MYCOAD

ALL efficacy claims are based on scientific *in vivo* trials with statiscal significance on

Target Organ Protection

Anti-Mycotoxin Additive

INTRODUCTION

Fungal contamination of agricultural products is often unavoidable and of growing concern because frequently these products have toxic metabolites known as mycotoxins. Mycotoxin contamination can occur in the crop, during harvest, during storage, or even after the feed is manufactured. Mycotoxins are fairly stable compounds that cause a wide variety of deleterious effects in poutry and other animals, depending on age, and nutritional and health status at the time of exposure to contaminated feed.

Mycotoxins cause toxic, teratogenic, mutagenic, carcinogenic effects, and/or depression of the immune system. The fact that a great variety of mycotoxins affect different organs in the urinary, digestive, nervous, reproductive and immune systems, makes difficult to establish a precise differential diagnosis. The most dangerous mycotoxins in poultry are aflatoxin, ochratoxin, T-2 toxin, fumonisin and deoxynivalenol (DON).

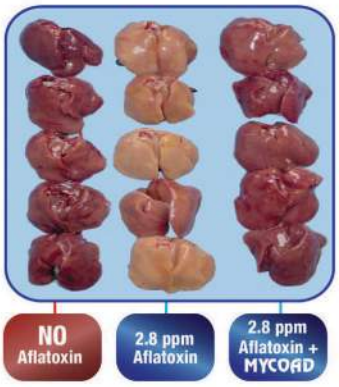
Approved by: QUALIDADE CERTIFICADA LAMIC **Tested by:** iira

AFLATOXIN

Effect of Aflatoxin and MYCOAD on broiler chicks after 21 days of consuming the experimental diets

Treatment	Body weight g	Feed intake g	Feed conversion	Liver weight %
Control	754 a	1074 a	1.45 a	2.96 a
5.0 kg MYCOAD	755 a	1085 a	1.46 a	3.00 a
2.8 ppm Aflatoxin	539 c	737 c	1.46 a	4.61 b
2.8 ppm Aflatoxin + 2.5 kg MYCOAD	668 b	970 b	1.47 a	3.83 a

a, b, c Values within each column with different letters are significantly different (P< 0.05)



Poultry Science Vol. 89, Suppl. 1 p. 817 2010.

OCHRATOXIN

Effect of Ochratoxin and MYCOAD on 28 day old brollers

Treatment	Average daily gain g	Liver weight %	Liver gross lesions	Kidney weight %	Kidney gross lesions
Control	31.05 a	4.90	Negative	1.09 a	Negative
2.5 kg MYCOAD	31.12 a	4.96	Negative	1.19 a	Negative
2.0 ppm Ochratoxin	29.67 b	4.89	19 + 63 ++ 18 ++++	1.37 b	6 + 6 ++ 88 ++++
2.0 ppm Ochratoxin + 2.5 kg MYCOAD	32.63 a	4.81	44 - 19 + 31 ++ 6 ++++	1.33 b	62 - 19 + 6 ++ 13 ++++

Score in % : Negative (-) Low (+), Moderate (++), accentuated (+++), Severe (++++).

a, b Values within each column with different letters are significantly different (P< 0.05)

Poultry Science Vol. 84, Suppl. 1 p. 131. 2005

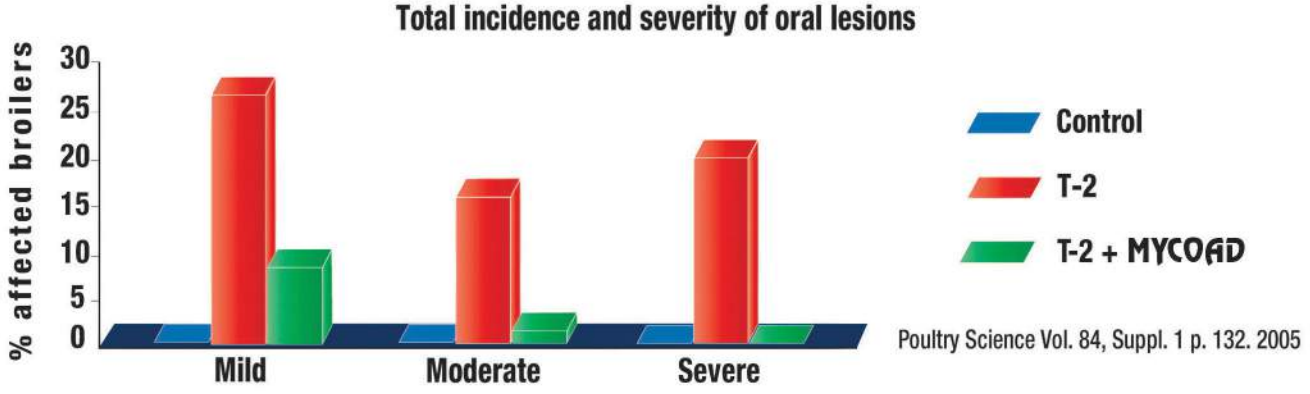
T-2 TOXIN

Effect of T-2 toxin and MYCOAD on broilers at different ages

Treatment	21 Days			28 Days			35 Days	
	Body weight g	Oral lesions score	Bursa weight %	Body weight g	Oral lesions score	Bursa weight %	Body weight g	Oral lesions score
Control	538 a	0 a	0.30 a	932 a	0 a	0.45 a	1446 a	0 a
1 ppm T-2 Toxin	463 b	1.84 b	0.20 b	788 b	1.63 b	0.20 b	1148 b	0.96 b
1 ppm T-2 Toxin + 2.5 kg MYCOAD	543 a	0.36 a	0.28 a	938 a	0.21 a	0.40 a	1451 a	0.04 a

a , b Values within each column with different letters are significantly different (P< 0.05)

1.0 ppm T-2 Toxin



Poultry Science Vol. 84, Suppl. 1 p. 132. 2005

FUMONISIN

Effect of Fumonisin and MYCOAD on broiler chicks after 21 days of consuming the experimental diets

100 ppm Fumonisin + MYCOAD

100 ppm Fumonisin

Treatment	Body weight g	Feed intake g	Feed conversion	Liver weight %	Sphinganine: sphingosine blood ratio
Control	717 a	1145 a	1.60 a	3.15 a	0.51 a
100 ppm Fumonisin	651 c	1093 c	1.69 b	3.30 a	0.35 b
100 ppm Fumonisin + 2.5 kg MYCOAD	679 b	1115 b	1.64 a	3.21 a	0.54 a

a, b, c Values within each column with different letters are significantly different (P< 0.05)

Poultry Science Vol. 91, Suppl. 1 p. 129. 2012

CONCLUSIONS

MYCOAD controlled in a statistically significant manner the toxic effects caused by aflatoxin, ochratoxin, T-2 toxin, and fumonisin on broiler performance, with a significant protection of target organs. No negative effects were reported seen on productive parameters of birds treated only with **MYCOAD**, showing results statistically similar to those of the controls.