MEZINÁRODNÍ TESTOVÁNÍ DRŮBEŽE
státní podnik, ÚSTRAŠICE

390 02 Tábor 2 Tel.: 381 200 320

5th part fattening test of the final product of test of parents from of broilers

xxxxx

9. 6. 2026 - 15. 7. 2026

Study Investigator: Eva Hrůšová
Ing. Markéta Krekulová

Ústrašice, September 2026

1 Basic tests information

1.1 The basic dates

setting in the hatchery:	18 May 2026
beginning of test:	9 June 2026
end of the test:	15 July 2026

1.2 Location of the test

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

2 Material and methods

2.1 Material

Four different samples were used in this test. There were 2130 xxxxx broiler hatching eggs. Each sample contained 200 chicks, divided into 5 pens (40 broilers in each pen). The parent flock is 61 weeks old at the time of hatching eggs collection.

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

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 – 32	18	6
Day 33 – 35	23	1

2.4 Stocking density

17 broilers per square meter

2.5 Feeding

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

Day 1 – 14 Starter (BR1)
Day 15 – 28 Grower (BR2)
Day 29 – 35 Grower (BR3)

Diet formulas

	Starter BR1	**Grower BR2**	**Finisher BR3**
Age	Days 1 - 14	Days 15 - 28	Day 29 - 35
Components (%)			
SBM	39.07	34.60	23.36
Wheat	33.00	40.08	53.00
Maize	18.00	15.70	15.30
Soybean oil	5.26	5.86	4.96
Limestone	1.65	1.24	1.08
MCP	1.20	0.84	0.52
Salt	0.27	0.28	0.28
Sodium bicarbonate	0.12	0.12	0.12
DL-methionine	0.41	0.36	0.33
L-lysine	0.34	0.28	0.38
L-threonine	0.18	0.14	0.17
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)	228.97	213.24	174.08
ME (MJ/kg)	12.16	12.47	12.55
Lysine (g/kg)	14.63	13.12	11.27
Met.+Cys. (g/kg)	13.29	12.04	10.55
Ca (g/kg)	11.04	8.57	6.95
P dig. (g/kg)	4.86	4.22	3.67
Na (g/kg)	2.03	2.00	1.84

Feed analyses for nutrient contents were performed at the laboratory of xxxxx

Nutrient content	Starter BR1	Grower BR2	Finisher BR3
Crude protein (g/kg)	226	214	178
Dry matter (%)	89.70	89.80	90.09
Fat (g/kg)	70.40	77.20	69.30
Ash (g/kg)	59.70	54.00	45.50
Starch (g/kg)	371	388	451
Reducing sugars (g/kg)	48.90	47.10	41.00
P (g/kg)	6.62	5.76	4.81
Ca (g/kg)	10.10	8.31	8.39
ME (MJ/kg)	12.70	13.00	13.20

The feed was without coccidiostats. xxxxx (1 kg/tonne) was in every group of feed.

2.6 Veterinary precautions

The chicken house was disinfected by xxxxx before the chick placement. On days 1 and 12 chickens were vaccinated with xxxxx.

3 Parameters recorded

3.1 Live weight

Live weight was measured on day 1 (all the birds in each pen were weighed altogether). On days 7, 10, 14, 21 and 28 birds were weighed individually without fasting. On day 35 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 – 7 days, 1 – 10 days, 1 – 14 days, 1 – 21 days, 1 – 28 days and 1 – 35 days.

3.3 Mortality

All pens were checked twice daily 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 Statistical analyses

Performance results of live weight at the age of 35 days were statistically evaluated.

4 Results

Tab. No.
- 1 Hatchability
- 2 Performance results:
  - 2a Body weight
  - 2b Weight gain
  - 2c Feed conversion ratio
  - 2d Feed consumption
- 3 Mortality
- 4 Statistical analysis of body weight at the age of 35 days
- 5 Performance results per pen:
  - 5a Body weight
  - 5b Weight gain
  - 5c Feed conversion ratio
  - 5d Feed consumption

Hatchability **Tab. No. 1**

Treatment	Tr. No.	Fertility	Hatchability		Birds housed	Average weight	
			Set	Fert.		hatch. eggs	1-day
		%	%	%		g	g
T1	1	94.17	79.02	83.95	200	69.16	47.25
T2	2	88.13	71.49	80.15	200	68.87	47.00
T3	3	94.17	79.36	84.29	200	69.39	47.25
T4	4	88.54	71.84	80.13	200	69.05	46.75

Body weight per phases **Tab. No. 2a**

Treatment	Tr. No.	Day 1		Day 3		Day 7		Day 10		Day 14		Day 21		Day 28		Day 35	
		Birds	Average body weight	Birds	Average body weight	Birds	Average body weight	Birds	Average body weight	Birds	Average body weight	Birds	Average body weight	Birds	Average body weight	Birds	Average body weight
			g		g		g		g		g		g		g		g
T1	1	200	47.25	200	89.36	200	205.92	188	320.44	187	565.82	176	1033.50	166	1702.51	154	2408.95
T2	2	200	47.00	200	87.90	198	204.07	187	320.47	187	565.36	177	1095.03	167	1792.19	156	2438.74
T3	3	200	47.25	200	88.55	195	203.96	183	316.36	183	560.25	172	1031.84	162	1734.44	150	2422.33
T4	4	200	46.75	200	89.58	199	203.61	189	314.22	189	558.30	179	1033.97	169	1725.11	157	2381.57

Weight gain per phases **Tab. No. 2b**

Treatment	Tr. No.	Day 3 - 7	Day 8 - 10	Day 11 - 14	Day 15 - 21	Day 22 - 28	Day 29 - 35	Day 3 - 35
		Weight gain per phase	Weight gain per phase	Weight gain per phase	Weight gain per phase	Weight gain per phase	Weight gain per phase	Weight gain per phase
		g	g			g	g	g
T1	1	116.56	114.34	245.16	469.76	672.58	705.02	2320.11
T2	2	115.96	116.74	244.89	531.01	698.16	651.08	2355.43
T3	3	115.17	112.47	243.89	471.63	702.01	691.61	2334.23
T4	4	114.10	110.94	244.08	476.93	695.38	658.82	2292.50

Feed conversion ratio **Tab. No. 2c**

Treatment	Tr. No.	Feed conversion ratio						
		Day 3	**Day 7**	**Day 10**	**Day 14**	**Day 21**	**Day 28**	**Day 35**
		g/kg LW	g/kg LW	g/kg LW	g/kg LW	g/kg LW	g/kg LW	g/kg LW
T1	1	660.81	795.47	916.85	1060.60	1323.93	1444.08	1562.28
T2	2	650.74	804.97	918.22	1096.85	1303.01	1435.32	1573.60
T3	3	648.79	805.98	926.74	1080.17	1292.70	1412.22	1523.88
T4	4	634.63	805.30	927.34	1050.31	1249.57	1390.75	1526.40

Feed consumption per phases **Tab. No. 2d**

Treatment	Tr. No.	Feed consumption							
		Starter (day 1-3)	Starter (day 4-7)	Starter (day 8-10)	Grower (day 11-14)	Grower (day 15-21)	Grower (day 21-28)	Finisher (day 29-35)	Total
		kg	kg	kg	kg	kg	kg	kg	kg
T1	1	11.81	20.95	25.82	57.78	140.08	186.64	207.99	651.07
T2	2	11.44	21.20	25.70	61.58	146.86	197.06	207.44	671.28
T3	3	11.49	20.97	24.98	57.72	129.06	184.92	194.72	623.86
T4	4	11.37	21.35	25.40	56.16	130.08	192.96	202.74	640.06

Mortality **Tab. No. 3**

Treatment	Tr. No.	Mortality in the period															Mortality according causes													
		Day 1–7		Day 8-10		Day 11-14		Day 15-21		Day 22-35		Day 29 - 35		Day 1 - 35																	
		birds	g	birds	g	birds	g	birds	g	birds	g	birds	g	birds	g	%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
T1	1	0	0	2	371	1	253	1	508	0	0	2	1667	6	2799	3.00										2	1		3		40
T2	2	2	142	1	159	0	0	0	0	0	0	1	1936	4	2237	2.00										2			2		40
T3	3	5	501	2	319	0	0	1	213	0	0	2	3495	10	4528	5.00										3	1		6		40
T4	4	1	112	0	0	0	0	0	0	0	0	2	3366	3	3478	1.50										2			1		40

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)

Statistical analysis - Body weight at 35 days of age **Tab. No. 4**

Treatment	Tr. No.	Cocks			
		Number of birds	Average body weight	Standard deviation	Coefficient of variation
			g/birds	g/birds	%
T1	1	154	2408.95	258.05	10.71
T2	2	156	2438.74	279.01	11.44
T3	3	150	2422.33	278.36	11.49
T4	4	157	2381.57	297.94	12.51

Body weight per phases per pen **Tab. No. 5a**

Treatment	Tr. No.	Box No.	Day 1		Day 3		Day 7		Day 10		Day 14		Day 21		Day 28		Day 35	
			Birds	Average body weight	Birds	Average body weight	Birds	Average body weight	Birds	Average body weight	Birds	Average body weight	Birds	Average body weight	Birds	Average body weight	Birds	Average body weight
				g		g		g		g		g		g		g		g
T1	1	1	40	47.50	40	92.75	40	210.80	37	327.95	37	584.30	35	1071.91	33	1737.21	31	2476.10
		5	40	47.50	40	89.98	40	209.68	38	321.92	38	567.76	36	1041.78	34	1740.74	31	2494.23
		9	40	47.50	40	86.43	40	202.70	37	319.22	36	558.86	34	1037.09	32	1723.47	30	2460.70
		13	40	47.50	40	93.90	40	212.08	38	322.71	38	563.16	36	993.92	34	1674.62	32	2313.00
		17	40	46.25	40	83.75	40	194.33	38	310.58	38	555.16	35	1023.80	33	1636.82	30	2302.07
T2	2	2	40	47.50	40	92.03	40	207.70	38	326.05	38	568.47	36	1131.06	34	1871.88	32	2542.19
		6	40	46.25	40	84.40	40	196.75	38	320.32	38	551.45	36	1075.81	34	1676.44	31	2390.29
		10	40	47.50	40	87.53	40	206.15	38	319.53	38	578.71	36	1139.61	34	1836.41	32	2541.63
		14	40	47.50	40	90.55	40	206.60	38	318.42	38	565.63	36	1058.22	34	1784.32	32	2361.72
		18	40	46.25	40	85.00	38	203.11	35	317.83	35	562.31	33	1068.21	31	1791.84	29	2347.86
T3	3	3	40	47.50	40	88.13	40	202.25	38	309.03	38	562.95	36	1104.00	34	1769.38	31	2547.29
		7	40	46.25	40	82.95	40	201.58	38	315.34	38	556.63	36	1029.83	34	1698.97	31	2428.39
		11	40	47.50	40	88.80	37	208.35	35	317.91	35	558.83	33	1033.52	31	1726.06	29	2400.10
		15	40	47.50	40	92.55	40	210.00	37	329.86	37	573.41	34	1034.71	32	1817.66	30	2489.40
		19	40	47.50	40	90.33	38	197.66	35	309.57	35	548.74	33	950.70	31	1657.48	29	2235.14
T4	4	4	40	47.50	40	92.20	40	211.15	38	324.55	38	556.97	36	1040.81	34	1753.68	31	2412.35
		8	40	46.25	40	84.28	40	197.85	38	301.53	38	543.18	36	1081.03	34	1763.82	31	2515.00
		12	40	46.25	40	91.73	40	205.68	38	318.63	38	568.13	36	1059.03	34	1779.59	32	2433.44
		16	40	46.25	40	91.73	40	201.58	38	318.05	38	561.82	36	993.56	34	1669.97	32	2269.66
		20	40	47.50	40	87.98	39	201.77	37	308.16	37	561.49	35	994.31	33	1656.45	31	2279.32

Weight gain per phases per pen **Tab. No. 5b**

Treatment	Tr. No.	Box No.	Day 3 - 7	Day 8 - 10	Day 11 - 14	Day 15 - 21	Day 22 - 28	Day 29 - 35	Day 3 - 35
			Weight gain per phase	Weight gain per phase	Weight gain per phase	Weight gain per phase	Weight gain per phase	Weight gain per phase	Weight gain per phase
			g	g			g	g	g
T1	1	1	118.05	115.62	256.35	487.51	670.21	746.13	2383.00
		5	119.70	112.55	245.84	477.56	695.12	742.90	2405.45
		9	116.28	117.59	238.53	479.18	697.53	745.50	2375.90
		13	118.18	109.61	240.45	433.56	685.15	646.56	2219.41
		17	110.58	116.45	244.58	472.09	614.58	645.27	2218.57
T2	2	2	115.68	119.26	242.42	564.14	738.12	677.09	2450.47
		6	112.35	124.29	231.13	526.03	600.44	700.00	2305.55
		10	118.63	113.29	259.18	563.75	701.50	707.09	2454.41
		14	116.05	112.92	247.21	492.67	728.97	607.28	2294.69
		18	117.18	113.71	244.49	506.42	724.03	556.59	2261.69
T3	3	3	114.13	107.61	253.92	541.22	665.00	770.87	2460.68
		7	118.63	114.53	241.29	475.03	665.50	738.45	2346.90
		11	118.24	110.26	240.91	475.39	687.77	678.38	2309.69
		15	117.45	119.19	243.54	454.85	789.63	677.47	2396.70
		19	107.26	110.63	239.17	405.55	706.42	584.66	2145.45
T4	4	4	118.95	114.42	232.42	486.06	709.24	658.61	2320.84
		8	113.58	103.42	241.66	539.06	689.00	761.42	2431.65
		12	113.95	112.24	249.50	490.22	726.26	646.66	2340.81
		16	109.85	117.45	243.76	433.19	685.21	603.47	2178.66
		20	114.18	107.08	253.32	434.94	666.36	626.10	2192.68

Feed conversion ratio per pen **Tab. No. 5c**

Treatment	Tr. No.	Box No.	Feed conversion ratio						
			Day 3	Day 7	Day 10	Day 14	Day 21	Day 28	Day 35
			g/kg LW	g/kg LW	g/kg LW	g/kg LW	g/kg LW	g/kg LW	g/kg LW
T1	1	1	668.46	858.63	953.56	1120.29	1373.22	1508.42	1616.16
		5	725.20	748.78	873.88	985.29	1279.69	1421.84	1524.30
		9	673.99	818.94	944.31	1101.78	1377.82	1498.35	1610.66
		13	588.39	770.95	903.73	1029.20	1384.01	1417.01	1539.79
		17	650.75	779.62	908.65	1067.49	1206.30	1372.60	1517.54
T2	2	2	698.18	777.56	916.31	1085.71	1266.00	1390.72	1555.23
		6	758.29	841.17	912.56	1174.51	1325.18	1539.73	1660.80
		10	565.55	776.13	903.18	1049.37	1219.89	1408.45	1534.92
		14	654.33	822.85	951.11	1108.40	1349.39	1453.55	1570.06
		18	576.47	809.16	907.44	1067.12	1366.92	1388.92	1548.37
T3	3	3	680.85	840.54	951.46	1108.19	1205.76	1380.60	1477.54
		7	837.85	798.71	913.77	1072.58	1254.56	1430.67	1529.67
		11	608.11	860.75	977.34	1095.20	1330.70	1377.74	1480.05
		15	537.55	766.67	911.74	1069.82	1306.59	1400.64	1513.60
		19	597.84	763.46	879.29	1053.73	1388.13	1477.23	1632.28
T4	4	4	648.05	776.70	884.77	1076.11	1206.37	1404.04	1561.67
		8	593.30	831.44	936.85	1046.13	1241.10	1394.54	1508.65
		12	714.09	794.94	949.53	1045.98	1218.09	1355.68	1488.41
		16	534.21	821.03	935.44	1063.24	1317.50	1408.60	1539.26
		20	682.01	804.41	931.95	1019.45	1269.74	1392.26	1536.85

Feed consumption per phases per pen **Tab. No. 5d**

Treatment	Tr. No.	Box No.	Feed consumption							
			Starter (day 1-3)	Starter (day 4-7)	Starter (day 8-10)	Grower (day 11-14)	Grower (day 15-21)	Grower (day 21-28)	Finisher (day 29-35)	Total
			kg	kg	kg	kg	kg	kg	kg	kg
T1	1	1	2.48	4.76	5.08	12.78	29.52	39.30	44.91	138.83
		5	2.61	3.67	4.98	10.64	28.90	39.66	41.64	132.10
		9	2.33	4.31	5.40	11.44	28.72	38.54	43.46	134.20
		13	2.21	4.33	5.10	11.02	29.78	34.60	39.48	126.52
		17	2.18	3.88	5.26	11.90	23.16	34.54	38.50	119.42
T2	2	2	2.57	3.89	5.54	12.22	30.08	40.60	45.50	140.40
		6	2.56	4.06	5.10	13.68	28.76	41.16	45.40	140.72
		10	1.98	4.42	5.12	12.20	28.94	42.16	43.80	138.62
		14	2.37	4.43	5.34	12.42	29.66	40.72	37.54	132.48
		18	1.96	4.40	4.60	11.06	29.42	32.42	35.20	119.06
T3	3	3	2.40	4.40	5.02	12.64	26.00	38.96	42.64	132.06
		7	2.78	3.66	5.10	11.84	25.76	39.60	41.14	129.88
		11	2.16	4.72	4.94	10.66	26.08	31.36	35.62	115.54
		15	1.99	4.45	5.44	11.70	25.60	39.30	38.44	126.92
		19	2.16	3.74	4.48	10.88	25.62	35.70	36.88	119.46
T4	4	4	2.39	4.17	4.98	12.00	24.30	42.00	41.96	131.80
		8	2.00	4.58	4.68	10.92	28.56	39.42	43.58	133.74
		12	2.62	3.92	5.50	11.14	25.64	39.42	39.90	128.14
		16	1.96	4.66	5.32	11.48	26.50	36.72	38.28	124.92
		20	2.40	4.02	4.92	10.62	25.08	35.40	39.02	121.46