

## SOMATIC CELL COUNT OF NINE DAIRY HERDS IN THE STATE OF SAO PAULO AS COMPLYING THE NORMATIVE INSTRUCTION 62

### CONTAGEM DE CÉLULAS SOMÁTICAS DE NOVE REBANHOS LEITEIROS DO ESTADO DE SÃO PAULO E ATENDIMENTO A INSTRUÇÃO NORMATIVA 62

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The technical regulation that is currently in effect for the production, identity and quality of the milk in Brazil is the Normative Instruction 62 (NI 62), published on December 29<sup>th</sup> 2011. Since January 1<sup>st</sup>, 2012 this legislation sets for pasteurized milk type A the Somatic Cell Count (SCC) limit of  $4.8 \times 10^5$  cel. mL<sup>-1</sup> until June, 30<sup>th</sup>, 2014, decreasing the limit in the following years till it reaches  $3.6 \times 10^5$  cel. mL<sup>-1</sup> from July, first 2016. From now, the limit of SCC for refrigerated raw milk in the Southeast region is  $6.0 \times 10^5$  cel. mL<sup>-1</sup>, decreasing in the following years till it reaches  $5.0 \times 10^5$  cel. mL<sup>-1</sup> from July, 1<sup>st</sup> 2014. The control of the amount of SCC in the milk is important for monitoring the milk quality and sanity from a dairy herd. The objective of the present study was to verify if nine dairy farms in the state of São Paulo attend the NI 62 to the limit of SCC. Milk samples were collected directly from the milk glass recording jar in sterile flasks containing bromothymol as conservative. It was evaluated in each herd 15 cows randomly selected. From the results, averages were made from all farms. The determination of SCC was performed by flow cytometry in clinical milk ESALQ-USP, Piracicaba-SP. The herds had different results (Table 1). One of the properties (A) produces pasteurized milk type A and the SCC is under the limit imposed by the NI 62. The others produce refrigerated raw milk. The properties B, C and I are in the limit established by NI 62. The properties D, E, F, G and H are out of the limits established by the NI 62 ( $6.0 \times 10^5$  cel. mL<sup>-1</sup>). The most worrisome findings derive from the properties E and F, which are the result of mismanagement and poor conditions of milking. It is known that high SCC is related to the presence of subclinical mastitis, which represents significant losses in milk production, compromises animal welfare and offers potential risks to consumer health. The owners of properties E and F should be notified about these results and try to solve the problem of high SCC to reach the minimum values required by the NI 62. Also, the state or local agencies or the dairy industry receiving this milk of high SCC should implement continuing educational campaigns to obtain a milk within the standard limits of SCC established by the NI 62.

**Table 1.** Averages of Somatic cell count ( $\times 10^3$  cel. mL<sup>-1</sup>) of 15 lactating cows from nine dairy farms in the state of São Paulo, in 2013

Properties/Averages of SCC ( $\times 10^3$ cel. mL <sup>-1</sup> )								
A	B	C	D	E	F	G	H	I
165,79	48,87	361,40	663,20	2116,73	2174,27	697,73	643,87	117,40

Keywords: Normative Instruction 62, somatic cell count, milk.

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