

A new bioeconomical approach to supporting poultry health

Fulvic acids are a water-soluble compound of humic substances. They form during the biodegradation of plant material, also known as humification. That is why fulvic acids are present in almost any soil.

by **Daniel Molnar**,
Product manager,
Humintech GmbH, Germany.
www.humintech.com

They function as natural complexing agents, enhance the availability of minerals and inhibit the growth of harmful germs.

Peat soils are especially rich in fulvic acids and are thus used as soil conditioners, plant fortifiers and as a fodder additive.



Leading Dutch water supplier Vitens NV and German biotech company Humintech GmbH have realised the first goals of their exclusive partnership.

As part of their Zero Liquid Discharge principle, Vitens is



supplying Humintech with food-grade quality fulvic acids extracted from drinking water, while Humintech turns these fulvic acids into high quality products for livestock breeding, agriculture and horticulture.

Fulvic acids in animal nutrition

Fulvic acids fulfill a similar function inside the digestive tract of animals as they do in soils: they improve feed conversion and help to reduce diseases of the gastrointestinal tract by inhibiting bacteria, viruses and other pathogens and prevent their take-up inside the digestive system. The germs bind to the fulvic acids and are excreted with them.

While free range animals take up fulvic acids and other humic substances from the soil, they are utterly missing in the feed recipes for modern factory farming – despite the fact that they have

always been a natural component of daily fodder. There is a reason they go unheeded by most: to produce pure fulvic acids has yet been very arduous and expensive.

That has now changed. Vitens NV has succeeded in extracting ultrapure fulvic acids out of Frisian peatland groundwater rich in fulvic acids in a patented process that makes it possible for the first time to extract the fulvic acids in an eco-friendly way, using no chemical additives to ensure a food-grade commodity.

What can we expect in practice?

Intensive farming is pushing the physiological boundaries of our livestock. Farmers must focus on the prevention of stress situations including illnesses and must optimise feed utilisation.

Any change in conditions can cause a drop in productivity, and

the regeneration demands nutritional requirements beyond the conventional feed rate. This can lead to deficiency symptoms like feather pecking and cannibalism.

Our practical and scientific experience shows that incorporating water derived natural fulvic acids into the diet or drinking water of animals helps to prevent and ease cannibalism as well as intestinal irregularities and contributes to the general well-being of animals.

This improved health status can lead to a productivity increase of up to 5%.

Given that it is a new product, we need further research to understand its effects in detail. But we already know that the capabilities of aquatic fulvic acid make it exceptional in developing liquid and powdered immune enhancers, intestinal health promoters and stress management products, as well as for direct application in animal breeding. ■

