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FACTORS ASSOCIATED WITH SOMATIC CELL COUNT IN LATE LACTATING COWS

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Abstract The purpose of this study was to determine factors associated with somatic cell count (SCC) in late lactating cows (DIM >210 days). The 429 quarter milk samples were collected from 110 lactating cows in small holder dairy farms in Chiang Mai and Lumphun provinces during January to May, 2004. The questionnaires were administered by interviewing information of farm management including milking procedure. Milk samples were measured for somatic cell count and transformed into natural logarithm scale (lnSCC). The association between lnSCC and the data from questionnaires were analyzed by repeated measure analysis with mixed model (Proc mixed: SAS®8.0). The results showed that the average lactation number was 2.35, geometric mean of SCC was 66.8×10^3 cells/milliliter. The factors associated with higher SCC in milk ($P < 0.05$) were teat lesion, slipping cup during milking time and more than one milking worker. Moreover, the factors associated with lower SCC in milk were post dipping and wet-dry towel separation. Good farm management, milking hygiene and milking machines can improve the SCC in milk of late lactating cows. **Chiang Mai Veterinary Journal 2005;3:43-53**

keywords: Somatic cell count, Late lactating cows
