CHARACTERIZATION OF THE FACTORS ASSOCIATED WITH THE GROWTH PHASE OF DAIRY CATTLE IN FAMILY FARMING

Rodrigo de Andrade Ferrazza*1, Gilvando Fabio Uliana de Moura2, Marcos Aurélio Lopes3

*Corresponding author: rodrigoferrazza@yahoo.com.br
1Department of Animal Reproduction, Faculty of Veterinary Medicine and Animal Science, Univ. Estadual Paulista, Botucatu, São Paulo, Brazil
2Technical Support and Rural Extension Company of the State of Minas Gerais (EMATER), Conceição de Ipanema, Minas Gerais, Brazil
3Department of Veterinary Medicine, Federal University of Lavras, Lavras, Minas Gerais, Brazil

The state of Minas Gerais is the largest milk producer in Brazil, mostly comprises family production units, which represent about 80% of the total milk production volume in the state. Despite the extensive participation of family farms in the milk production in Minas Gerais, the practices adopted by these farmers in the pre- and post-weaning phases of bovine females are little known. The aim of this study was to characterize the factors associated with the growth phase of dairy cattle used in family farming. We investigated 20 family-run milk production systems located in the Conceição de Ipanema municipality, Minas Gerais, Brazil. Farmers were interviewed in person by a single interviewer using a semi-structured survey form containing 152 questions. The questionnaire addressed different issues related to the family production system, including newborn care, colostrum and nutritional management, animal identification method, zootechnical bookkeeping, husbandry practices, housing, and health management. Data were processed by using Sphinx® software, and descriptive analyses were performed in MS Excel® software. The sample of farms showed a predominance of small-scale production (up to 250 L day⁻¹) and area less than 60 ha. The results showed strengths, including navel healing (100%), location of the calf housing above (45%) or next to the pen (35%), and existence of a sanitary calendar (90%). However, several limitations in the management of calves and heifers were identified, such as lack of zootechnical bookkeeping (55%), manual milking with calf at the foot (65%), absence of herd sizing (100%), no routine weighing of calves (95%), incorrect colostrum management (80%), non-supply of transition milk to calves (85%), and likely failure to diagnose diseases by a fraction of the farmers. In conclusion, this study represents the local reality of traditional family farms of the region and reveals important indicators for understanding the rearing model of young animals by family farmers. Training regarding adequate management practices by extension technicians is imperative, along with the formulation of public policies that comply with the aspirations of family farmers, while promoting their economic and social sustainability.

Keywords: calf, dairy farming, heifer, rural extension, survey