



NORPONIN M POWDER

The natural solution to efficient farm production

Norponin M Powder contains 60% *Yucca schidigera* extract which has been traditionally used as source of different phytochemicals including saponins. Saponins are natural detergents or surfactants which, in animal nutrition have a number of applications and implications:

- Anti-microbial properties- *Yucca* saponins have the ability to form complexes with cholesterol in the cell membranes of bacteria, nematodes, protozoa and fungi causing cell lysis and death.
- Anti-inflammatory properties- *Yucca*'s phenolic compounds act as antioxidants which inhibits the inflammatory agent, nitric oxide synthase.
- Immune stimulatory properties- *Yucca* saponins are known to stimulate production of IgG and IgA even in the absence of pathogenic challenge.
- Environmental effects- *Yucca* is known to counteract the harmful effects of ammonia, thus it is used as one of the tools in odor management control in the farm.

BENEFITS:

- Better reproductive performance of breeders. *Yucca* extract promotes increased feed intake and reduced weight loss of lactating sows resulting in better milk production and shorter dry period. With its antimicrobial and immuno-stimulatory properties, *Yucca* extract also helps breeders improve their resistance to bacterial infections.
- More viable piglets at weaning. Feeding trials proved that supplementation of *Yucca* extract resulted in lower stillbirths & preweaning mortality and improved viability of piglets. These may be due to the improved performance of the sows and immunostimulatory effects of *Yucca* extract. Arthritis caused by *E. coli* and urea and uric acid deposits can also be prevented.
- Improved meat and egg quality. *Yucca* extract has the ability to inhibit recycling of cholesterol in the gut and liver, lowering blood cholesterol levels in the animals. Thus, the meat and egg they produce have cholesterol contents.
- Improved overall health status of the animals. *Yucca* extract contains phenolic compounds with anti-inflammatory and antioxidant properties which help prevent different kinds of inflammations in the animals' body.
- Environmental effects. *Yucca* extract is known to help in better odor management and fly population control due to its ammonia-binding and urease inhibiting properties. Therefore it provides a better environment for the animals, farm personnel and neighbors. Slurry handling and disposal is also easier because *yucca* is used in very small quantities compared to mineral ammonia binders.
- **Norponin M Powder** prevents stillbirths and promotes sexual maturity.

COMPOSITION (per kg):

Concentrated high grade extracts of <i>Yucca schidigera</i>	600 grams
Special Carrier	QSAD

INCLUSION RATES:

SWINE:

Booster	50 g/ton
Pre- starter/Starter/Grower	100 g/ton
Finisher	50 g/ton
**Special Nutrition ^o Application: 125 grams/ ton	

POULTRY:

Broilers	100 g/ton
Layers	50 g/ ton

PACKAGING:

25 kg