Phileo Focus

Supporting feed conversion during heat stress

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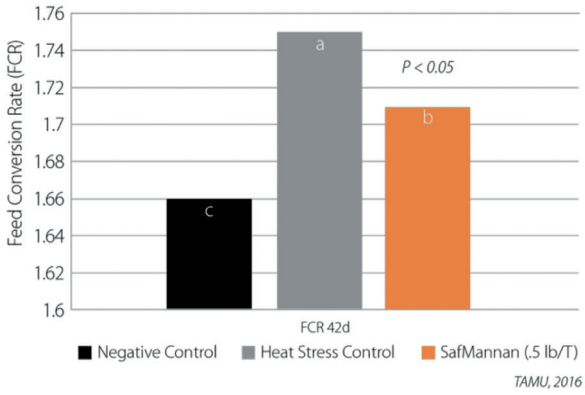
With the temperatures rising in most regions, concern for heat stress events in Poultry barns is also on the rise. Heat stress can have a negative impact on several aspects of a chicken's well-being; one consequence that can significantly impact poultry production and profitability is feed efficiency. With chickens starting to feel the physical impact of heat stress as early as April and May in some regions, solutions are needed to assist their physiological defenses.

Nutritional supplements are available to address heat stress in broilers. Particularly, feed supplementation with yeast cell wall compounds such as mannan-oligosaccharide and 1,3/1,6 β-glucans has been shown to modulate immunity, preserve gut function and improve growth performance. This scientific knowledge is the foundation of **Safmannan®**, a selected yeast fraction rich in mannan-oligosaccharides and β-glucans.

Trial 1:

450, 1-day-old male broilers on a corn-soybean diet, were randomly assigned to 3 different groups for this 42-day floor pend trial where heat stress conditions were 95 ± 3.6°F for the first week and then decrease of 5.4°F per week until it reached 78.8 ± 3.6°F. **Safmannan®** was supplemented at 1lb/T. *Sohail et. Al 2012*

Effect of SafMannan on feed conversion during heat stress challenge



TAMU, 2016

Trial 2:

300, 1-day-old male broilers were randomly assigned to 3 different groups of 100 (10 pens of 10 birds each). Group 1 (negative control; No heat stress and no supplementation). Group 2 (positive control; heat stress, no supplementation). Group 3, heat stress; supplemented with **Safmannan®** at 0.5lbs/T. After 42 days, feed conversion was evaluated.

Treatment	FCR 42D
Control	1.33^{C}
Heat Stress	1.67^{A}
Safmannan 1 lb/T & Heat Stress	1.39^{BC}

Trial 3:

60 Day commercial grow-out field trial, Southeast Integrator

During a 60-day target grow-out period, this on/off trial alternated supplementation with **Safmannan®** in two-week time periods. **Safmannan®** was supplemented at 1 lb/T in the finisher diets during the weeks specified below.

Treatments:

Two week periods of Control vs **Safmannan®** in Finisher Diets
Wk ending 7/20 – Control
Wk ending 8/3 – **Safmannan®**
Wk ending 8/17 – Control
Wk ending 8/31 – **Safmannan®**
Wk ending 9/14 – Control

Effect of SafMannan on weight, livability and FCR

Date	SafMannan	Ave. Weight	Livability (%)	Adj. FCR
7/20	Control	7.19	96.2	1.822
8/17	Control	7.27	94.4	1.840
9/14	Control	6.97	95.6	1.872
8/03	SafMannan	7.24	95.4	1.810
8/31	SafMannan	7.42	95.3	1.828
AVG	**SafMannan**	7.33	95.3	1.819
	Control	7.15	95.4	1.844
	Difference	**+0.19**	**-0.1%**	**-0.025**

It is widely known that heat stress can have detrimental effects on broiler performance and overall bird health. Therefore, a multi-faceted approach is necessary in most situations to help mitigate the negative effects of heat stress. In order to effectively mitigate these effects, a multi-hurdle approach which includes proper management, program monitoring, and effective tools such Safmannan are necessary. **Safmannan®** is a premium, sustainable, nature-based solution that has been specifically selected and scientifically validated to improve natural defenses and intestinal mucosal integrity.

In instances of heat stress, **Safmannan®** serves as a biological approach to those physiological problems induced by heat stress. This supplement helps to mitigate these negative zootechnical performance effects, resulting in improved feed conversion in broilers across multiple growth targets. Overall, this results in improved performance, bird health and animal welfare.

More information?

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