

## **Progut® Info Letter 1 /2012**

### **The effect of Progut® on the milk production of dairy sheep**

#### **1. Introduction**

The aim of the study was to test and assess the effects of hydrolysed brewery yeast (Progut®) on the milk production of sheep. The trial was carried out by Department of Sheep Breeding (IAS) in the Bulgaria.

#### **2. Materials and methods**

The experiment was conducted with 40 ewes of the Synthetic Population Bulgarian Milk (SPBM) from the heard of IAS. The sheep were divided into two groups (control and experimental) each containing 20 ewes. The animals were of uniform age, lactation and milk production. The trial lasted up to 180 days.

The basal diet contained alfalfa hay, corn silage and concentrate mixture in according to the norms. The feed consumption was controlled daily. The experimental group received feed which contained 0,2% of Progut®. Progut® was used in the experimental group 15 days before lambing up to 165 after lambing.

The milk production was tested individually in every 15 days. The milk production was measured according to the Instructions on the Control of the Productive Qualities, 2003 (BG). The milk production was calculated

based on individual milk samples for the first 120 days in milk. The composition of the milk fat, protein and lactose were analysed based on Ecomilk analyser (Bultech Ltd.).

### 3. Results and discussion

The experimental group had on average 6,9 % (6,21 kg) higher milk yield compared to the control during the first 120 days (Fig. 1.) The milk fat, protein and lactose contents (%) were similar in both groups. However, the milk fat, protein and lactose yields were 7,8 %, 4,6 % and 6,5 % higher in the experimental group (Fig. 2.). In earlier Progut® studies carried out with dairy cows 5 - 7 % higher milk yields have been observed.

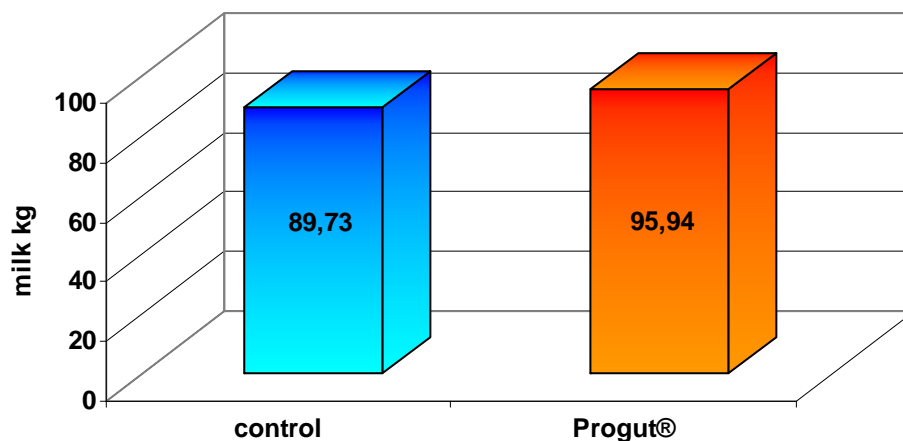


Figure 1. Milk yield for 120 days, L

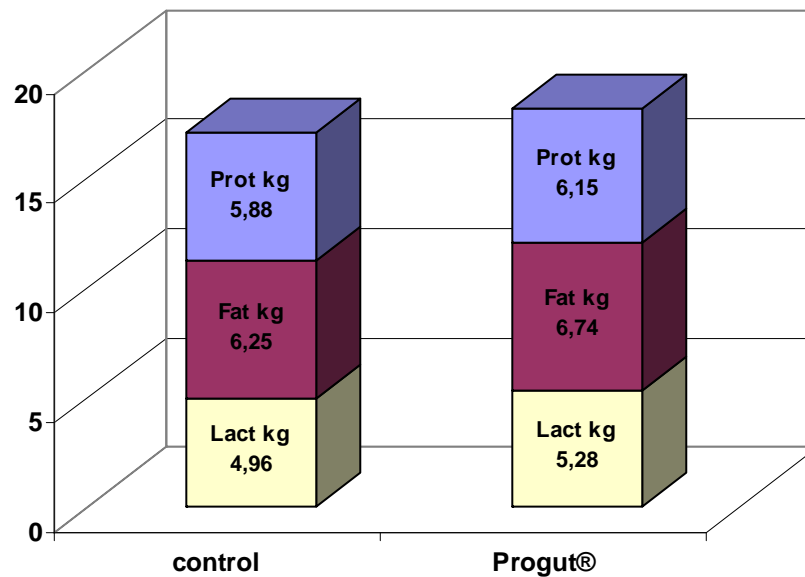


Figure 2. Dry matter yield for 120 days, kg

#### 4. Conclusions

- The hydrolysed brewery yeast (Progut®) increased numerically the daily milk yield throughout the trial period.
- The inclusion of Progut® had no effect to milk fat, protein and lactose contents. Due to higher milk yield the milk fat, protein and lactose yields were also higher in the experimental group.