

# **Danisco Xylanase**

# Consistently improves energy and nutrient release in pig and poultry diets

## Multi-species and flexibility

- Flexible dosing variable inclusion rate according to feed ingredients to maximise value
- Registered in the EU for use in weaned piglets, growerfinisher pigs, broilers, turkeys, layers and ducks

# **Consistency and reliability**

 A highly effective xylanase to target the arabinoxylan in dietary fibre, resulting in improved digestibility and increased profitability Proven to consistently improve FCR and daily weight gain

#### **Convenience in application**

- Combine with Danisco Animal Nutrition's Phyzyme® XP phytase for additional feed cost savings
- Available as a liquid and a dry product form with inherent thermostability to 90°C (194°F)

## Why is dietary fibre costly to animal performance?

The nutritional value of grains and other raw materials is negatively affected by their dietary fibre content. A key component of soluble and insoluble dietary fibre is arabinoxylan which is found in plant cell walls (see table right).

The negative effects of arabinoxylan in dietary fibre include:

- acting as a physical barrier to the animal's own enzymes, encapsulating useful nutrients
- increasing digesta viscosity leading to:
  - decreased feed intake by slowing the passage rate of digesta in the gut
  - reduced nutrient utilisation as the animal's own enzymes cannot easily reach their substrate
- wasting valuable energy and protein/amino acids as the animal needlessly produces more of its own enzymes that are inappropriate to deal with dietary fibre
- wet litter or soft/watery faeces due to detrimental changes to the gut microflora

Poorly digested feed reduces animal performance, increases the costs of production and lowers profitability.

#### How can Danisco Xylanase help?

Danisco Xylanase is a preparation of endo-1,4-ß-xylanase produced by *Trichoderma reesei*.

Danisco Xylanase is designed and extensively tested for use in pig and poultry diets. It targets the arabinoxylan fraction (see table below) of the fibre in many raw materials e.g. grains, grain by-products and vegetable protein meals.

Danisco Xylanase improves digestion and reduces production costs by releasing nutrients, reducing digesta viscosity and the production of excessive secretions into the gut; reducing variability in the feeding value of grain and other raw materials, improving litter quality and faecal consistency.

Grain	Arabinoxylan content %	Arabinoxylan solubility %
Wheat	6.0	25
Rye	8.5	33
Triticale	5.7	24
Barley	7.4	12
Corn	3.9	8
Wheat middlings	16.5	10
Corn DDGS	12.7	10
Soybean meal	3.8	21
Canola meal	6.5	22



#### Danisco Xylanase makes it easy

With the assurance of Danisco's science-based approach to animal nutrition, Danisco Xylanase is a cost effective product that is easy to use.

#### Danisco Xylanase has:

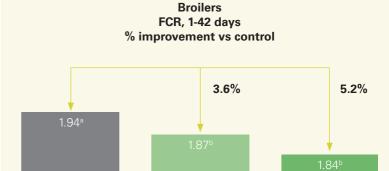
- multi-species registration
- · flexibility in dose rate
- liquid and dry product forms
- excellent efficacy across a range of raw materials

# **Consistent performance benefits**

Danisco Xylanase gives consistent performance benefits across a wide range of animal species and diet types, adding value to feed and animal production.

### **Product form benefits**

- Available as a liquid and dry product
- Thermostable to 90°C (194°F) during pelleting
- Free flowing for accurate handling in the feed mill
- Liquid product enables easy post-pelleting application



Danisco Xylanase

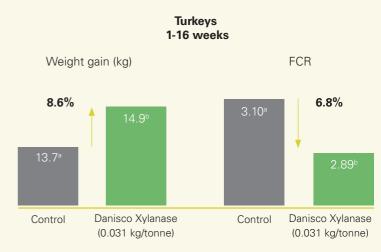
(0.016 kg/tonne)

Danisco Xylanase

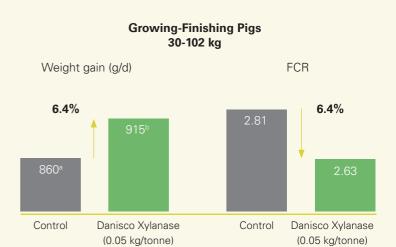
(0.031 kg/tonne)

DPIF, Australia. Wheat-based diets. abP<0.05

Control



Roslin Nutrition, UK. Wheat and triticale-based diets. abP<0.05



Bingen, Germany. Mixed grain and by-product diets.

abP<0.05

### **Danisco Xylanase application**

Species	Flexible application*
Broilers	0.016 - 0.063 kg/t
Layers	0.016 - 0.063 kg/t
Turkeys	0.031 - 0.063 kg/t
Ducks	0.016 - 0.063 kg/t
Piglets	0.05 - 0.1 kg/t
Grower-finisher pigs	0.05 - 0.1 kg/t

Higher feed cost savings are achievable by using Danisco Xylanase in combination with Danisco Animal Nutrition's Phyzyme® XP phytase to maximise nutrient release.

Danisco Xylanase feed formulation matrix values for maximum feed cost savings are available on request from Danisco Animal Nutrition.

Customised recommendations in use are supported by Danisco Animal Nutrition's unique Porcheck<sup>TM</sup> and Avicheck<sup>TM</sup> dose optimisation services, for pigs and poultry respectively.

#### **Product form**

Danisco Xylanase (dry)

Packed in 25kg multi-wall polyethylene lined paper bags, or 1000kg bulk (tote) bags.

Danisco Xylanase (liquid)

Packed in containers of 200kg and 1000kg.

#### **Product combination**

Available as a liquid blend with Phyzyme® XP\*.

\*subject to national registrations



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