

## **Relationships between the milk yield of Montbéliarde primiparas in the first trimester of lactation and their further milk performance**

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### **Summary**

In this paper the influence of milk yield level of Montbéliarde primiparas in first trimester of lactation (up to 2300, 2301-2800 and above 2800 kg) on the daily and lactation productivity (with division on primiparas and multiparas) were analyzed. The study was conducted in a herd of 228 cows with an average unit yield of 9565 kg of milk. The animals were kept in the free-stall barn on a deep litter, and were fed with the TMR system. The analysis included 8236 test-day milkings and 911 standard and complete lactations. It was shown that both primiparas, as well as older cows, which were the least yielding in the first 100-day lactation (up to 2300 kg of milk) were characterized by the lowest daily milk yield (16.8 and 28.5 kg respectively) and the lowest milk yield, fat, protein and solids in standard and complete lactations. Significantly lower concentration of basic milk constituents have been found in the animals characterized by the highest milk yield in first trimester of first lactation. The results suggest that milk yield in first 100-day lactation can be used in predicting the performance of Montbéliarde cows in further lactations. Analysis of somatic cell count in milk implies that maximizing of the milk yield at the beginning of dairy performance may, in the future, cause an increase of cows' susceptibility to mastitis.

**KEY WORDS:** first trimester of lactation / Montbéliarde breed / primiparas / milk performance