



LEIBER BREWERS' YEAST-BT®



LEIBER BREWERS' YEAST-BT® FOR BREEDING SOWS - Effects on piglet performance -

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Brewers' yeast is known to have a beneficial effect on the 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 on the extent to which the health and performance of the piglets were effected even when the breeding sows were fed with **Leiber Brewers' Yeast-BT®**.

Materials and methods:

Test site: From March to August 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 Prof. 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% Leiber 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% Leiber Brewers' Yeast-BT®**. The rations contained 13.0 MJ ME, 15.6% crude protein, and 1.0% lysine.

Piglets 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 14.3 MJ ME, 19.0% crude protein, and 1.54% lysine.

Weaning: The piglets were weaned at the age of 21 days and then followed a test period for another 3 weeks.

Results:

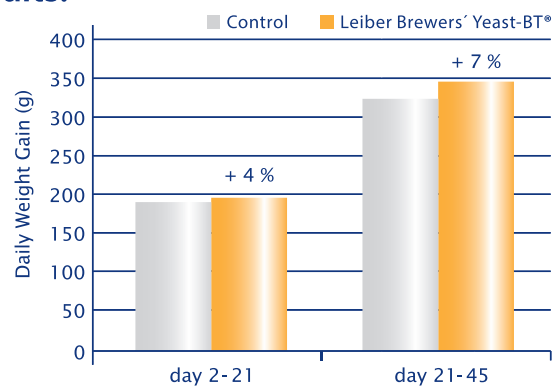


Fig. 1: Effects of **Leiber Brewers' Yeast-BT®** on Daily Weight Gain (DWG) during piglet rearing

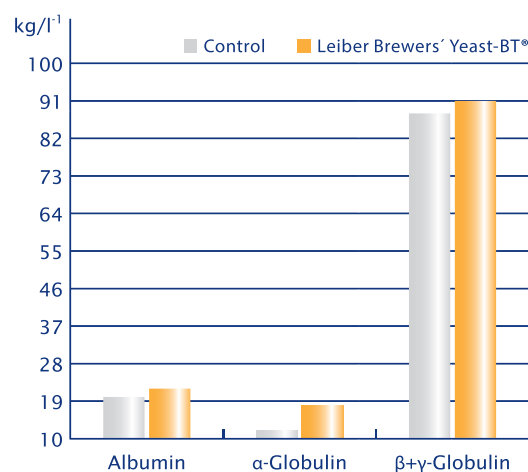


Fig. 2: Effects of **Leiber Brewers' Yeast-BT®** on immunity parameters in colostrum of breeding sows



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Table 1:
Effect of Leiber Brewers' Yeast-BT® on rearing and fertility parameters of breeding sows

Treatment:	Control	Leiber Brewers' Yeast-BT®
Number of litters	15	15
Number of piglets born alive	150	158
Number of piglets per litter	10.0	10.5
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
Return to oestrus at next mating (%)	23.3	13.3

Table 2:
Growth performance and feed conversion of rearing piglets born to breeding sows fed with Leiber Brewers' Yeast-BT®

Treatment:	Control	Leiber Brewers' Yeast-BT®
Number of piglets	150	158
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
Daily weight gain from day 21-45 (g)	323	347
Prestarter feed intake (g)	11.8	11.8
Feed conversion rate, day 21-45 (1:)	1.43	1.42

Results:

- **Leiber Brewers' Yeast-BT®** improved the number of piglets born alive per litter by 0.5 piglets (5.3%) and the number of weaned piglets at day 21 by 9%.
- The rate of return to oestrus after weaning decreased by 10 percentage points absolute (Table 1).
- **Leiber Brewers' Yeast-BT®** significantly increased the immunoglobulin content of colostrums (Fig. 2), indicating improved nourishment and immune defence of the sows. Tendentially during lactation, similar improvements were observed.
- **Leiber Brewers' Yeast-BT®** increased weight gain and daily weight gain by 4% at weaning and 7.4% at end of trial (Fig. 1).
- **Leiber Brewers' Yeast-BT®** reduced losses by roughly 40%.

Conclusions Leiber Brewers' Yeast-BT®:



Positive effect on the fertility performance of breeding sows.



Improved immunity status of the breeding sow is transferred to the piglets.



Increased vitality of the sow results in an increased weight gain of the piglets.



Reduced losses of piglets.