TECH REPORT | Poultry
Volume 5 | Issue 4 | Dec. 1, 2012

QTI™ ANIMAL HEALTH & NUTRITION

Q-essentials™: Multiple Products in One Convenient Package

Author: Steve Johnson

Key Points:

- Combines performance, health and safety at affordable prices
- Reduces the number of microbins required
- Reduces the chance for ingredient mix-ups
- Reduces the inventory floor warehouse stock

QTI is introducing Q-essentials, a brand line that combines various essential additives and ingredients in a single application, delivering a consistent blend of products that complement each other. With its first "combo" product now released (see below), QTI's research and development teams are also working on future offerings that will include different mixes of ingredients for animal and poultry applications.

Each combination goes through extensive research to find the optimum balance of products for poultry and livestock operations to improve performance, health and safety. Since each application is pre-mixed, customers get added value, convenience, and savings. Less microbins are needed for storage, there's less chance for ingredient mix-ups, and inventory control is simplified.

BacPack™

Qessentials BacPack

The first Q-essentials product is BacPack which combines the industry-leading direct-fed microbial/probiotic CALSPORIN® with one of the highest quality MOS products in the world, IMW50™. This powerful combination of prebiotic and probiotic gives you improved performance and less health and food safety concerns in your flocks and herds.

All Q-essentials products are blended and packaged to our high quality standards. When you use Q-essentials in your operation, you can be assured that you are getting some of the highest quality feed additives available on the market.

Trials show prebiotic and direct-fed microbial combination improves broiler performance.

Recent trials with our previous MOS product indicates that the combined action of CALSPORIN and MOS products create a powerful one-two punch in helping gut microbial balance. Field trials indicating healthier animals, faster weight gains, and more profitable feed conversion rates are all positive end results. Now, with our new IMW50 MOS product, we expect future results to be even stronger.

With Q-essentials, you can trust that our products have been rigorously researched and tested in operations just like yours. The following trials used our previous MOS product instead of IMW50, but we are confident that new tests will verify these types of results, if not enhance the outcomes.

Virginia Diversified Research Corporation, Harrisonburg, VA (2011-2012)

A broiler chicken litter pen trial was conducted from December 8, 2011 to January 19, 2012 using Cobb straight-run chicks. Chicks were allocated at 30 per pen to 16 pens for treatments 1-3 and 10 pens for treatment 4. Stocking density was 0.67 ft^2 using pen dimensions only (4' x 5'). Used litter was added to each pen at 7 days of age. Dietary treatments were: 1) negative control; 2) BMD® 55 ppm (0-35 days); 3) CALSPORIN® (300,000 cfu/g feed); and 4) CALSPORIN® + MOS Product#1 (1 lb/ton). Maxiban was used at 79 and 89 ppm in starter and grower, respectively. Feeds were fed in mash form. European Poultry Efficiency Factor (EPEF) = (Livability % x BW kg) x 100 / (Age, days x FCR). Higher value is better. MAFCR is mortality-adjusted FCR.

Southern Poultry Research, Inc., Athens, GA (2012)

A broiler chicken litter pen trial was conducted January 2-February 13, 2012 using Cobb x Cobb male chicks. Chicks were allocated to 50 pens of 50 chicks each (10 replicate pens/treatment and 5 treatments). Each pen had an area of 5 x 10 = 50 ft^2, and built up wood shavings of ~4 inches was used for bedding. The initial stocking density, after subtracting out for equipment, was 0.93 ft^2/bird. Chicks were spray vaccinated with Coccivac-B at day of hatch. The 3-phase (0-18, 18-35, and 35-42 day) dietary treatments were: 1) negative control; 2) BMD® 55 ppm (0-35 days) and Stafac® 22 ppm (35-42 days); 3) CALSPORIN® (300,000 cfu/g feed) + MOS Product#1 (1 lb/ton); 4) CALSPORIN®; and 5) BMD®/Stafac® + CALSPORIN® + MOS#1. Feeds were fed as crumbles/pellets. European Poultry Efficiency Factor (EPEF) = (Livability % x BW kg) x 100 / (Age, days x FCR). Higher value is better.

Summary

Two broiler pen trials were conducted during the winter of 2011-2012 at contract research facilities to evaluate the benefits of CALSPORIN® plus MOS#1, a yeast cell wall mannan oligosaccharide product, in feeds. In Trial 1, CALSPORIN® alone or CALSPORIN® plus MOS#1 significantly improved 42-day body weight and EPEF compared to negative control. In Trial 2, CALSPORIN® plus MOS#1 numerically improved all parameters, except mortality %, compared to negative control and in combination with antibiotics further improved weight gain, feed conversion ratio, and EPEF versus antibiotics alone. The prebiotic and direct-fed microbial combination improved broiler performance.

Table 1. Virginia Diversified Research Corporation, Harrisonburg, VA (2011-2012)

Treatments	Reps	BWd42, lb	FCR042d	MAFCR040d	Mort%042d	EPEF
Negative Control	16	4.5126 B	1.8942	1.8882	1.0416	267.70 B
BMD 55 ppm (0-35d)	16	4.4891 B	1.8768	1.8657	1.0416	268.60 B
CALSPORIN	16	4.7703 A	1.8659	1.8527	1.6666	285.50 A
CALSPORIN + MOS#1	10	4.9124 A	1.8393	1.8243	2.6665	295.80 A
P value		0.0000	0.3092	0.2345	0.1542	0.0008

Table 2. Southern Poultry Research, Inc., Athens, GA (2012)

Treatments	Reps	BWd42, lb	FCR042d	Mort%042d	KcalLbBW	Feed%LbBW	EPEF
Negative Control	10	5.4661 C	1.8709 A	4.4000	2,703 A	0.2806 A	308.8 D
BMD 55/VM 22 ppm	10	5.6286 AB	1.8106 B	4.2000	2,615 B	0.2743 BC	328.8 BC
CAL + MOS#1	10	5.6070 BC	1.8319 AB	7.2000	2,647 AB	0.2773 AB	318.9 CD
BMD/VM + CAL	10	5.6530 AB	1.7643 C	3.6000	2,547 C	0.2684 C	339.9 AB
BMD/VM + CAL + MOS#1	10	5.7692 A	1.7564 C	5.6000	2,536 C	0.2685 C	345.30 A
P value		0.0079	0.0000	0.1799	0.0000	0.0004	0.0001

PROVEN TECHNOLOGY

PERFORMANCE. HEALTH. FOOD SAFETY.

www.qtitechnology.com | 847-649-9300

1707 N. Randall Rd, Suite 300, Elgin, IL 60123

QTI TR v5:i4-2/17

QTI™ ANIMAL HEALTH & NUTRITION