



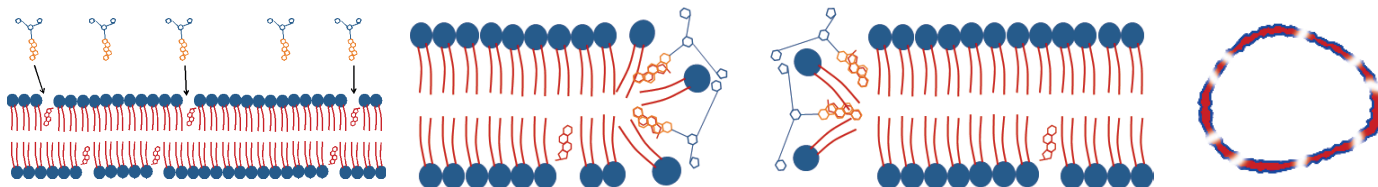
Contributes to the coccidial risk management

Norponin® XO is a natural product based on plants and plant extracts rich in saponins (including protodioscin and *schidigera* saponin B1). **Norponin® XO** contributes to **the management of the coccidial risk.**

Product Highlights

- ▶ Highly active & efficient compounds
- ▶ No withdrawal time: can be used in finisher diet
- ▶ High Safety index
- ▶ No interference with immunity
- ▶ Can be used during the whole raising period, in shuttle and rotation programs
- ▶ Can be used in organic farming

Mode of action



1. Saponins bind with sterol compounds of the cell membrane

2. Polarity Interactions between saponins and cell membrane create pores

3. Membrane rupture causes the coccidia lysis

Instruction for use

1 day-old chick

250 ppm during the whole life span

Slaughter



Powder (25 kg bag)	Norponin XO: 500 g/ton of complete feed Norponin XO₂: 250 g /ton of complete feed
Premix (25 kg bag)	2 kg/ton of complete feed
Liquid (1, 5, 20L drums)	1 L/1000L of drinking water (3-5 mL/lamb/day, 15 mL/ bull calf/day)

Material & Methods

Trial on broiler chickens | 42 days | Commercial farm in Peru | 3 groups of 25 broilers



▶ **Negative control** group: standard diet without coccidiostat

▶ **Positive control** group: standard diet + coccidiostats:

days 1-22: clopidol 25%, 500 g/T

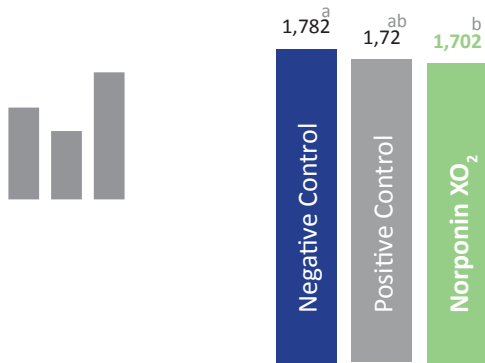
days 23-42: salinomycin 12%, 600 g/T

▶ **Norponin XO₂** group: Norponin® XO₂ at 250 g / T of feed, all life long

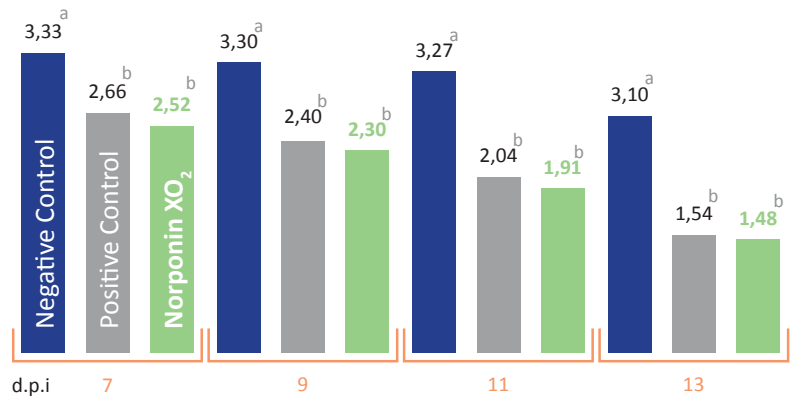
▶ **Challenge per os at D14** by ingestion of Coccivac – D™ (15 x normal dose)

Results

A better **Feed Conversion Ratio**

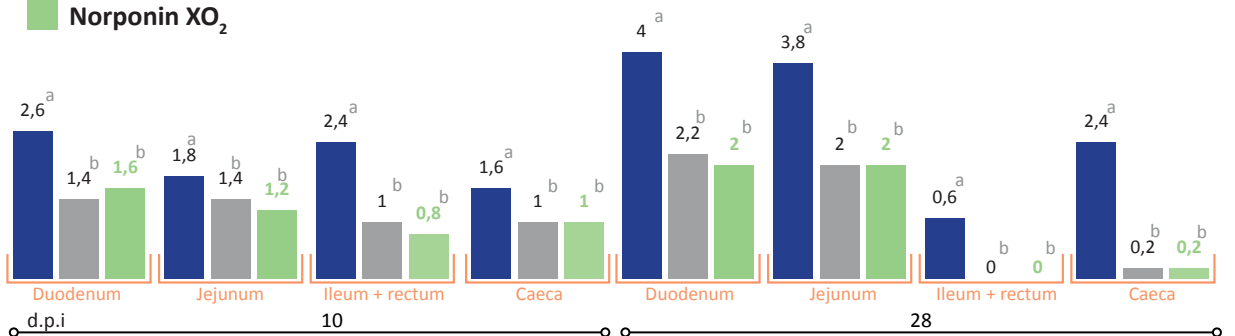


A significant reduction of ***Eimeria sp. in faeces*** Log (oocysts / g)



■ Negative Control
■ Positive Control
■ Norponin XO₂

Better **Lesion Scores**



Conclusion



▶ Norponin XO₂ protects the birds against coccidiosis even in front of severe challenge
 ▶ Even in case of severe infestation, Norponin XO₂ is as cost effective as a current shuttle program (chemical + ionophores)

▶ R.O.I: Negative control: 3.22 | Positive control: 7.74 | **Norponin XO₂: 7.79**

Others trials available upon request