

Science & Solutions

Immune depression

What's wrong with my pigs?

Photo: ienestran



Global industry trends

Highlights from the World Nutrition Forum 2014



The right approach?

Tackling the Fumonisin Challenge in Pig Production

Excerpt

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What's Wrong With My Pigs? Part 1: Immune Depression



A handy checklist for diagnosing swine ailments that you can cut out and keep with you for reference.

A number of biological agents are able to compromise immune integrity of animals, from mycotoxins to infections to drugs. A single instance or concomitant administration and poisoning of the above mentioned caused by these elements can undermine through suppression or disrupt regular development of body defenses and are resulting in lower performances, increased disease outbreaks and vaccine failures. Most often the syndromes stem from so-called "conditioned diseases" such as *E. coli*, *Streptococcus*, *Salmonella*, *Pasteurella*, *Influenza*, etc.. It is well known nowadays that diseases come from multifactorial causes; immune depression can let loose many latent infections, presenting a challenge for practitioners regarding etiology and therapy.

	Potential cause	Check list	Corrective action
MYCOTOXINS	<ul style="list-style-type: none"> • AFB₁, DON, DAS, T-2, OTA, FUM 	<ul style="list-style-type: none"> <input type="checkbox"/> Positive raw materials (ELISA) or feed (HPLC) <input type="checkbox"/> Origin of raw materials historically contaminated <input type="checkbox"/> Symptoms pertaining to mix of infections, vaccine failure <input type="checkbox"/> Decline of herd/phase performances 	<ul style="list-style-type: none"> <input type="checkbox"/> Check raw materials and feed <input type="checkbox"/> Hygiene of feed and water lines <input type="checkbox"/> Use Mycofix® at suitable inclusion rate
PATHOGENS	<p>Virus:</p> <ul style="list-style-type: none"> • <i>Circovirus</i>, <i>Herpes virus</i> (Aujeszky's), <i>Asfivirus</i>, <i>Orthomyxovirus</i> (Flu), and <i>Arterivirus</i> (PRRS) <p>Bacteria:</p> <ul style="list-style-type: none"> • <i>Mycoplasma</i>, <i>Pasteurella</i>, <i>APP</i>, <i>Salmonella</i> 	<ul style="list-style-type: none"> <input type="checkbox"/> Epidemiology, symptomatology <input type="checkbox"/> Necropsy <input type="checkbox"/> Immune-histochemistry, PCR, ELISA 	<ul style="list-style-type: none"> <input type="checkbox"/> Biosecurity <input type="checkbox"/> Vaccination <input type="checkbox"/> Antibiotics
ANTIBIOTICS	<ul style="list-style-type: none"> • Tetracyclines, penicillins, sulphametazine, streptomycin, chloramphenicol (forbidden in EU) 	<ul style="list-style-type: none"> <input type="checkbox"/> Overdosing <input type="checkbox"/> Prolonged treatment <input type="checkbox"/> Unwise adoption 	<ul style="list-style-type: none"> <input type="checkbox"/> Proper management and nutrition (acidifiers, phytogenics) <input type="checkbox"/> Alternative antibiotics

For more information, visit www.mycotoxins.info

DISCLAIMER: This table contains general advice on swine-related matters which most commonly affect swine and may be related to the presence of mycotoxins in feed. Swine diseases and problems include, but are not confined to the ones present in the table. BIOMIN accepts no responsibility or liability whatsoever arising from or in any way connected with the use of this table or its content. Before acting on the basis of the contents of this table, advice should be obtained directly from your veterinarian.