



MEZINÁRODNÍ TESTOVÁNÍ DRŮBEŽE
státní podnik, ÚSTRAŠICE

390 02 Tábor 2

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**4th part fattening test of the final product of 31. test
of parents from of broiler chicken**

12. 1. 2023 - 8. 3. 2023

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Ústrašice, March 2023

1 Basic tests information

1.1 The basic dates

setting in the hatchery: 20 December 2022
beginning of test: 12 January 2023
end of the test: 8 March 2023

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 JA (males and females) were divided by 35 birds per pen. Every treatment had 5 replications.
The parent flock is 70 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	42.00	48.81	52.00
Soybean meal	32.10	28.00	24.92
Maize	17.00	14.00	14.00
Soybean oil	4.50	5.00	5.20
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)	202.05	189.47	179.71
ME (MJ/kg)	11.96	12.14	12.30
Lysine (g/kg)	13.83	12.11	11.49
Methionine (g/kg)	6.13	5.54	5.20
Met.+Cys. (g/kg)	9.77	9.01	8.53
Ca (g/kg)	9.57	8.71	7.94
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 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.

3.5 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
4a	Statistical analysis – cocks
4b	Statistical analysis – hens

Hatchability

Test: 31

Part fattening: 4

Tab. No. 1

Sample	Sample No.	Fertility	Hatchability		Birds housed	Average weight	
			Set	Fert.		hatch. eggs	1-day
		%	%	%		g	g
T1	1	70.22	61.77	87.55	175	67.02	44.57
T2	2	63.55	56.00	88.66	175	67.04	45.14
T3	3	77.77	62.22	81.41	175	67.55	45.14
T4	4	74.44	68.00	91.53	175	67.35	44.57

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

Test: 31

Part fattening: 4

Sample	Sample No.	Mortality		Average live weight at 21 days		FCR
		birds	%	birds	g	g
T1	1	1	0.57	174	693.21	1545.48
T2	2	0	0.00	175	682.87	1534.20
T3	3	0	0.00	175	690.99	1539.99
T4	4	0	0.00	175	701.45	1540.81

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

Test: 31

Part fattening: 4

Sample	Sample No.	Mortality		Average live weight at 35 days		FCR
		birds	%	birds	g	g
T1	1	1	0.57	174	1546.30	1737.78
T2	2	0	0.00	175	1546.93	1731.88
T3	3	0	0.00	175	1537.96	1745.99
T4	4	0	0.00	175	1541.69	1709.08

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

Test: 31

Part fattening: 4

Sample	Sample No.	Average live weight at 56 days						FCR
		male		female		average		
		birds	g	birds	g	birds	g	g
T1	1	88	2919.32	86	2452.43	174	2688.56	2178.92
T2	2	87	2935.79	88	2452.88	175	2692.95	2200.32
T3	3	94	2922.72	81	2435.47	175	2697.19	2208.69
T4	4	92	2919.23	82	2429.27	174	2688.33	2173.38

Statistical analysis - Cocks on the age of 56 days

Tab. No. 4a

Test: 31

Part fattening: 4

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	88	2919.32	260.60	8.93	27.78	0.95	0.68
T2	2	87	2935.79	257.97	8.79	27.66	0.94	0.68
T3	3	94	2922.72	217.88	7.45	22.47	0.77	0.55
T4	4	92	2919.23	246.84	8.46	25.74	0.88	0.63

Statistical analysis - Hens on the age of 56 days

Tab. No. 4b

Test: 31

Part fattening: 4

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	86	2452.43	284.87	11.62	30.72	1.25	0.90
T2	2	88	2452.88	240.55	9.81	25.64	1.05	0.75
T3	3	81	2435.47	275.31	11.30	30.59	1.26	0.91
T4	4	82	2429.27	236.49	9.73	26.12	1.08	0.77