DAIRY PRODUCTION SYSTEMS IN GOIÁS, BRAZIL: TYPOLOGY AND PRODUCTION SCALE

Bruna Sesco de MENDONÇA*, Raiane Real MARTINELLI, Marcela CASALI, Vinicius Donizeti Vieira da COSTA, Marcio Gregório Rojas dos SANTOS, Clodoaldo Souza MONTEIRO JUNIOR, Ferenc Istvan BÁNKUTI, Magali Soares dos Santos POZZA

*corresponding author: b_sesco@hotmail.com

1 Aluno(a) de Pós-Graduação em Produção Sustentável e Saúde Animal - Universidade Estadual de Maringá, campus de Umuarama, Paraná, Brasil
2 Aluno(a) de Pós-Graduação em Zootecnia – Universidade Estadual de Maringá, Paraná, Brasil
3 Professor (a) do Departamento de Zootecnia – Universidade Estadual de Maringá, Paraná, Brasil
4 Aluno (a) de Graduação em Zootecnia – Universidade Estadual de Maringá

Milk production in Goiás State has increased 68.75% between 2006 and 2015. The scale of milk production is one of the most important determinant to increase profitability in dairy production systems (DPS). Higher volume of milk production result in less production cost. In addition, higher volume can increase net revenue due to better prices for each liter of milk marketed for the industry. Typology studies have been carried out to characterize and to draw strategies to improve competitiveness in DPS. A total of 170 semi-structured forms were applied on DPS located in the eastern of Goiás State on January 2018. DPS were segregate in three groups based on production scales: G1 milk production ≤ 50 L/day; G2 > 51 milk production ≤ 250 L/day; and G3 milk production ≥ 250 L/day. After that DPS groups were analyzed, by mean test (T – test) considering other three variables: number of cows in milk (head), productivity per animal (milk production/head) and productivity per area (area/head). Group 3 has achieved the best results (P<0.05) followed respectively by G2 and G1 for variables analyzed. Considering the number of cows in milk, G3 presented 42.17 ± 18.36 heads, G2 (16.91 ± 8.84) heads and G1 (16.82 ± 43.29) heads. Considering the variable “milk production/cow, G3 presented 14.90 ± 4.90 liters/head, G2 presented 9.19 ± 5.23 and G1 (4.60 ± 2.92). For the variable of production per area G3 achieved 23.95 ± 19.59 liters/ha; G2 10.87 ± 9.71 and G1 3.51 ± 4.98. We conclude that DPS with higher scale of production have better responses for the analyzed variables, numbers of cows in milk, productivity per animal and productivity per area, when compared with DPS of smaller production scale.

Key words: dairy cattle, economy of scale, milk producer, productivity, typology analysis