

FRA[®]MELCO

The effect of feeding FRA C12 liquid on neonatal diarrhoea

TRIAL REPORT

Public version

Trial code: SM_HP140012

FRAmelco

Sales & Marketing department

Ruisvoorn 5, NL-4941 SB,
Raamsdonksveer, The Netherlands

1. Introduction

Products from the Health program, consisting of monoglycerides and essential oils, have shown a strong antibacterial and antiviral effect when used as animal feed additive. The products improve animal health and performance without affecting feed intake. One of the products in this line is FRA C12 liquid. FRA C12 liquid is a feed additive consisting of mainly 1-monolaurin.

This trial report presents the results on piglet performance after adding FRA C12 liquid to the sows' meal. The experiment is performed in Portugal, 2014.

2. Material and Methods

Historically, this farm had problems with non-specific diarrhoea. Aim of this experiment was to test effect FRA C12 liquid on sows' health and neonatal diarrhoea in piglets. A total of 257 sows were used for this trial. A control group of 128 sows (69 Pietran and 59 Traxx sows) received the usual diet. A treatment group of 129 sows (77 Pietran and 52 Traxx sows) were treated with 20 ml FRA C12 liquid on top of every meal from the day after farrowing till weaning.

Control and experimental group were exposed to the same environmental conditions. Feed and water were available *ad libitum*. During the experiment piglet mortality and number of litters treated against diarrhoea are recorded. Of the sows, the number of open days is measured. At the weaning stage all litters are weighted and average weaning weight and growth performance was calculated. Weight loss of the sows was measured during the farrowing stage and diarrhoea treated sows and the number of open days after weaning are recorded.

3. Results

Results are presented in Table 1.

4. Conclusion

- The number of live born piglets was higher in the treatment group, and especially for the treated group of Pietran sows. Number of piglets alive 48 hour after birth was also higher in the treatment groups
- For both breeds a slightly higher number of piglets are weaned. Between groups there is hardly any difference observed in the average weaning weight of piglets
- Weight loss was higher for the sows in the treatment group compared to the sows in the control group. Likely because the higher number of piglets weaned for the FRA C12 liquid treated sows
- Sows treated with FRA C12 liquid were less suffering from diarrhea and the number of open days (days between weaning and first service) reduced as well

Table 1. The effect of FRA C12 liquid on sow and piglet performance

<i>Parameter</i>	Pietran		Traxx		Control	Treatment
	Control	Treatment	Control	Treatment		
Number of sows (<i>n</i>)	69	77	59	52	128	129
Live born piglets per sow (<i>n</i>)	12.64	13.88	13.86	13.90	13.20	13.89
Avg. litter weight at birth (kg)*	18.64	18.59	17.40	18.73	18.22	18.64
Avg. weight of live born piglets (kg)*	1.32	1.36	1.37	1.30	1.34	1.34
Piglets alive 48h. after birth (<i>n</i>)	12.43	12.87	13.36	13.83	12.86	13.26
Weaning age (days)	25.17	25.27	22.75	23.50	24.05	24.56
Number of weaned piglets (<i>n</i>)	12.61	12.73	13.25	13.46	12.91	13.02
Litter weight at weaning (kg)	78.99	81.36	77.55	76.33	78.33	79.33
Avg. weight of weaned piglets (kg)	6.26	6.39	5.85	5.67	6.07	6.09
Avg. litter growth (kg/d)*	2.57	2.66	2.51	2.62	2.55	2.65
Weight loss of sows (%)*	9.54	13.47	16.93	16.47	12.93	15.08
Diarrhea treated sows (<i>n</i>)	17	10	12	12	29	22
Number of open days (d)	4.39	3.83	5.21	4.11	4.81	3.95

* Figures are based on only a part of the sows per group

For additional info about this trial please contact R&D@framelco.com