

ABSTRACT

In the past drinking water sources were mainly rainwater, well water, and ground water. All of which the rainwater was the most drinking water consumed. As the industry has been developed all over the world, people now think that the rainwater is toxic. As a result they are paying for drinking water. Unfortunately, this has also been the case for Thailand. As such, this research attempted to show that rainwater actually is still drinkable. If the result was positive, then people would have more money left in their pockets thereby having more to spend on other essential things.

To achieve those objectives five different types of rainwater and one groundwater were systematically collected and tested according to the drinking water standards announced by the ministry of public health. Please be noted that the rainwater samples were collected in the areas of Songkhla and Nakhon si thammarat because they are big compared to their counterparts in the South in terms of both area and population. In addition, both provinces have relatively large amounts of annual rainfall thereby possible for harvesting rainfall.

The rainwater samples included pure rainwater, boiled pure rainwater, rainwater flowing through roof, rainwater kept in a stainless tank, and rainwater kept in a stainless tank and boiled. The test results revealed that only the groundwater passes the pH criteria. Note that this is very easy to correct. For substances, it was found that all of the samples pass the criterion. In terms of bacteria, however, only boiled rainwater passed the standard. This indicates that rainwater when boiled is indeed safe for drinking.

Keywords: rainwater, drinkable, drinking water standard