COMBATTING THE MOST OCCURRING MYCOTOXIN IN SOUTH EAST ASIA: FUMONISINS

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A recent survey highlighted that, in South East Asia, 86.5% of the feedingstuff samples analyzed between 2013 and 2016 were contaminated with fumonisins, making it the most occurring mycotoxin in the area, and representing a significant threat for animal performance.

The objective of the study was to evaluate the capacity of an algae-clay based product (MT.X+) to manage fumonisin risk in poultry production.

Three trials were implemented. The first trial, conducted by the Samitec Institute (Brazil), tested the capacity of this product to decrease the effects of an acute fumonisin contamination (100 ppm) under experimental conditions. The 2 other trials, conducted in field conditions, tested the capacity of the product to counteract fumonisin effects on breeding hens (n=50,500) and broiler chickens (n=308,700) in a context of natural fumonisin contamination (from 0.850 to 3.500 ppb).

The results of the experimental study showed that the product significantly improved performance (feed intake and growth), reduced by the contamination in fumonisins. Clinical biochemistry and liver parameters were also significantly improved. In the field, the product increased the laying rate of breeding hens (+6%, *P*=0.014), leading to an improved productivity of the farm. In broiler chickens, the product increased the production efficiency factor (PEF) by 10% and the return over feed cost by 36% compared to control.

This series of trials confirmed that fumonisin contamination has a negative impact on poultry performance. The use of a specific algae-clay based product succeeded in preventing this impact on performance and productivity, both in experimental and commercial conditions.