

MAXFERM/PRO



DRIED ASPERGILLUS SSP. FERMENTATION PRODUCT FOR MONOGASTRICS

MAXFERM/PRO is a fungal fermentation product for monogastric animals to improve protein release from protein-rich feedstuffs. It is produced through an innovative solid-state fermentation process using selected fungi strains with impact on nutrient utilization and feed efficiency.

AIMS TO OPTIMIZE THE PROTEIN UTILIZATION OF FEEDSTUFFS

MAXFERM/PRO solutes the protein-containing cells of protein-rich feedstuffs very efficient and releases proteins from the colloidal system of cytoplasm and cell wall structures. As a result, more protein is generally available for the utilization in the digestive tract.

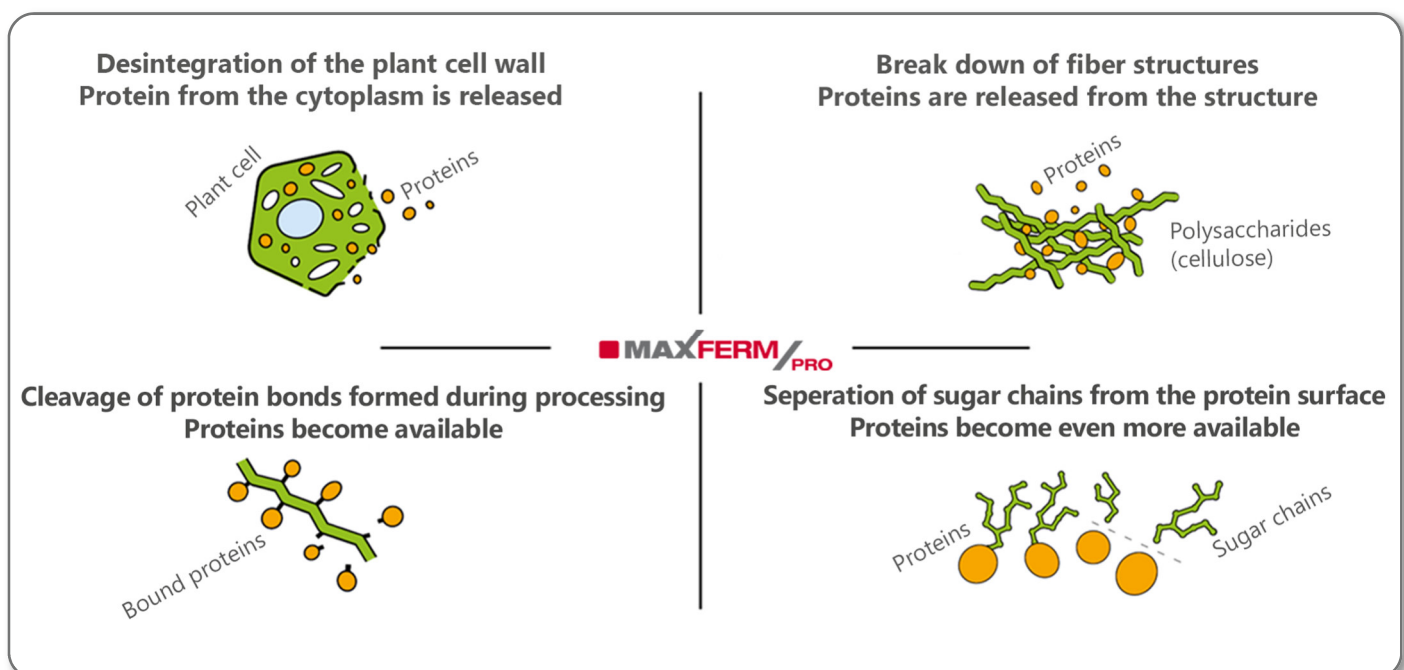
Simultaneously **MAXFERM/PRO** removes branched sugar-protein complexes and stimulates the degradation of non-starch polysaccharides (NSP). The multifactorial impact of **MAXFERM/PRO** elevates total tract digestibility, improves protein utilization and enables a more efficient

MAXFERM/PRO  

- Disintegration of plant cells and cell wall structures
⇒ Increased protein-release in protein-rich feed
- Breakdown of polysaccharide-protein complexes
⇒ Improved protein solubility in feedstuffs
- Degradation of complex sugar-protein chains
⇒ Higher protein utilization in monogastric diets

feed conversion. **MAXFERM/PRO** allows to reduce the crude protein content in the diet and helps to decrease nitrogen excretion.

MAXFERM/PRO IMPROVES PROTEIN-RELEASE AND DIGESTIBILITY



PERFECT COMPONENTS. MAXIMUM RESULTS.

IMPROVED NUTRIENT UTILIZATION IN FEED

MAXFERM/PRO - IMPROVES PROTEIN UTILIZATION OF FATTENING PIGS

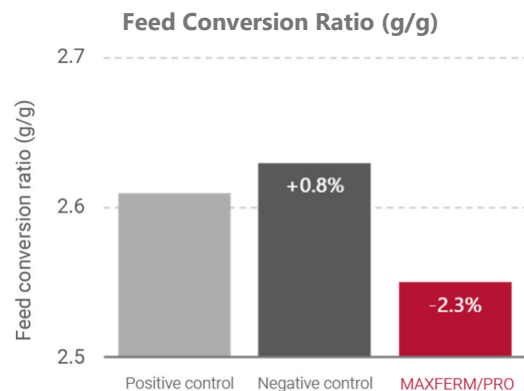
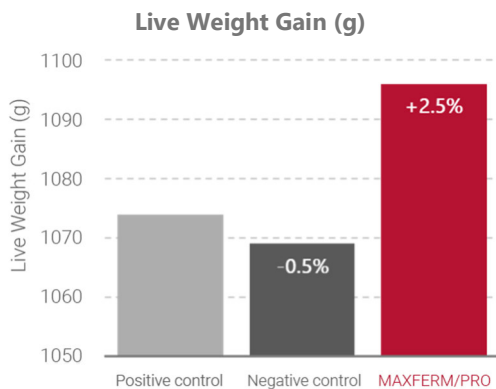
The effect of the **MAXFERM/PRO** technology on raised protein release was applied in diets for fattening pigs. Based on the assumed improvement on the apparent ileal protein digestibility, the addition of **MAXFERM/PRO** was evaluated. A treatment group of animals with a 1.0%p reduction in dietary crude protein content (16.0%) and simultaneous supplement of 500

ppm **MAXFERM/PRO** (treatment) has been compared to a positive control (17% CP) and negative control group (16.0% CP). Up to the finishing period (after 77 days) the effects of protein reduction compared to the positive control could be compensated with **MAXFERM/PRO** by +2.5% in daily weight gain and -2.3% in feed conversion.



Benefit of improved protein utilization in growing-finishing pigs

Trial Setup: n = 300 (DanAvl x Duroc), 11 weeks of age, 500 ppm MAXFERM/PRO



Source: ISF, 2018

MAXFERM/PRO - REDUCES THE AVERAGE AMMONIA CONCENTRATION

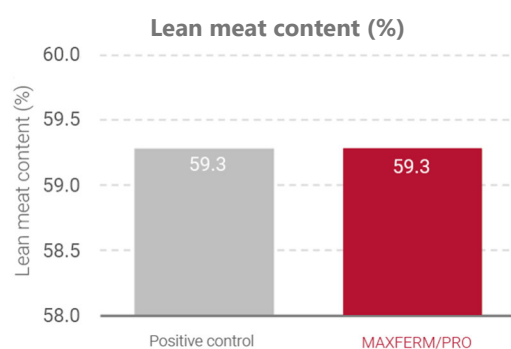
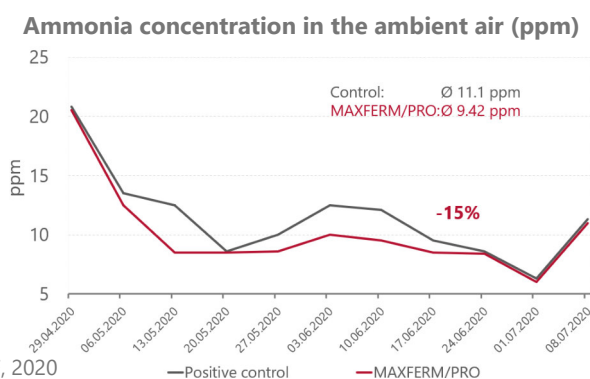
In the course of a another pig fattening feeding trial the ammonia concentration in two separate barn compartments was evaluated as a consequence of adapted dietary protein contents. **MAXFERM/PRO** in combination with a reduced protein content (-3%p soy bean meal in diet and -1%p CP respectively) was able to significantly reduce the average ammonia concentration in the ambient air in the barn. For the control group, the average ammonia concentration was 11.1 ppm, the treatment

group (**MAXFERM/PRO**) had an average of 9.42 ppm which represents a reduction by app. 15%. In the same trial, the beneficial effect of **MAXFERM/PRO** on protein utilization was confirmed by the results of carcass evaluations. Despite the 1%p CP reduction in the diets, no differences in the characteristics were observed between the treatments, with both the control and the **MAXFERM/PRO** group having an average lean meat content of 59.3%.



Simultaneous improvement of environmental parameters and protein utilization in fattening pigs

Trial Setup: n = 400; (DanAvl x Duroc), 35—110 kg; 500 ppm MAXFERM/PRO (-1%p CP in diet)



Source: ISF, 2020