

Cross	Sample	Average live weight at 39 days								
		male			female			average		
		birds	live weight	FCR	birds	live weight	FCR	birds	live weight	FCR
			g	g		g	g		g	g
xxxxxxxx	1	121	3218.8	1560.8	127	2611.5	1699.9	248	2907.8	1624.8
xxxxxxxx	2	126	3144.0	1502.7	129	2694.8	1600.0	255	2916.8	1548.2
xxxxxxxx	3	125	3045.6	1498.8	129	2680.5	1584.2	254	2860.2	1539.5
xxxxxxxx	4	126	3068.5	1507.4	130	2618.8	1603.2	256	2840.2	1552.2
xxxxxxxx	5	128	3002.5	1524.3	124	2699.0	1628.7	252	2853.2	1572.9
xxxxxxxx	6	126	3249.2	1498.5	125	2836.8	1543.1	251	3043.8	1519.2
xxxxxxxx	7	129	3069.2	1489.2	126	2645.2	1662.8	255	2859.7	1568.5
xxxxxxxx	8	124	2924.3	1585.2	124	2870.2	1565.3	248	2897.2	1575.3
xxxxxxxx	9	120	3204.3	1505.6	128	2759.1	1596.4	248	2974.5	1549.0
xxxxxxxx	10	122	3108.7	1549.9	124	2740.3	1642.7	246	2923.0	1593.7
xxxxxxxx	11	116	3196.2	1582.2	124	2803.7	1639.2	240	2993.4	1609.8
xxxxxxxx	12	125	3098.6	1457.2	128	2714.5	1602.5	253	2904.3	1525.9

Mortality in the age 14 days **Tab. No. 3a**

Test: 49

Part fattening: 3

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	%														
xxxxxxxx	1	2	0.77	2	0.77	4	0.77											2			2
xxxxxxxx	2	4	1.54	0	0.00	4	0.77											3			1
xxxxxxxx	3	5	1.92	0	0.00	5	0.96											2			3
xxxxxxxx	4	4	1.54	4	1.54	8	1.54											4			4
xxxxxxxx	5	0	0.00	8	3.08	8	1.54											4			4
xxxxxxxx	6	3	1.15	3	1.15	6	1.15											3			3
xxxxxxxx	7	2	0.77	7	2.69	9	1.73											3		1	5
xxxxxxxx	8	1	0.38	4	1.54	5	0.96											1		1	3
xxxxxxxx	9	4	1.54	3	1.15	7	1.35											5		1	1
xxxxxxxx	10	8	3.08	11	4.23	19	3.65											4		9	6
xxxxxxxx	11	5	1.92	7	2.69	12	2.31											7		3	2
xxxxxxxx	12	1	0.38	4	1.54	5	0.96											2		2	1

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: 49

Part fattening: 3

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	%														
xxxxxxxx	1	4	0.77	8	1.54	12	2.31											9			3
xxxxxxxx	2	4	0.77	4	0.77	8	1.54											5			3
xxxxxxxx	3	5	0.96	5	0.96	10	1.92											6			4
xxxxxxxx	4	8	1.54	4	0.77	12	2.31											8			4
xxxxxxxx	5	8	1.54	3	0.58	11	2.12											7			4
xxxxxxxx	6	6	1.15	8	1.54	14	2.69											10			4
xxxxxxxx	7	9	1.73	1	0.19	10	1.92											4		1	5
xxxxxxxx	8	5	0.96	13	2.50	18	3.46											10		1	7
xxxxxxxx	9	7	1.35	7	1.35	14	2.69											12		1	1
xxxxxxxx	10	19	3.65	9	1.73	28	5.38											13		9	6
xxxxxxxx	11	12	2.31	16	3.08	28	5.38											19		3	6
xxxxxxxx	12	5	0.96	4	0.77	9	1.73											6		2	1

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 39 days **Tab. No. 3c**

Test: 49

Part fattening: 3

Cross	Sample	Mortality in the period						Mortality according causes													
		1 - 14		15 - 39		1 - 39		1	2	3	4	5	6	7	8	9	10	11	12	13	14
		birds	%	birds	%	birds	%														
xxxxxxxx	1	4	0.77	12	2.31	16	3.08											13			3
xxxxxxxx	2	4	0.77	5	0.96	9	1.73											6			3
xxxxxxxx	3	5	0.96	6	1.15	11	2.12											7			4
xxxxxxxx	4	8	1.54	4	0.77	12	2.31											8			4
xxxxxxxx	5	8	1.54	5	0.96	13	2.50											9			4
xxxxxxxx	6	6	1.15	12	2.31	18	3.46											14			4
xxxxxxxx	7	9	1.73	1	0.19	10	1.92											4		1	5
xxxxxxxx	8	5	0.96	15	2.88	20	3.85											12		1	7
xxxxxxxx	9	7	1.35	12	2.31	19	3.65											17		1	1
xxxxxxxx	10	19	3.65	11	2.12	30	5.77											14		9	7
xxxxxxxx	11	12	2.31	20	3.85	32	6.15											23		3	6
xxxxxxxx	12	5	0.96	6	1.15	11	2.12											8		2	1

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

Results of carcass analysis in 32 days **Tab. No. 4 (page 1)**

Test: 49

Part fattening: 3

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	%	%	%	%
xxxxxxxx		♂	3339	2390	194	49	1.46	775	23.22	32.44	748	22.40	31.29	1523	45.62	63.72	71.59	77.39
	1	♀	2654	1896	154	48	1.80	616	23.20	32.46	588	22.14	30.98	1203	45.34	63.44	71.46	77.26
		ø	**2996**	**2143**	**174**	**48**	**1.61**	**695**	**23.21**	**32.45**	**668**	**22.28**	**31.15**	**1363**	**45.49**	**63.60**	**71.53**	**77.33**
xxxxxxxx		♂	3176	2276	180	43	1.35	748	23.54	32.84	716	22.56	31.47	1464	46.10	64.31	71.68	77.35
	2	♀	2748	1982	152	46	1.66	673	24.51	33.98	593	21.57	29.91	1266	46.08	63.88	72.13	77.66
		ø	**2962**	**2129**	**166**	**44**	**1.49**	**711**	**23.99**	**33.37**	**655**	**22.10**	**30.74**	**1365**	**46.09**	**64.11**	**71.89**	**77.49**
xxxxxxxx		♂	3064	2244	169	44	1.45	772	25.20	34.40	676	22.05	30.10	1447	47.25	64.50	73.25	78.77
	3	♀	2780	2001	162	47	1.67	682	24.53	34.07	597	21.47	29.83	1279	46.00	63.90	71.98	77.80
		ø	**2922**	**2123**	**166**	**45**	**1.56**	**727**	**24.88**	**34.25**	**636**	**21.77**	**29.97**	**1363**	**46.65**	**64.22**	**72.64**	**78.31**
xxxxxxxx		♂	3098	2207	175	35	1.12	774	24.99	35.07	672	21.68	30.43	1446	46.67	65.50	71.25	76.88
	4	♀	2629	1885	149	40	1.51	644	24.51	34.18	579	22.01	30.69	1223	46.52	64.88	71.71	77.40
		ø	**2863**	**2046**	**162**	**37**	**1.30**	**709**	**24.77**	**34.66**	**625**	**21.83**	**30.55**	**1334**	**46.60**	**65.21**	**71.46**	**77.12**
xxxxxxxx		♂	3170	2307	178	46	1.46	793	25.02	34.37	710	22.40	30.77	1503	47.42	65.15	72.80	78.40
	5	♀	2831	2071	159	51	1.81	719	25.41	34.73	615	21.71	29.67	1334	47.12	64.40	73.18	78.81
		ø	**3000**	**2189**	**168**	**49**	**1.63**	**756**	**25.21**	**34.54**	**662**	**22.08**	**30.25**	**1418**	**47.28**	**64.79**	**72.98**	**78.59**
xxxxxxxx		♂	3285	2325	184	49	1.48	786	23.94	33.83	712	21.68	30.63	1499	45.62	64.46	70.77	76.36
	6	♀	2987	2164	162	61	2.03	738	24.69	34.09	647	21.66	29.90	1384	46.35	63.98	72.44	77.86
		ø	**3136**	**2244**	**173**	**55**	**1.75**	**762**	**24.30**	**33.95**	**680**	**21.67**	**30.28**	**1441**	**45.96**	**64.23**	**71.56**	**77.07**

Results of carcass analysis in 32 days **Tab. No. 4 (page 2)**

Test: 49

Part fattening: 3

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	%	%	%	%
xxxxxxxx		♂	3083	2214	177	42	1.37	744	24.13	33.59	670	21.72	30.24	1413	45.84	63.83	71.83	77.57
	7	♀	2635	1964	148	45	1.72	661	25.08	33.65	585	22.19	29.78	1246	47.27	63.43	74.52	80.14
		ø	**2859**	**2089**	**163**	**44**	**1.53**	**702**	**24.56**	**33.62**	**627**	**21.94**	**30.02**	**1329**	**46.50**	**63.64**	**73.07**	**78.75**
xxxxxxxx		♂	3243	2318	176	48	1.47	793	24.45	34.21	693	21.36	29.88	1486	45.82	64.09	71.49	76.92
	8	♀	2790	2035	158	53	1.91	720	25.81	35.38	599	21.46	29.42	1319	47.27	64.80	72.94	78.61
		ø	**3016**	**2177**	**167**	**51**	**1.68**	**756**	**25.08**	**34.75**	**646**	**21.41**	**29.67**	**1402**	**46.49**	**64.42**	**72.16**	**77.70**
xxxxxxxx		♂	3336	2377	189	45	1.34	805	24.12	33.84	709	21.26	29.83	1514	45.38	63.67	71.27	76.95
	9	♀	2853	2079	159	51	1.79	720	25.23	34.61	621	21.78	29.88	1341	47.01	64.49	72.89	78.47
		ø	**3094**	**2228**	**174**	**48**	**1.55**	**762**	**24.63**	**34.20**	**665**	**21.50**	**29.85**	**1427**	**46.13**	**64.05**	**72.02**	**77.65**
xxxxxxxx		♂	3243	2325	181	39	1.19	796	24.53	34.22	720	22.19	30.96	1515	46.72	65.18	71.68	77.24
	10	♀	2938	2119	155	48	1.62	723	24.62	34.13	641	21.83	30.27	1365	46.45	64.40	72.13	77.40
		ø	**3090**	**2222**	**168**	**43**	**1.40**	**759**	**24.57**	**34.18**	**680**	**22.02**	**30.63**	**1440**	**46.59**	**64.81**	**71.89**	**77.32**
xxxxxxxx		♂	3195	2336	179	48	1.52	771	24.13	33.00	709	22.20	30.36	1480	46.33	63.36	73.12	78.73
	11	♀	2701	1932	157	50	1.86	635	23.50	32.85	573	21.23	29.67	1208	44.72	62.52	71.53	77.35
		ø	**2948**	**2134**	**168**	**49**	**1.68**	**703**	**23.84**	**32.93**	**641**	**21.75**	**30.05**	**1344**	**45.59**	**62.98**	**72.39**	**78.10**
xxxxxxxx		♂	3154	2272	174	41	1.30	794	25.18	34.96	682	21.64	30.04	1477	46.82	65.00	72.04	77.56
	12	♀	2763	2004	149	44	1.57	705	25.51	35.18	598	21.64	29.84	1303	47.15	65.02	72.52	77.90
		ø	**2958**	**2138**	**161**	**42**	**1.43**	**750**	**25.34**	**35.06**	**640**	**21.64**	**29.95**	**1390**	**46.98**	**65.01**	**72.26**	**77.71**

Statistical analysis - Cocks on the age of 39 days **Tab. No. 5a**

Test: 49

Part fattening: 3

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	%	%
xxxxxxxx	1	121	3218.84	226.00	7.02	20.55	0.64	0.46
xxxxxxxx	2	126	3144.05	257.05	8.18	22.90	0.73	0.52
xxxxxxxx	3	125	3045.60	327.02	10.74	29.25	0.96	0.69
xxxxxxxx	4	126	3068.49	261.82	8.53	23.32	0.76	0.54
xxxxxxxx	5	128	3002.50	327.97	10.92	28.99	0.97	0.69
xxxxxxxx	6	126	3249.21	266.01	8.19	23.70	0.73	0.52
xxxxxxxx	7	129	3069.22	267.75	8.72	23.57	0.77	0.55
xxxxxxxx	8	124	2924.27	336.16	11.50	30.19	1.03	0.74
xxxxxxxx	9	120	3204.25	400.78	12.51	36.59	1.14	0.82
xxxxxxxx	10	122	3108.69	362.06	11.65	32.78	1.05	0.76
xxxxxxxx	11	116	3196.21	327.89	10.26	30.44	0.95	0.68
xxxxxxxx	12	125	3098.56	290.85	9.39	26.01	0.84	0.60

Statistical analysis - Hens on the age of 39 days **Tab. No. 5b**

Test: 49

Part fattening: 3

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	%	%
xxxxxxxx	1	127	2611.50	275.42	10.55	24.44	0.94	0.67
xxxxxxxx	2	129	2694.81	234.67	8.71	20.66	0.77	0.55
xxxxxxxx	3	129	2680.47	282.17	10.53	24.84	0.93	0.67
xxxxxxxx	4	130	2618.85	198.94	7.60	17.45	0.67	0.48
xxxxxxxx	5	124	2699.03	328.67	12.18	29.52	1.09	0.79
xxxxxxxx	6	125	2836.80	280.33	9.88	25.07	0.88	0.63
xxxxxxxx	7	126	2645.24	287.32	10.86	25.60	0.97	0.70
xxxxxxxx	8	124	2870.16	328.33	11.44	29.48	1.03	0.74
xxxxxxxx	9	128	2759.14	263.11	9.54	23.26	0.84	0.60
xxxxxxxx	10	124	2740.32	254.45	9.29	22.85	0.83	0.60
xxxxxxxx	11	124	2803.71	318.32	11.35	28.59	1.02	0.73
xxxxxxxx	12	128	2714.53	323.86	11.93	28.63	1.05	0.76