

# Mycofix<sup>®</sup> product line

Naturally ahead in  
mycotoxin risk management



## Mycotoxins ...

... are toxic compounds produced by fungi that colonize crops. Most mycotoxins are produced before crops are harvested; however, others may be produced when crops are improperly stored. Regardless, mycotoxins pose a threat to human and animal health. Mycotoxins are chemically very stable, heat resistant and they are not deactivated by mold inhibitors.

Many fungal species also are capable of simultaneously producing several mycotoxins (Bottalico et al., 1998). Therefore, feed components are commonly contaminated with more than one mycotoxin.

## How do mycotoxins affect poultry?

The major mycotoxins, which have substantial negative effects on health and productivity of poultry, are T-2 toxin (T-2), Deoxynivalenol (DON), Diacetoxyscirpenol (DAS), Nivalenol (NIV), Zearalenone (ZEN), Ochratoxin A (OTA), Fumonisin (FUM), Aflatoxin B<sub>1</sub> (AFB<sub>1</sub>) and Ergot Alkaloids (Ergots).

Residues of mycotoxins can be found in the egg posing a food safety threat to consumers. Further, egg quality can be affected by the toxins.

A partial outline of their impacts is illustrated below.

## Most susceptible to mycotoxins are

- Poultry breeder
- Commercial layers
- Pullets
- Broilers
- Ducks
- Turkeys
- Quails, guinea fowls, ostriches and game birds

Unspecific symptoms like poor livestock performance and/or disease syndromes, reported in commercial operations, may be due to additive and synergistic interactions between multiple mycotoxins, even at a very low contamination level.



Fatty liver (AFB<sub>1</sub>)



Inflammation of the mucous membrane of oral cavity



Diarrhea (DON, OTA)



Affected comb (T-2, DAS, NIV, DON)



Impaired feathering (DON)



Diarrhea (DON, OTA)



Affected ovaries (ZEN, DON)



Dermal lesions (T-2, DAS, DON)



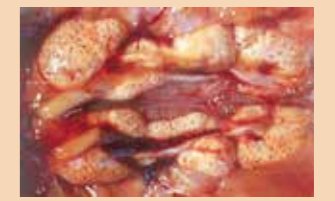
Poor feathering (T-2, DAS, DON)



Nervous syndrome (AFB<sub>1</sub>, DON)



Inhomogeneous flocks (DON, T-2, AFB<sub>1</sub>)



Affected kidneys (OTA)



Gizzard erosions (T-2, DAS, DON)



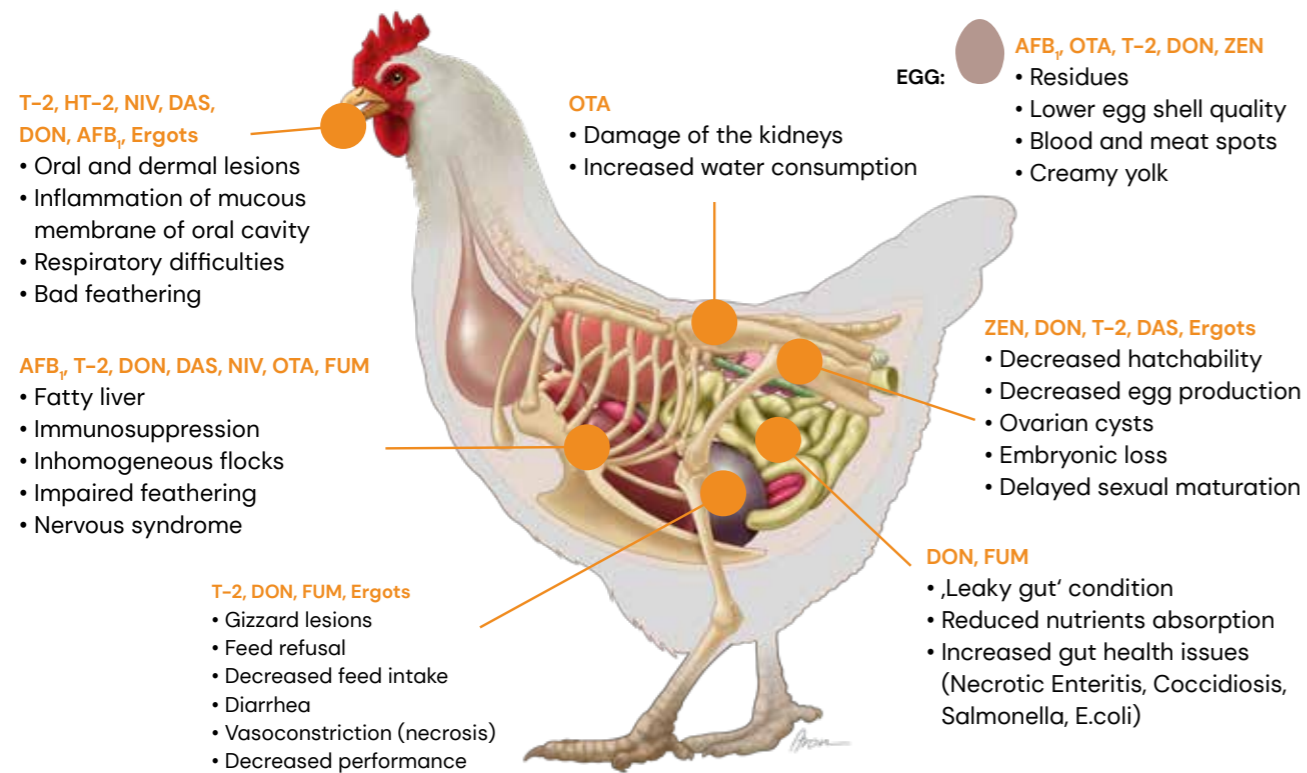
Sticky feces (T-2, DON)



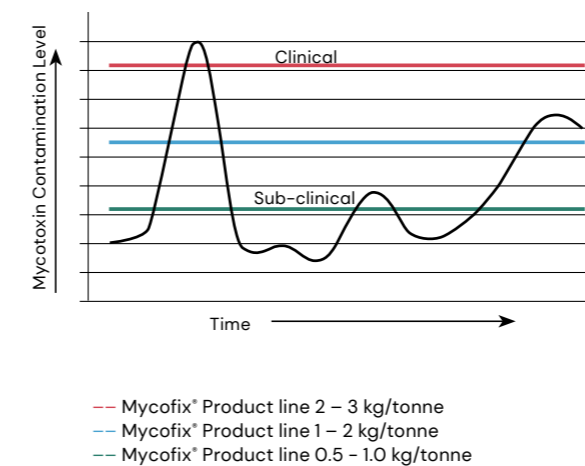
Leg weakness (T-2, DON)



Affected egg shell quality (AFB<sub>1</sub>, T-2)



## Mycotoxin Contamination Levels and Dose Recommendations for Mycofix® Product line



## Mycofix® Product line

- Dosage: 0.5 – 3 kg/t
- Stability: 18 months from production date
- Packing: 25 kg plastic bag in corrugated cartons
- Storage: Store in a dry place and avoid direct sunlight

Approved and registered in the EU according to the regulation No 2017/913, 1060/2013, 2017/930, 2018/1568 and 2021/363

# Trial-proven benefits of Mycofix® Product line\*

500 ppb OTA and 1000 ppb DON determined a reduction in average daily weight gain and body weight, and increased feed conversion ratio. With inclusion of Mycofix® Product line in the feed negative effects on growth parameters as well as renal and hepatic lesions were reduced. Natural humoral immunity and cellular defence were severely affected by chronically intoxication of broilers with OTA and DON, while the supplementation of Mycofix® Product line to the fodder avoided any negative effects and brought the parameters back to normal values.

Faculty of Veterinary Science Timisoara,  
Romania

The combination of 50 ppb aflatoxin, 300 ppb T-2 toxin and 500 ppb ochratoxin led to significantly lower body weight (d42), impaired FCR and higher mortality, caused a significant reduction on performance and led to a decreased level of plasma proteins and to a higher occurrence of lesions in the organs. Mycofix® Product line could completely overcome the negative impacts on performance and moreover was capable to enhance the immune system.

Dr. Luis Micheluzzi, Avimetrica, Argentina

The addition of Mycofix® Product line to broiler feed increased weight gain. Furthermore mortality and FCR were decreased.

Agricultural University Athens, Greece

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October 2023

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