

Thanapun Nilkamnerd 2009: Study on Composition and Quality in Raw Milk of Goat Raised in Pen and Free to Roam in Western Part of Thailand. Master of Science (Food Safety), Major Field: Food Safety , Department of Animal Science.
Thesis Advisor: Assistant Professor Sasitorn Nakthong, Ph.D. 100 pages.

The experiment was to study on raw goat milk quality and composition of native crossbreed dairy goat were raised in pen and free to roam from six medium size (20-50 does) farms in western part of Thailand; Suphanburi, Phetchaburi, Ratchaburi, Kanchanaburi and Nakhonpathom province. Morning milk samples were collected to study milk composition (individual goat milk) and quality (bulk goat milk) for five months (1 time/month; October, 2006 – March, 2007). Data were evaluated by using Least Square analysis. The result showed goat milk of dairy goat raised from free to roam (4.25%) had higher lactose value than dairy goat raised in pen (4.18%) ($p<0.05$). There were no differences ($p>0.05$) in fat, protein, total solid, solid not fat, density, freezing point and pH. Moreover, somatic cell count and total plate count in milk were no differences between raising in pen and free to roam. The result found Coliform, *Escherichia coli*, *Staphylococcus aureus* and *Bacillus cereus* but *Listeria monocytogenes* and *Salmonella* spp. were not detected. Otherwise, goat milk of dairy goat raised in pen showed rapid change in hour and color of methylene blue and resazurin test.

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Thesis Advisor's signature

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