Heat treatment vs acid treatment in layer and breeder nutritional degradation of corn during storage

Introduction

Feed related costs are the main drivers of profitability of commercial farms, and good nutrition is mainly responsible for the exceptional egg production. There has been an ongoing discussion whether pelleted or mash feed is more favorable when feeding laying hens and breeders. Particle size in both pelleted and mash feed are very relevant for the feed digestibility, nutrient absorption and birds' performance. Yet, constant struggle with Enterobacteria outbreaks puts additional pressure on feed producers and farmers. Heat treatment like pelleting can inactivate Enterobacteria but it will not prevent the recontamination during feed transportation and storage. Heat treatment can also influence the nutritional value of feed as well and intestinal health. Would adding blends of acids to reduce the Salmonella development in mash feed and be more financially feasible to a farmer than investing in pelleted feed? Are there any other feed technology solutions that reduce microbiological counts? This would be to investigate within this internship/ thesis project involving literature review and possibly a trial considering production cost of pelleting or mash feed with inmixed acid blends and other methods found during the literature review.

Project aim

The aim of this project will be to compare different methods of preserving feed for layers and broiler breeders (pelleting, toasting etc) with the use commercial blends of acids produced by Selko, looking at the commercial aspect of production cost of feed.

What we offer

- Independent project where student is in lead in planning and executing
- Constant support of international experts in the field
- Possibility to visit several of our locations in the Netherlands

What we expect

- Writing a literature review on different ways to preserve feed for layers and broiler breeders
- Planning and carrying out research project
- Writing report that contains methodology, results, discussion and conclusion
- Present outcomes of the work during oral project evaluation

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