100 % Organic feed for poultry: results of feed trials in the UK

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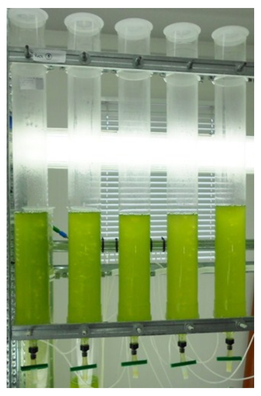
INTRODUCTION

Current regulations for organic pig and poultry production systems permit feed ingredients of non-organic origin, primarily due to concerns that a 100% organic diet would be unable to meet the demand for the essential amino acids methionine and lysine. This is compounded by the fact that the most obvious and commonly used protein feed source (soya) is not widely grown in Europe due to climatic conditions, and there are environmental and social concerns about using imported soya. However, 100 % organic diets for poultry and pigs are due to become compulsory in the EU from 1st January 2018. This poster reports on feeding trials carried out with broilers in the UK to investigate the impact of locally sourced 100 % organic feed on broiler performance.

MATERIALS AND METHODS

3 DIETS

1. Standard organic broiler feed (control: soya)
2. Locally sourced (i.e. within the UK/Europe) organic ingredients (sweet lupins)
3. Locally sourced organic ingredients and algae (*Spirulina spp*.)



HOUSING AND REPLICATES

Summer trial: July-Aug 2012

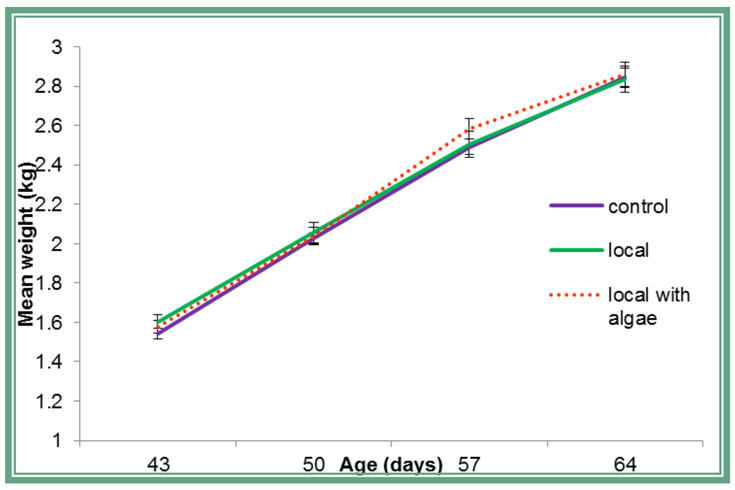
- 24 pens (2 houses) of 10 birds (Hubbard JA 57)
- Pens split between 3 diets: 8 replicates
- 50% birds weighed weekly during trial period
- Welfare scoring (breast feather coverage; hock lesions)

Winter trial: Jan-Feb 2013

- 12 pens (1 house) of 20 birds (Hubbard JA 57)
- Pens split between 3 diets: 4 replicates
- 50% birds weighed weekly during trial period
- Welfare scoring (breast feather coverage; hock lesions)

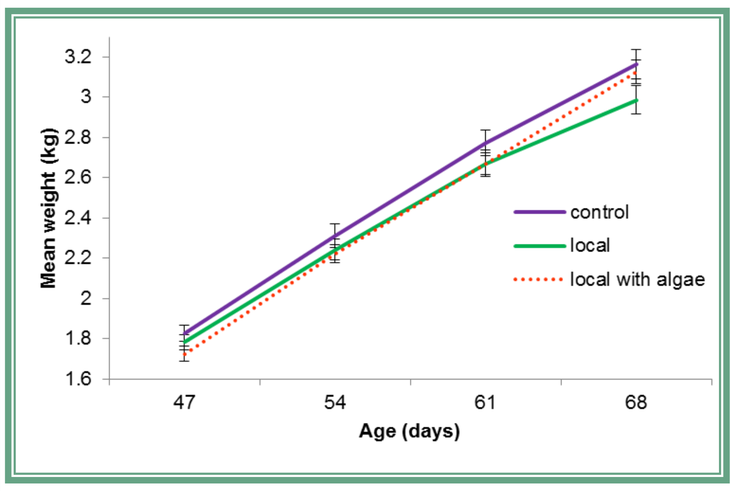
RESULTS

Summer trial



ANOVA gives no significant difference between diets

Winter trial



ANOVA gives P=0.03431

Significant difference between the local diet without algae (lower weight gain) and the local diet with algae.

CONCLUSIONS

The feed based on local ingredients with algae performed as well as the control feed in terms of weight gain in both the summer and winter feed trials.

Animal welfare parameters (breast feather coverage and hock lesion assessments) were recorded and showed no differences between the three feeds (data not shown).

Further work is needed to compare the economic and environmental impact of the ingredients that were included in the trial diets, and this will be carried out within the ICOPP project in the forthcoming year.

ICOPP
Improved Contribution of Local Feed to Support 100% Organic Feed Supply to Pigs and Poultry

ACKNOWLEDGEMENTS

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The diets were designed and manufactured by Hi-Peak feeds.