

Table S1

Weight loss (g) of eggs from laying hens fed β -mannanase (BMA) depending on the storage time.

Treatments	Storage period (days)						
	1	7	14	21	28	35	42
Phase 1 – 36 to 40 weeks							
Control	1.017	1.673	1.748	2.691	3.251	3.750	1.017
BMA	0.744	1.168	1.221	2.591	3.223	3.653	0.744
<i>P-value</i> ¹	0.004	0.099	<0.001	0.434	0.839	0.526	0.004
SE ²	0.598	0.661	0.794	0.684	0.842	0.599	0.598
Phase 2 – 41 to 44 weeks							
Control	0.736	1.242	2.056	2.387	2.923	3.807	0.736
BMA	0.756	1.315	2.024	2.515	3.098	3.717	0.756
<i>P-value</i>	0.537	0.160	0.612	0.130	0.244	0.607	0.537
SE	0.969	0.755	0.609	0.651	0.664	0.697	0.969
Phase 3 – 45 to 48 weeks							
Control	0.615	1.348	1.523	2.137	2.439	3.675	0.615
BMA	0.541	1.221	1.562	2.300	2.121	3.263	0.541
<i>P-value</i>	0.131	0.152	0.708	0.241	0.291	0.020	0.131
SE	0.645	0.855	0.853	0.741	0.773	0.690	0.645

¹ Probability of treatment effect.

² Standard error.

Table S2

Albumen height of eggs from laying hens fed β -mannanase (BMA) depending on the storage time

Treatments	Storage period (days)						
	1	7	14	21	28	35	42
Phase 1 – 36 to 40 weeks							
Control	9.34	6.03	4.74	3.97	3.24	2.98	2.70
BMA	9.69	5.90	4.30	3.67	3.16	2.88	2.76
<i>P-value</i> ¹	0.347	0.461	0.044	0.096	0.538	0.534	0.644
SE ²	0.186	0.087	0.110	0.089	0.068	0.081	0.059
Phase 2 – 41 to 44 weeks							
Control	6.83	5.33	3.92	3.23	2.74	2.75	2.62
BMA	6.65	4.91	3.58	2.89	2.58	2.57	2.67
<i>P-value</i>	0.504	0.007	0.058	0.016	0.242	0.173	0.531
SE	0.135	0.080	0.089	0.072	0.066	0.062	0.041
Phase 3 – 45 to 48 weeks							
Control	7.97	5.49	4.74	3.67	2.96	2.66	2.68
BMA	7.83	5.28	4.30	3.13	2.82	2.48	2.47
<i>P-value</i>	0.576	0.294	0.051	0.016	0.245	0.057	0.106
SE	0.121	0.092	0.086	0.115	0.059	0.040	0.062

¹ Probability of treatment effect.² Standard error.

Table S3

Yolk length (mm) of eggs from laying hens fed β -mannanase (BMA) depending on the storage time.

Treatments	Storage period (days)						
	1	7	14	21	28	35	42
Phase 1 – 36 to 40 weeks							
Control	40.63	43.49	45.02	49.84	47.91	50.00	49.29
BMA	41.25	44.38	45.58	45.85	48.00	49.84	51.67
<i>P-value</i> ¹	0.319	0.262	0.391	0.005	0.914	0.895	0.012
SE ²	0.304	0.392	0.318	0.738	0.397	0.588	0.661
Phase 2 – 41 to 44 weeks							
Control	41.43	44.73	45.89	47.80	50.39	47.90	51.59
BMA	42.52	42.80	45.67	47.42	48.15	48.50	51.91
<i>P-value</i>	0.021	0.008	0.713	0.564	0.022	0.416	0.739
SE	0.242	0.380	0.292	0.312	0.500	0.359	0.563
Phase 3 – 45 to 48 weeks							
Control	39.94	42.03	46.63	46.08	46.08	48.06	50.00
BMA	41.10	42.63	45.40	46.10	45.47	47.96	49.04
<i>P-value</i>	0.024	0.301	0.099	0.977	0.328	0.928	0.418
SE	0.262	0.285	0.373	0.371	0.309	0.541	0.581

¹ Probability of treatment effect.

² Standard error.

Table S4Yolk weight (g) of eggs from laying hens fed β -mannanase (BMA) depending on the storage time.

Treatments	Storage period (days)						
	1	7	14	21	28	35	42
Phase 1 – 36 to 40 weeks							
Control	17.86	16.73	17.38	16.51	16.51	16.21	16.34
BMA	17.98	17.02	16.61	16.62	16.62	16.93	18.29
<i>P-value</i> ¹	0.827	0.650	0.184	0.841	0.705	0.294	0.003
SE ²	0.185	0.267	0.308	0.284	0.251	0.335	0.352
Phase 2 – 41 to 44 weeks							
Control	16.75	17.73	17.10	17.47	17.00	16.16	16.18
BMA	16.51	16.87	17.36	16.09	16.29	16.46	16.51
<i>P-value</i>	0.464	0.104	0.066	<0.001	0.086	0.520	0.026
SE	0.159	0.265	0.290	0.205	0.208	0.225	0.271
Phase 3 – 45 to 48 weeks							
Control	14.75	15.87	17.95	18.67	17.98	17.23	18.04
BMA	15.38	16.49	17.00	18.28	17.82	17.86	17.56
<i>P-value</i>	0.027	0.116	0.104	0.374	0.699	0.245	0.375
SE	0.147	0.221	0.294	0.216	0.204	0.264	0.268

¹ Probability of treatment effect.² Standard error.

Table S5

Total solids of eggs from laying hens fed β -mannanase (BMA).

Treatments	Albumen	Yolk
Control	11.65	46.88
BMA	12.02	47.04
<i>P-value</i> ¹	0.570	0.851
SE ²	0.18	0.26

¹ Probability of treatment effect.

² Standard error.