

Thesis Title	Variation in Stool Examination Results and Immunodiagnosis of <i>Strongyloides stercoralis</i> Infection		
Author	Mr. Suthep Phongsri		
M.Sc.	Parasitology		
Examining Committee:	Assistant Prof. Pichart Uparanukraw, M.D., Ph.D.	Chairman	
	Associate Prof. Nimit Morakote, Ph.D.	Member	
	Apinun Aramrattana, M.D., Ph.D.	Member	

Abstract

The variation of stool examination results in *Strongyloides stercoralis* infection was studied by agar plate culture of stool samples from uninfected (group 1) and infected (group 2) individuals. Six stool samples over a period of 4 weeks and 8 stool samples over a period of 8 weeks were obtained from group 1 and group 2 respectively. The results of agar plate culture showed variation at every time point but without statistical significance. The study by Beaver's standard direct smear on stool samples from group 2 showed that the numbers of larvae released in stool may not vary much in some cases but can vary greatly over time in other cases. Analysis of the sera from both groups by enzyme-linked immunosorbent assay (ELISA) showed 64.3% sensitivity (95% confidence interval = 51.8-76.8), 95.4% specificity (95% confidence interval = 89.1-100). Western blot analysis revealed the reactivities of the sera from infected individuals to proteins of molecular weights 205, 41, 31 and 28 kDa with 51.8%, 82.1%, 30.4% and 53.6% sensitivity (95% confidence interval = 38.7-64.9, 72.1-92.1, 18.4-42.4 and 40.5-66.7 respectively), 100%, 95.4% (95% confidence interval = 89.1-100), 100%, and 100% specificity, respectively.