

## WASTE REUSE AND DISPOSAL PRACTICES IN MILK PRODUCTION IN PARANÁ<sup>1</sup>

### *DESTINO DE RESÍDUOS DA PRODUÇÃO LEITEIRA NO PARANÁ*

FERENC ISTVAN BÁNKUTI<sup>2</sup>, SANDRA MARA SCHIAVI BÁNKUTI<sup>3</sup>, MARCEL MOREIRA DE BRITO<sup>2</sup>, MARIA CLARA MELO FERREIRA<sup>2</sup>

<sup>1</sup>Financial support: National Council for Scientific and Technological Development - CNPq.

<sup>2</sup>DZO/UEM, Animal Science Department, State University of Maringá - Avenida Colombo, 5790, CEP 87020-900, Maringá, PR, Brazil. E-mail: fibankuti@uem.br

<sup>3</sup>DAD/UEM, Administration Department, State University of Maringá - Avenida Colombo, 5790, CEP 87020-900, Maringá, PR, Brazil. E-mail: smsbankuti@uem.br

Brazil is among the six largest producers of milk cow in the world. In 2010, Brazilian milk production reached 30.7 billion liters, corresponding to 4.8% of total world production, according to official data from IBGE. As stated by an IPARDES report in 2010, Paraná state has 114,488 milk producers, being responsible for an increased production of 71% between 1997 and 2006. Besides such remarkable figures, there are still important challenges to be surpassed in milk chain, which includes environmental adequation of livestock production. According to a study published by Banco do Brasil Foundation and Interamerican Institute for Agricultural Cooperation - IICA in 2010, social and environmental sustainability are among factors restricting milk chain competitiveness. The aim of this paper is to verify waste reuse and disposal in dairy cattle farming in Paraná. Methodological procedures in this research comprised: (a) literature review on milk agribusiness system and environmental adequation; (b) formulation of semi-structured questionnaires, including questions about environmental practices in 2011; (c) data analysis through descriptive statistics. Random sampling included milk producers in Santa Izabel do Oeste and Marechal Cândido Rondon, in southwestern Paraná. Eighty producers were interviewed, equally sampled in both places, resulting in 79 valid interviews. As results, 79.4% of milk producers informed they have day-to-day practices to reuse wastes internally produced in farming. Main practice highlighted was the use of manure waste in agriculture. Only one producer in the sample adopted the use of poultry manure. Considering correct disposal of pesticide packaging, 84.4% of producers are in accordance to legal requirements; 10.1% of total interviewed producers do not follow legal requirement for packaging disposal, and 5% do not use pesticides at all, so not being concerned to that practice. Concerning appropriate disposal of medical packaging, 71.2% of milk producers do not follow correct practices, using common garbage, sewerage or sump system. Only 20.2% of producers always follow legal practices for medical disposal, taking packages to collection points. 7.6% of total follow such practices sporadically. To sum up, we observed that only manure waste is largely adopted among milk producers. Medical and pesticide packaging disposal is a considerable environmental problem, cause serious negative impacts. Thus, actions to promote good environmental practices must be developed, enforcing mechanisms to control and incentive rural producers.

Key words: internal waste reuse; packaging disposal; sustainability.