



MEZINÁRODNÍ TESTOVÁNÍ DRŮBEŽE
státní podnik, ÚSTRAŠICE

390 02 Tábor 2

Tel.: 381 200 320

**2nd part fattening test of the final product of 31. test
of parents from of broilers**

19. 7. 2022 - 13. 9. 2022

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Ústrašice, November 2022

1 Basic tests information

1.1 The basic dates

setting in the hatchery: 27 June 2022
beginning of test: 20 July 2022
end of the test: 13 September 2022

1.2 Location of the test

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

2 Material and methods

2.1 Material

There were 4 different breeds in this test. 700 day old chicks xxxxx (males and females) were divided by 35 birds per pen. Every treatment had 5 replications. The parent flock is 45 weeks old at the time of hatching eggs collection.

Treatment		Description
1	T1	xxxxx
2	T2	xxxxx
3	T3	xxxxx
4	T4	xxxxx

All the groups got xxxxx (1 kg/t).

All the groups got the yellow pigment xxxxx in the finisher phase at 800 g/t.

2.2 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.

2.3 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 – 53	18	6
Day 54 – 56	23	1

2.4 Feeding

Feed was produced in Mezinárodní testování drůbeže s.p., Ústrašice

Day 1 – 21 Starter (BR1)
Day 22 – 35 Grower (BR2)
Day 36 – 56 Finisher (BR3)

Diet formulas

	Starter BR1	Grower BR2	Finisher BR3
Age	Days 1 - 21	Days 22 - 35	Day 36 - 56
Components (%)			
Wheat	40.30	46.91	51.02
Soybean meal	33.80	29.00	25.00
Maize	17.00	15.00	15.00
Soybean oil	4.50	4.90	5.10
Limestone	1.50	1.28	1.24
MCP	1.30	1.40	1.10
Salt	0.30	0.30	0.30
Sodium bicarbonate	0.12	0.12	0.12
L-lysine	0.39	0.30	0.32
DL-methionine	0.09	0.09	0.10
L-threonine	0.20	0.20	0.20
Premix AMV BR1-PLUS 0,5%	0.50	-	-
Premix AMV BR2-PLUS 0,5%	-	0.50	-
Premix AMV BR3-PLUS 0,5%	-	-	0.50
Nutrient content			
Crude protein (g/kg)	200.19	183.34	169.36
ME (MJ/kg)	12.17	12.42	12.63
Lysine (g/kg)	14.26	12.36	11.51
Methionine (g/kg)	6.21	5.59	5.21
Met.+Cys. (g/kg)	9.93	9.10	8.54
Ca (g/kg)	9.62	8.74	7.95
P dig. (g/kg)	3.73	3.93	3.38
Na (g/kg)	1.57	1.57	1.57

2.5 Veterinary precautions

The chicken house was disinfected by xxxxx before the chick placement. On day 1 chickens were vaccinated with xxxxx.

No anticoccidials were not added to the diet. In order to prevent possible outbreaks of coccidiosis, an attenuated coccidiosis vaccine xxxxx with solvent was administrated as hatchery spray.

3 Parameters recorded

3.1 Live weight

Live weight was measured on days 1 (all the birds in each pen were weighed altogether), 21 and 35 (all the birds were weighed individually, without fasting). On day 56 birds all the birds were weighed individually, after 12 hours of fasting.

3.2 Feed conversion ratio (FCR)

Feed conversion ratio was calculated as feed consumption per 1 kg of live weight for the periods 1 – 21 days, 1 – 35 days and 1 – 56 days.

3.3 Mortality

All pens were checked twice 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.

3.4 Carcass analysis

The carcass analysis was done on 3 cocks and 3 hens per each pen on day 56. Breast muscles was weighed without skin and thigh muscles with bone and skin.

3.5 Statistical analyses

Performance results of live weight at the age of 56 days were statistically evaluated.

4 Results

Tab. No. 1	Hatchability
2a	Broiler results at the age of 21 days
2b	Broiler results at the age of 35 days
2c	Broiler results at the age of 56 days
3	Mortality during growing period at the age of 56 days
4	Results of carcass analysis
5a	Statistical analysis - cocks
5b	Statistical analysis - hens

Hatchability

Test: 31

Part fattening: 2

Tab. No. 1

Sample	Sample No.	Fertility	Hatchability		Birds housed	Average weight	
			Set	Fert.		hatch. eggs	1-day
		%	%	%		g	g
T1	1	91.43	87.78	96.01	175	61.51	40.57
T2	2	94.29	90.79	93.26	175	61.27	40.00
T3	3	95.56	90.79	94.94	175	62.14	40.86
T4	4	96.03	91.54	95.54	175	62.14	41.14

Broiler results at the age of 21 days**Tab. No. 2a**

Test: 31

Part fattening: 2

Sample	Sample No.	Mortality		Average live weight at 21 days		FCR
		birds	%	birds	g	g
T1	1	0	0,00	175	677,81	1559,79
T2	2	0	0,00	175	665,35	1549,13
T3	3	2	1,14	173	651,80	1442,57
T4	4	2	1,14	173	656,80	1487,30

Broiler results at the age of 35 days**Tab. No. 2b**

Test: 31

Part fattening: 2

Sample	Sample No.	Mortality		Average live weight at 35 days		FCR
		birds	%	birds	g	g
T1	1	0	0,00	175	1504,61	1753,91
T2	2	0	0,00	175	1494,70	1711,39
T3	3	3	1,71	172	1478,46	1659,04
T4	4	3	1,71	172	1475,97	1708,02

Broiler results at the age of 56 days**Tab. No. 2c**

Test: 31

Part fattening: 2

Sample	Sample No.	Average live weight at 56 days						FCR
		male		female		average		
		birds	g	birds	g	birds	g	
T1	1	71	2848.32	70	2319.64	141	2585.86	2245.56
T2	2	66	2849.86	79	2355.62	145	2580.59	2151.56
T3	3	62	2816.26	73	2382.33	135	2581.61	2171.29
T4	4	52	2861.69	85	2350.64	137	2544.61	2222.95

Mortality during the masts in 56 days

Tab. No. 3

Test: 31

Part fattening: 2

Sample	Sample No.	Mortality in the period								Mortality according causes														
		1 - 21		22 - 35		36 - 56		1 - 56		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		birds	%	birds	%	birds	%	birds	%															
T1	1	0	0,00	0	0,00	4	2,29	4	2,29										1	3				30
T2	2	0	0,00	0	0,00	3	1,71	3	1,71										1	2				27
T3	3	2	1,14	1	0,57	8	4,57	11	6,29										6	5				29
T4	4	2	1,14	1	0,57	7	4,00	10	5,71										3	7				28

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
 15 – Sampling (excluded of calculation)

Results of carcass analysis in 56 days

Tab. No. 4

Test: 31

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	%	%	%
T1	1	♂	2926	2085	168	75	2.57	514	17.57	24.66	703	24.02	33.72	1217	41.59	58.38	71.25	77.00
		♀	2386	1713	133	69	2.88	443	18.57	25.87	550	23.05	32.10	993	41.62	57.97	71.79	77.39
		⊖	2656	1899	151	72	2.71	479	18.02	25.20	626	23.59	32.99	1105	41.60	58.19	71.49	77.18
T2	2	♂	2884	2035	163	70	2.44	499	17.30	24.52	698	24.19	34.27	1197	41.49	58.79	70.57	76.22
		♀	2425	1747	137	76	3.15	467	19.25	26.73	558	23.03	31.97	1025	42.28	58.69	72.03	77.67
		⊖	2655	1891	150	73	2.76	483	18.19	25.54	628	23.66	33.21	1111	41.85	58.75	71.24	76.88
T3	3	♂	3004	2145	177	79	2.63	536	17.83	24.97	719	23.93	33.51	1254	41.76	58.49	71.40	77.29
		♀	2464	1766	138	82	3.34	458	18.60	25.95	573	23.25	32.44	1031	41.86	58.39	71.68	77.27
		⊖	2734	1956	157	81	2.95	497	18.18	25.41	646	23.63	33.03	1143	41.80	58.44	71.53	77.28
T4	4	♂	2970	2132	170	78	2.62	538	18.12	25.24	722	24.32	33.88	1260	42.43	59.12	71.78	77.51
		♀	2423	1730	136	75	3.11	449	18.51	25.93	561	23.15	32.42	1010	41.67	58.35	71.40	77.01
		⊖	2696	1931	153	77	2.84	493	18.30	25.55	642	23.79	33.23	1135	42.09	58.77	71.61	77.29

Statistical analysis - Cocks on the age of 56 days

Tab. No. 5a

Test: 31

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	%	%
T1	1	71	2848.32	223.85	7.86	26.57	0.93	0.67
T2	2	66	2849.86	250.49	8.79	30.83	1.08	0.78
T3	3	62	2816.26	284.13	10.09	36.09	1.28	0.92
T4	4	52	2861.69	302.08	10.56	41.89	1.46	1.06

Statistical analysis - Hens on the age of 56 days

Tab. No. 5b

Test: 31

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	%	%
T1	1	70	2319.64	183.45	7.91	21.93	0.95	0.68
T2	2	79	2355.62	193.04	8.19	21.72	0.92	0.66
T3	3	73	2382.33	202.01	8.48	23.64	0.99	0.71
T4	4	85	2350.64	208.69	8.88	22.64	0.96	0.69