



The following independent report, was produced by a Company named Agroflow Ltd, based in Wiltshire, United Kingdom

TEST SITE REPORT CHICKENS (broilers)

Broiler chickens are birds that are raised from chicks to a weight of 2 kilograms in a period of 43 days. There are some crops that are taken to 51 days for birds of 2.5 kilograms. This report only covers 43 day crops.

Site

Description:

This farm has six houses measuring 60 by 200 meters. Each house will contain 36,000 chicks at the start of the crop and be reduced to 30,000 thirty days into the growing period.

Houses 1, 2, 3 and 4 are controlled by a Flockman computer system, which controls and monitors feed, temperature, humidity, water consumption and bird weight.

Each house is supplied with water from the mains to a storage tank of 1,000 litres located on a platform 3 meters high which provides a gravity feed to four rows of nipple drinkers that run the length of the house.

Unit

Installation:

A HydroPath HS28 water conditioner was installed between the storage tank and the drinkers on the 1 inch (34mm) galvanized pipe, this unit was installed in house No. 1 and comparisons made with house No. 2.

The following results were obtained on tests carried out over six months and four crops of 43 day broilers. All results are compared with an identical house with the same number of birds.

Water The consumption of water increased by 18% over the test period. At first this created some concern as it was thought it may have an effect on the moisture of the litter (see litter) this was not the case.

Litter As mentioned above, there was concern that the higher consumption of water would create a wet litter, this was not the case and if anything the litter was drier. Dry litter is important because wet litter causes ammonia burns to the birds and a lower grading when they are processed.

Feathering The birds have a much better feather covering and the feathers are of very good quality, this is also important as it protects the bird against ammonia burning resulting in better grading.

Mortality There was a 33% less bird loss over the growth period.

Bird Weight On average, the birds weighed 0.15 kilogram or 6.8% more than birds from the other houses for the same growing time. In a weight to date test it showed that the birds in the treated house reached their desire weight two days sooner than the others. This can be a large saving when you consider each house uses 4 tons of feed per day during the last days of growing.

FCR (food conversion rate) This is a direct comparison between the weight of feed consumed and the weight of bird produced. For example, 2 kilograms of feed produce 1 kilogram of bird the FCR is 2 a good FCR is 1.8. We were unable to do a FCR due to the fact that all the birds from all the houses were mixed together and we could not get the integrators to co-operate and keep them separate. (see note).

NOTE Broiler growing in GB is controlled by the large integrators like Sun Valley and Vacenda and they virtually dictate to the growers. They say when the birds go in and come out, what feed to use, the price, etc. We have tried to organise some tests with them but to date it has been without success.

We have just started tests in turkey houses, egg laying houses and hatcheries with the new Hydropath units, but it is too soon for us to have any results.

We have had a HS28 in a laying house for a few months and although there has been some technical difficulties there are indications that we are getting a better laying percentage than in non treated houses. The eggs produced at this farm are for hatcheries and preliminary indications show a better hatching percentage. I must caution that these results are inconclusive due to the technical problems and the shortness of duration.

Now that we have the new Hydropath units and the fact that we have a better knowledge of the poultry industry as a whole, should make it easier to obtain the necessary results. With the results we have obtained so far I am convinced that there are substantial benefits in this process.

We are also testing some other modifications to the watering systems in poultry houses which work in conjunction with the Hydropath units. It is our belief that the combination of conditions, circulating and filtering the water will not only improve the growth rate and overall condition of the birds but will greatly reduce the possibility of disease within the flock.

I will be happy to discuss this subject further at any time and can be contacted at the above address, telephone or fax.

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Director