

# BIOAKTIV FarEast

## Netherlands: BioAktiv Improves the Performance of Mother Hens



Netherlands BioAktiv distributor Topturn Agro conducted a study in a broiler farm in Limburg in 2012. The broiler farm kept 16,400 mother hens of Ross 308 breed equally divided (4,100 hens) into four identical houses with centralised feed conveyors and drinking water systems. Adult roosters are kept in separate houses.

From 23 February 2012, the hens in houses 1 and 2 (test group) were fed 200 g BioAktiv for Animal Feed-G per tonne of feed for 30 weeks until December 2012. Hens in houses 3 and 4 (control group) were not fed the BioAktiv product (see picture below).



The eggs from the first few weeks of laying from the four houses were not separated. For hens aged 32 to 61 weeks, eggs for hatching were separated as far as possible before sending to the incubator for hatching. There were a total of 3,087,076 eggs on week 31, minus out 508,350 eggs up to week 31, total for week 32 to week 61 were 2,578,726 eggs, out of which 2,309,750 eggs (or about 90%) were examined for insemination and hatching. The recorded numbers of eggs for hatching, inseminated and hatched of both test and control groups of hens are shown as follows.

Work Week	Age in Weeks	BioAktiv					Control				
		Eggs for Hatching	Eggs Inseminated	Eggs Hatched	Insemination Rate	Hatching Rate	Eggs for Hatching	Eggs Inseminated	Eggs Hatched	Insemination Rate	Hatching Rate
21	32	60,750	56,419	54,182	92.9%	89.2%	64,650	59,828	57,533	92.5%	89.0%
22	33	33,600	31,205	30,106	92.9%	89.6%	33,600	31,057	29,722	92.4%	88.5%
23	34	49,200	45,466	43,483	92.4%	88.4%	49,800	45,706	43,789	91.8%	87.9%
24	35	48,000	44,559	42,600	92.8%	88.8%	50,400	46,333	44,447	91.9%	88.2%
25	36	48,000	44,616	42,504	93.0%	88.6%	52,800	48,334	46,365	91.5%	87.8%
26	37	46,050	42,593	40,700	92.5%	88.4%	55,200	49,990	48,190	90.6%	87.3%
27	38	41,850	38,556	37,059	92.1%	88.6%	46,500	41,460	40,009	89.2%	86.0%
28	39	46,650	42,526	40,371	91.2%	86.5%	47,250	41,954	40,271	88.8%	85.2%
29	40	43,200	39,424	37,726	91.3%	87.3%	45,600	40,201	38,468	88.2%	84.4%
30	41	38,400	34,832	33,512	90.7%	87.3%	43,200	37,964	36,353	87.9%	84.2%
31	42	38,400	34,395	32,436	89.6%	84.5%	43,200	37,381	35,428	86.5%	82.0%
32	43	43,200	39,009	36,918	90.3%	85.5%	48,000	41,439	39,527	86.3%	82.3%
33	44	43,200	38,907	36,466	90.1%	84.4%	46,500	39,874	37,214	85.8%	80.0%
34	45	33,600	29,931	28,329	89.1%	84.3%	38,400	33,104	31,288	86.2%	81.5%
35	46	33,600	29,918	28,126	89.0%	83.7%	44,100	37,842	35,867	85.8%	81.3%
36	47	35,850	31,856	30,081	88.9%	83.9%	43,200	36,361	34,158	84.2%	79.1%
37	48	36,450	31,850	29,722	87.4%	81.5%	43,200	35,640	33,216	82.5%	76.9%
38	49	33,600	29,295	27,713	87.2%	82.5%	38,400	31,554	29,568	82.2%	77.0%
39	50	43,800	37,533	34,712	85.7%	79.3%	39,000	31,392	28,697	80.5%	73.6%
40	51	36,000	29,693	27,717	82.5%	77.0%	36,000	27,421	25,499	76.2%	70.8%
41	52	31,350	25,177	23,509	80.3%	75.0%	38,400	28,949	27,291	75.4%	71.1%
42	53	28,800	22,692	20,929	78.8%	72.7%	31,800	23,198	20,855	72.9%	65.6%
43	54	33,000	25,855	24,209	78.3%	73.4%	33,600	23,590	21,380	70.2%	63.6%
44	55	27,900	21,243	19,274	76.1%	69.1%	33,600	23,308	21,306	69.4%	63.4%
45	56	33,600	24,871	22,425	74.0%	66.7%	32,700	21,183	18,656	64.8%	57.1%
46	57	24,000	17,500	15,564	72.9%	64.9%	27,000	16,943	14,988	62.8%	55.5%
47	58	33,600	22,200	18,987	66.1%	56.5%	36,450	21,888	18,480	60.0%	50.7%
48	59	24,000	14,558	12,482	60.7%	52.0%	37,200	21,818	18,611	58.7%	50.0%
49	60	16,500	9,414	7,749	57.1%	47.0%	31,650	17,445	14,344	55.1%	45.3%
50	61	8,000	4,083	3,673	51.0%	45.9%	4,200	2,252	1,911	53.6%	45.5%
<b>Overall:</b>		1,094,150	940,176	883,264	85.9%	80.7%	1,215,600	995,409	933,431	81.9%	76.8%
<b>Per Hen:</b>		133	115	108			148	121	114		

From the results, hens fed BioAktiv had 4% (85.9% – 81.9%) higher insemination rate and 3.7% (80.7% – 76.8%) more hatchlings than the control hens. Some of the effects of using BioAktiv observed by the farm manager were:

- Hens were quieter.
- Hens copulated more readily.
- Hens kept their plumage for a longer period.
- Hens appeared livelier

[\[Original report\]](#)

## Discussion

If we plot the insemination and hatching rates of both groups, they appear as in the chart below, Note that both groups had about the same rates at the start as BioAktiv was yet to take effect. As the hens aged, both rates of both groups dropped, but the control group's rates dropped faster. The rates were about the same again at week 60/61.

