

**SUPPRESSING EFFECT OF X-333 ON THE TOXICITY OF AFLATOXIN  
AND PESTICIDES IN THE LAYING HEN**

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In order to decrease the toxic effects of aflatoxin and pesticides in the laying hen, a food additive has been tested on 84 hens raised in individual cages and distributed into 4 equal groups. With this additive, the laying rate only decreased 40 p. 100 compared to 90 p. 100 without additive. Moreover, the blood GOT and cholesterol increase was reduced. Some complementary trials are in progress to complete our observations.

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**EFFECT OF LYSINE DEFICIENCY  
DURING THE GROWING PERIOD WITH OR WITHOUT DEFICIENCY  
DURING THE LAYING PERIOD  
ON THE PERFORMANCES OF THE LAYING HEN**

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An experiment was carried out on 120 pullets to determine the effects of a lysine deficiency during the growing period followed or not by a lysine deficiency during the laying period. From 0 to 17 weeks, the pullets were fed *ad libitum* either a complete diet (T) or a diet deficient in lysine (L). Then each group was split into 2 batches of hens reared in cages and fed a complete laying diet (N) or a lysine deficient laying diet (C).

Lysine deficiency during the growing period (LN and LC) reduced live weight, feed intake and feed efficiency. It also delayed sexual maturity, but did not modify the laying performances, except egg weight. Lysine deficiency during the laying period (TC and LC) sharply decreased weight gain, laying rate and egg weight. But this latter reduction was much more pronounced in LC birds than in TC birds (2.5 g instead of 0.4 g significant interaction). Therefore an early deficiency in lysine makes the pullets more susceptible to a later lysine deficiency, at least as far as egg weight is concerned.

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