Spatial evaluation of milk quality indicators in the micro region of Ji-Paraná, Rondônia, 2011 - <u>Souza G.N.</u>^{*1}, Carvalho, G.L.O.², Grego, C.R.³, Hott M.C.¹, Silva M.R.¹, Hylario S.M.⁴, Bruno A.F.⁴, Ozório R.S.⁴

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The study was developed with 217 dairy herds and its information on geographical coordinates, contents of fat, protein, lactose, non-fat solids (NFS), somatic cell count (SCC) and total bacterial count (TBC). The study area was 25,088.40 km², located in the micro region of Ji-Paraná, Rondônia State, Brazil. The spatial dependence of the indicators of milk quality was assessed by semivariogram. In case of spatial dependence, were estimated values of the indicators under study for non-sampled locations within the space, without bias and with minimum variance, by method known as kriging for interpolation data. The results showed that spatial dependence for fat, lactose, NFS, SCC and TBC. There was a weak spatial dependence for fat and NFS. However, we identified a moderate spatial dependence for lactose, SCC and TBC. It is suggested that the low and moderate spatial dependence found in the study was due to the number of farms included in the study. The maps generated in this study showed areas with different values for the milk quality indicators. These maps may be used by government agencies in policy aimed at improving milk quality, planning and decision making for the sector. Spatial analysis of the guality of milk proved to be a viable tool to assess the variation of milk contents, SCC and TBC between areas in the same region. The information generated by maps of milk guality may be used in the definition of public policies and management strategies for the dairy industry in others areas in Brazil.

Key-words: spatial analyze, milk quality indicators, Rondônia

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RESULTS AND DISCUSSION

The results showed that spatial dependence for fat, lactose, ESD, SCC and TBC. The area of greatest demand in this region to reduce CCS is located in three municipalities, which are Governor Jorge Teixeira, Jaru and Cacaulándia (Figure 2).

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