International Pig Topics

Pighealth BYTES

Your own reference source on pig health

Number: 114

Mycotoxins II

Mycotoxicoses

Mycotoxicosis is the general term for any condition in an animal resulting from the consumption of a mycotoxin. For mycotoxicosis to occur a certain volume or dose of mycotoxin needs to be consumed. If the diet is protein, selenium or vitamin deficient it may predispose the pigs to a mycotoxicosis. Combinations of mycotoxins can exert synergistic effects.

Aflatoxins, trichothecenes and ochratoxin A have been reported to be immunosuppressive in swine.

The clinical response of pigs to mycotoxicoses is variable and can be acute, subacute or chronic and depends on dose and time. The signs are often vague and/or subtle and are often seen as changes in feed intake, FCR, reproduction and/or immunosuppression.

The common mycotoxins of swine are shown below and these will be considered in more detail in future Pighealth BYTES.

Mycotoxin	Clinical effects
Aflatoxins	Slow growth, poor FCR, reduced milk production, immune dysfunction
Ochratoxin	Anorexia, weight loss, reduced immunocompetence
Trichothecenes	Anaemia, diarrhoea, skin irritation and necrosis, reduced immunocompetence
Deoxynivalenol	Refusal to eat, vomiting, diarrhoea, depression, mild immunodepression, occasional reduced litter size and/or stillbirths
Zearalenone	Swollen vulvas in gilts, prolapses, nymphomania or anoestrus in sows
Fumonisins	Respiratory effects, jaundice
Ergot alkaloids	Peripheral necrosis/gangrene of feet, tail and ears. Agalactia and piglet starvation