



Table 1 – Experimental design of a mycotoxin challenge trial that used commercially-available feed additives.

Treatment Group	Aflatoxins (ppm)	Fumonisin (ppm)	Anti-Mycotoxin Additive
Control	0	0	0
Mycotoxin-challenged control	1	100	0
Calibrin-Z	1	100	0.5%
Enzyme-based (ENZ)	1	100	0.5%
Yeast cell wall-based (YCW)	1	100	0.5%
Algae-based (ALG)	1	100	0.5%

One of the biggest challenges for the poultry industry, particularly after the removal of in-feed antibiotics, is bacterial enteritis.

(1 ppm), and fumonisins B1 and B2 produced by *Fusarium moniliforme* (100 ppm). Aflatoxin B1 accounted for 93.8% of the aflatoxin added to the treatment diets and fumonisin B1 made up 95.8% of the cultured fumonisins added. Broilers fed Calibrin-Z were numerically the most feed-efficient group and had the greatest numerical weight gain in all groups fed a mycotoxin-contaminated diet. Broilers fed Calibrin-Z were also statistically more feed-efficient and statistically gained more weight compared to the yeast cell wall-based and algae-based products (Figure 1).

Safe and reliable

Performance and efficacy are important when deciding to incorporate a new feed additive into a ration but safety and re-

liability also need to be considered. Very few companies can say they own the clay mineral that goes into their feed additives, or that they control production all the way from the mine to the feed. Vertical integration with Oil-Dri means Am-lan controls every step of the production process to deliver safe and reliable, high-quality mineral-based products that are also processed in a sustainable manner. In the poultry industry's search for alternatives to antibiotics, Calibrin-Z can improve poultry intestinal health by binding a broad spectrum of microbial toxins, thereby helping to control some of the most economically-significant challenges the industry currently faces.

References available on request.

Figure 1: Feed conversion ratio and weight gain of aflatoxin and fumonisin-challenged broilers (540 total birds) fed different anti-mycotoxin additives.



Source: SAMITEC, Santa Maria, Brazil