Factors associated with prevalence of swine gastrointestinal parasitic infestation in pig farms in Chiang Mai

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Abstract The Aim of this study was to investigate the prevalence and to identify factors associated with swine gastrointestinal parasitic infestation in pig farms in Chiang Mai province. Fecal samples were collected from 72 farms, divided into 40 farms licensed from Department of livestock development and 32 non-licensed farms. Fecal pooled sample of each randomly selected group including gestating sows, weaners, and fatteners, was detected for parasitic egg and protozoa by Formalin- ethyl acetate sedimentation concentration method. Information was obtained by questionnaires for further statistical analysis with multivariate logistic regression. The prevalence of positive farms was 62.5% (45/72, 95% CI: 51.0-74.0), non-licensed farms' prevalence was higher than licensed farms significantly ($P<0.05$). Intestinal parasites detected in non-licensed farms (87%, 95% CI: 76.0-99.0) were significantly higher compare to licensed farms (40%, 95% CI: 25.0-55.0). The intestinal parasites found in this study were Coccidia protozoan, *Tricuris suis,* Strongyle Nematode and *Ascaris suum.* Factors associated with prevalence of intestinal parasites in pigs significantly ($P<0.05$) were fecal management, having pets in farm area and carcass management.

Key Words: prevalence, swine gastrointestinal parasites, factors, pig farms, Chiang Mai