



GroPro Rumen

Rumen health promoter



- Creates a better rumen environment
- Improves feed digestibility
- Increases milk yield



ANGEL YEAST CO., LTD.

Description

GroPro Rumen is derived from specially fermented yeast which can provide high quality yeast bio-actives for rumen microbe to create a better rumen environment, increase milk yield and meat production.

Efficacy

- Creates a better rumen environment
- Improves feed digestibility
- Increases milk yield

Mode of Action

GroPro Rumen can provide high quality nucleic acid, small peptide, amino acid, polysaccharides and other bio-actives, which enhances rumen fermentation by increasing the number of rumen microbes. More microbes can increase fiber digestibility, produce more volatile fatty acids, and produce more microbial protein. Finally, GroPro Rumen can positively impact milk yield and meat production.

The inherent prebiotic cell-wall polysaccharides (mannan and glucan) and peptides serve as a source of nutrients for beneficial rumen microbes and supplies yeast cell-wall components which adhere to deleterious bacteria in calves. It reduces diarrhea of calves and promotes rumen development.

Application trails

GroPro Rumen could improve rumen feed digestibility

Tab.1. Effect of GroPro Rumen on in vitro dry matter disappearance and kinetic gas production

Item	CON	GroPro Rumen (20g/h.d)
IVDMD(%)	64.40±2.77a	68.10±0.57b
GP ₄₈ (ml/g DM)	134.78±7.81a	157.87±9.83b
Gas Production kinetic		
A (ml/g DM)	140.04±6.98a	166.40±8.46b
C(/h)	0.24±0.04	0.19±0.03
T1/2 (h)	3.23±0.05	3.95±0.57
AGPR(ml/h)	27.14±3.59	28.21±3.56

IVDMD, in vitro dry matter disappearance; GP₄₈, cumulative gas production at 48 h. A, asymptotic gas production; AGPR, average gas production rate when half of asymptotic gas production occurred.

C, constant fractional rate; T1/2, the time when half of asymptotic gas production occurred.

Diluted buffered rumen fluids (75 ml) were incubated for 48 h with 500-mg ground substrate and with 0.5g GroPro Rumen.

IVDMD(in vitro dry matter disappearance) increased by 5.75%, GP₄₈ (cumulative gas production at 48 h) enhanced by 17.13%. These indicated that GroPro Rumen could improve rumen function and increase feed digestibility.

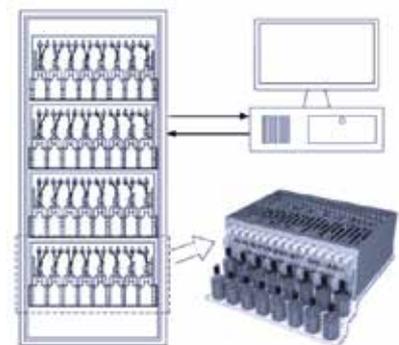


Fig.1. The 64-channel automated trace gas recording system used in the trail

GroPro Rumen could improve MCP and tVFA

Tab.2.Effect of GroPro Rumen on rumen MCP and VFA production *in vitro*

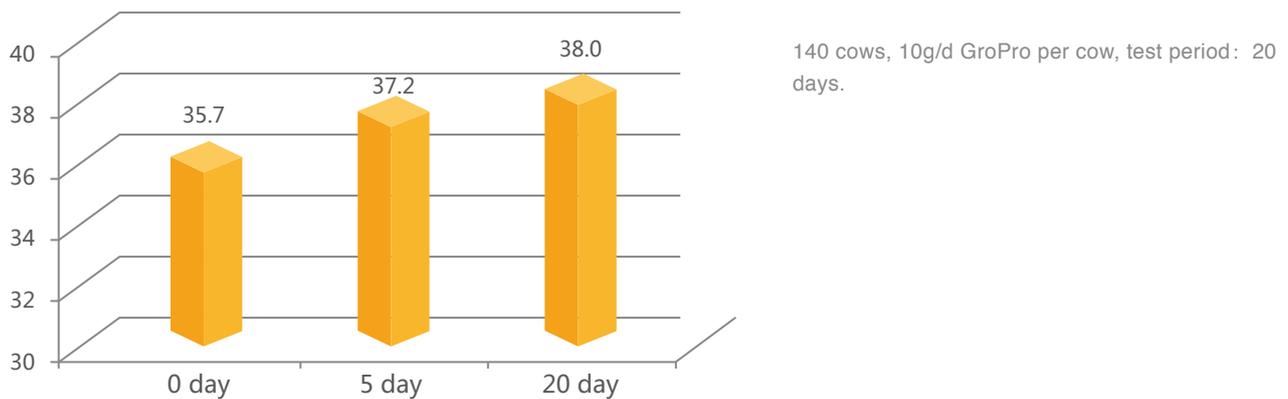
Item	CON	GroPro Rumen (20g/h.d)
Microbial Curde Protein(mg/ml)	0.37±0.05	0.44±0.05
Ammonia N(mmol/l)	62.13±1.22	56.88±5.16
Total VFA(mmol/l)	128.89±9.00	133.07±11.84
Acetate(%)	53.75±1.52	54.70±1.27
Propionate(%)	22.40±0.49	22.38±0.62
Butyrate(%)	14.26±0.20	14.27±0.44

MCP increased by 18.92%, tVFA enhanced by 3.24%.These indicated that GroPro Rumen could produce more protein and VFA to produce more milk and meat.

(Kang, 2017)

GroPro Rumen could improve milk yield

Fig.2. Effect of GroPro Rumen on milk production



GroPro Rumen increased continuously after 5 days from 35.7 L up to 37.2 L, milk yield increased to 38 L after 20 days. These indicated that GroPro Rumen enhanced milk yield more than 2L/d.

(Jose, 2017)



Usage

Item	Dosage g/(d.h)	Efficacy
Diary Cow	10-20	Regulate rumen microbes and strengthen the function of rumen
		Improve feed efficiency and organic matter digestibility
		Improve milk yield
Calves	5-10	Promote rumen development
		Prevent calf diarrhea
		Stimulate immunity, control disease
Beef Cattle	10-20	Regulate rumen microbes and strengthen the function of rumen
Sheep & Goat	5	Improve feed efficiency and organic matter digestibility
		Improve meat production



GroPro Swine

Replaces SDPP (Spray Dried Porcine Plasma) in creep feed.
Promotes growth in weaned pigs.



GroPro Poultry

Promotes growth and reduces mortality in broilers.
Improves laying rate and egg quality.



GroPro Aqua

Promotes growth.
Replaces fish meal.



GroPro Rumen

Improves feed digestibility.
Increases milk yield.



GroPro Pet

Improves palatability.
Keeps a healthy skin and coat.

GroPro



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