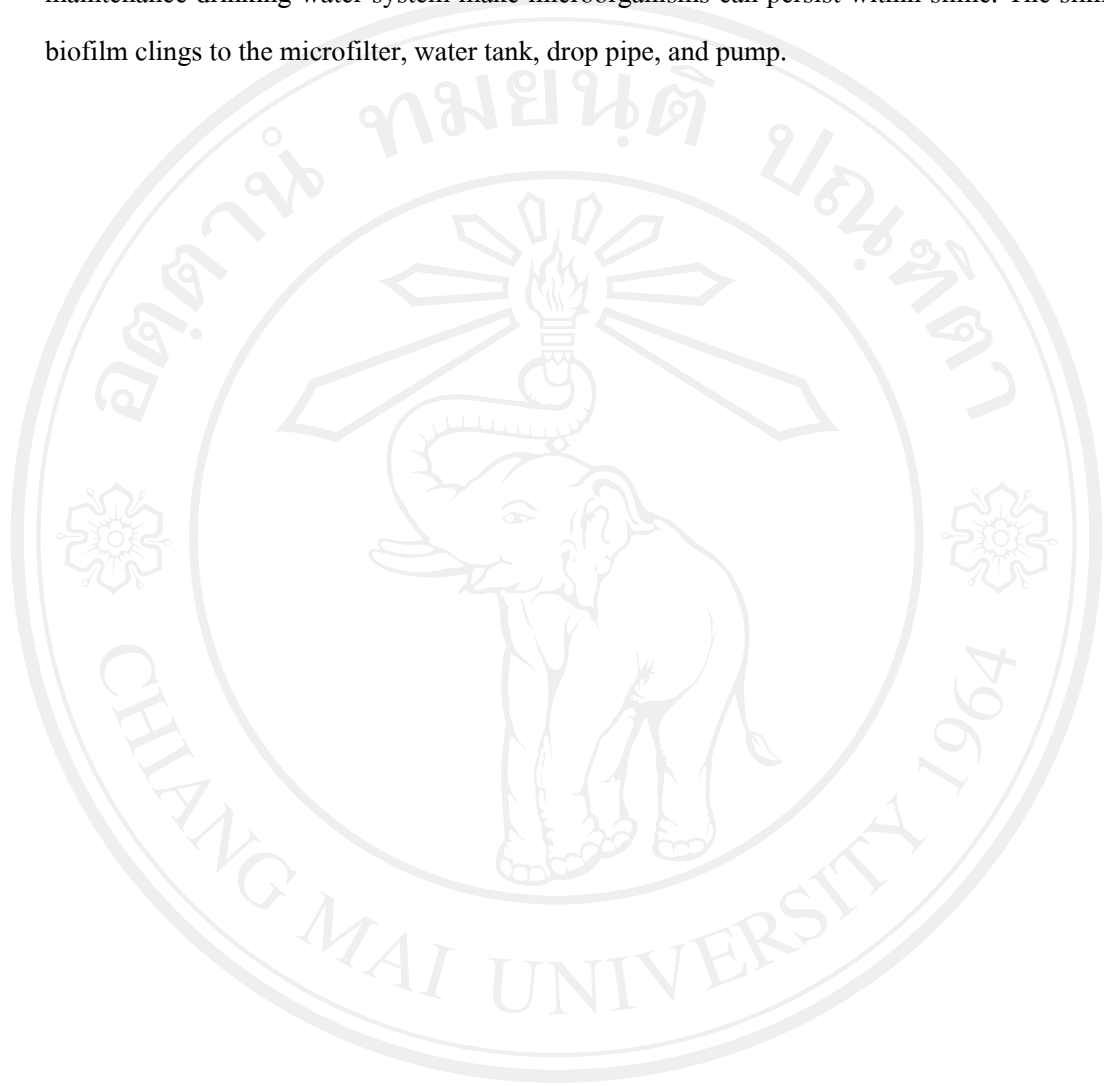


Thesis Title	Microbiological Qualities of Drinking Water in Some Educational Opportunity Extension Schools in Chiang Mai Province	
Author	Miss Nawaree Pingmuang	
Degree	Master of Science (Biology)	
Thesis Advisory Committee	Asst. Prof. Dr. Sakunnee Bovonsombut	Advisor
	Assoc. Prof. Dr. Pongpor Asnachinda	Co-advisor

ABSTRACT

The object of this thesis was to study microbiological qualities of drinking water from educational opportunity extension schools in Chiang Mai. Drinking water source used were groundwater, village waterworks and mountain waterworks. Drinking water is distilled before drinking them, except Ban Pang Ton Duea School. Drinking water from 9 school were tested for the presence of coliform bacteria, *Escherichia coli*, *Samonella* spp., *Staphylococcus aureus* and *Clostridium perfringens* which were evaluated 5 times on April to November. Coliform bacteria were detected in non-distilled water from Thepsadej Wittaya School, Ban Naboon Long-kod School, Sop Poeng Wittaya School, Ban Pang Ma-Yao School, Pang Ton Duea School and Pattana Ton Nam Khun Kong School value between 4 and 460 MPN per100 mL and in drinking distilled water value between 4 and 93 MPN per100 mL. Pattana Ton Nam Khun Kong School is detected the maximum coliform value. No *Escherichia coli*, *Samonella* spp., *Staphylococcus aureus* or *Clostridium perfringens* were detected. The nitrate and fluoride levels were below the Thai Industrial Standards Institute and do not pose a health risk. Most coliform bacteria do not cause illness, but can be indicators of pathogenic organisms that cause diseases. Lacking of

maintenance drinking water system make microorganisms can persist within slime. The slime or biofilm clings to the microfilter, water tank, drop pipe, and pump.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved