

Brewers' Yeast-BT[®] for Breeding Sows

– Effects on Piglet Performance –

Brewers' Yeast is known to have a beneficial effect on fertility of breeding sows. In particular, it reduces the frequency of non-pregnant sows and improves the number of live births of piglets. The present study was designed to provide information to which extent health and performance of the piglets were effected, too when breeding sows were fed with Brewers' Yeast-BT only.

MATERIALS AND METHODS -----

Test site: From March to April 2005, this feeding trial with breeding sows was carried out at a sow breeding facility in Wroniawy, southwest of Poznan, Poland. The facility had 2000 sows and a fattening unit. The trial was supervised and conducted by Professor Fuchs of the Institute of Animal Nutrition and Feed Science in Wroclaw, Poland.

Pregnancy feed: After weaning, a total of 30 breeding sows were fed with the facility's standard soy-based pregnancy feed, which contained 4 % fish meal (72% Protein) and organic zinc. The feed of 15 of the sows was supplemented with 5 % Brewers' Yeast-BT (test group). The ration contained 11.6 MJ ME, 13.4 % crude protein, and 0.7 % lysine.

Lactation feed: Starting on day 85, the animals received the facility's standard lactation feed, which had a similar composition and the same ingredients plus calcium formate. The feed of the test group was supplemented with 4% Brewers' Yeast-BT. The rations contained 13.0 MJ ME, 15.6 % crude protein, and 1.0 % lysine.

Piglet feed: Both groups of piglets were fed a commercial starter feed *without brewers' yeast* containing a combination of organic acids, mycotoxin-binders and enzymes. The ration contained 14.3MJ ME, 19.0% crude protein, and 1.54 % lysine.

Weaning: The piglets were weaned at the age of 24 days and then followed a test period for another 3 weeks.

RESULTS-----

Fig. 1: Effects of Brewers' Yeast-BT on Daily Weight Gain (DWG) and the number of surviving animals during piglet rearing

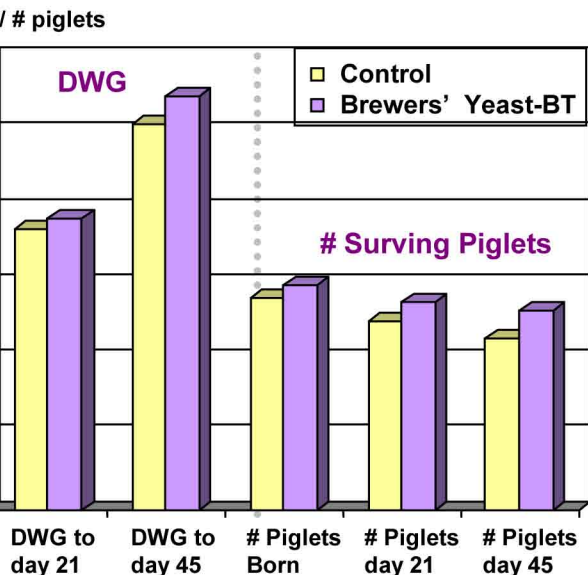
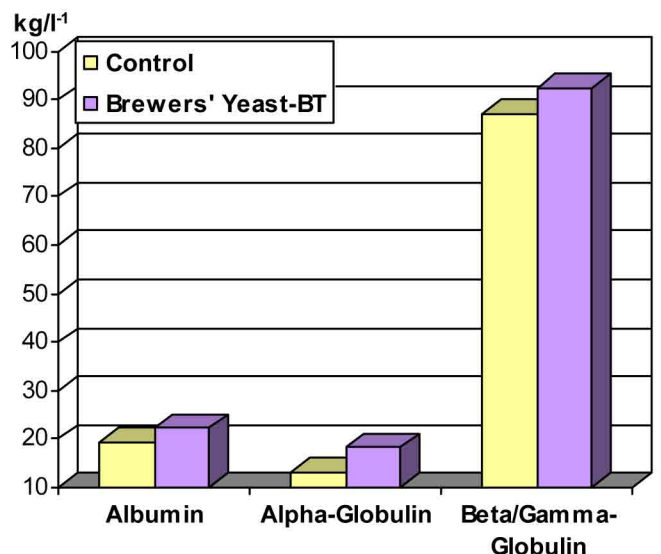


Fig. 2: Effects of Brewers' Yeast-BT on immune parameters in colostrum of breeding sows



RESULTS

- Brewers' Yeast improved the number of born piglets per litter by 0.5 piglets (5.3 %).
- The rate of return to oestrus after weaning decreased by 10 % absolute.
- Brewers' Yeast significantly increased the immunoglobulin content of colostrums.
- Brewers' Yeast-BT increased weight gain and daily weight gain by 4 to 7 percent. The feed intake levels in the test and control groups were comparable.
- Brewers' Yeast-BT reduced losses by roughly 40 percent.

Table 1: Growth performance and Mortality rate of rearing piglets born to breeding sows fed with Brewers' Yeast-BT

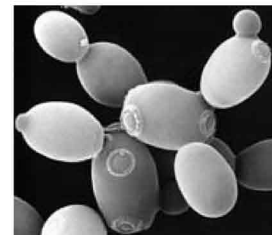
Treatment: -----	Controls	Brewers' Yeast-BT
Sows:		
No. of litters	15	15
Number of piglets born	150	158
Number of piglets per litter	10,0	10,5
Rate of return to oestrus at next mating (%)	23,3	13,3
Piglets:		
Growth performance: -----		
Starting weight at day 2 of life (kg)	1,85	1,77
Live weight on day 21 (kg)	5,55	5,63
Live weight on day 45 (kg)	13,3	14,0
Weight gain from day 21-45 (kg / pig)	7,8	8,3
Weight gain farrowing to day 45 (kg / pig)	11,4	12,2
Daily weight gain to day 21 (g)	195	203 (104,1 %)
Daily weight gain from day 21-45 (g)	323	347 (107,4 %)
Feed conversion rate: -----		
Prestarter feed intake (g)	11,8	11,8
Feed conversion rate, day 21-45 (1:)	1,43	1,42
Losses: -----		
Living piglets on day 21	135	147
Living piglets on day 45	123	142
Mortality, farrowing to day 21 (# pigs)	15	11
Mortality, farrowing to day 21 (%)	10,0	6,9
Losses, farrowing to day 45 (# pigs)	27	16
Losses, farrowing to day 45 (%)	18	10,1

CONCLUSIONS

The findings of this study confirm once again that the addition of 5 % **Brewer's Yeast-BT** to pregnancy feed and 4% to lactation feed has a positive effect on the fertility performance of breeding sows.

At the same time, the increased vitality of the mother sow results in an increased weight gain of the piglets.

The improved immune status of the breeding sow is transferred to the piglets. This ultimately decreases the losses and improves overall results.



Sacharomyces cerevisiae



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