

## THE MILK COLLECTING CENTERS' CHARACTERISTICS IN NORTHERN THAILAND

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**Abstract** The characteristic of 11 milk-collecting centers (MCC) of 6 dairy cooperatives in Northern of Thailand was investigated by interviewing. The median of the total collected milk was 4.0 (1.2-13.6) ton/day, and the median number of the members was 52 (14-161) farms. All MCCs were operated by the dairy cooperatives, had 1-4 officers and received milk twice a day (in the morning and in the evening). Each MCC had 1 – 2 cooling tanks which were 1.5 - 10 ton in size, the temperature was set at  $-0.3$  to  $7^{\circ}\text{C}$  and took about 0 – 8 hours to decrease the temperature of the raw milk to set point. All MCCs used the alcohol test as a basis for rejecting the milk. All MCCs used the methylene blue reduction test to determine the milk price and some MCCs added the other tests, such as the resazurin test. The raw milk samples from all MCCs' bulk tanks were collected every week for 2 consecutive months. Standard plate count (SPC) was conducted to evaluate the bacterial counts in the raw milk samples. MCCs could be divided into 2 groups according to their bacterial count; group1: MCCs which had low bacterial count in raw milk (average of SPC < median) and group2: MCCs which had high bacterial count in raw milk (average of SPC > median). From the study, the median of SPC was 1,584,962 colony forming unit/ml (log<sub>10</sub> median = 6.20). Moreover, we found that the ratio between the total capacity volume of cooling tank and the total collected milk that was less than 1.5 was not significantly related to the high bacterial count in raw milk (Fisher exact test  $p = 0.061$ ).

**Keywords** : The milk collecting centers' characteristics

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