

Preparation of Cold Cream from the Local Materials

The cold cream is composed of four important ingredients; they are beeswax, almond oil, borax and water.

Beeswax The beeswax is prepared from the honeycomb of the bee [Apis mellifera, Linne' (Family Apidae)] We found that the beeswax obtained from the bee farm in Chiang Mai Province has an equal quality as described in the U.S.P. When the cold cream is formulate, the genuine beeswax should be used.

Almond Oil Both almond oil and persic oil are used in cold cream, but these two oil are imported. We found that the soybean oil, peanut oil, rice bran oil, corn oil, coconut oil and palm oil can be used to replace almond oil and persic oil. The soybean oil is the most suitable one.

Borax When borax dissolved in water it hydrolysed to produce canstic soda or sodium hydroxide (one molecule of borax gives only one molecule of NaOH). In this research we prepared alkaline solution from wooden ash. Two kilograms of the wooden ash were macerated in the percolator for 48 hours, with an excessive amount of water as the menstruum, finally, the first litre of the extractive was collected. The extractive so obtained was analysed for the strength and the concentration of cation and anion content. We found that the strength of the extractive is equal to 0.767 normal and the ion concentration was in the order $K^+ > Cl^- > Na^+ > HCO_3^-$,

no Mg^{++} was found.

Water Distilled water, rain water, deionized water or tap water can be used.

The best formula for cold cream as we have found was as follow :

Beeswax, white	16 g
Soybean oil or peanut oil or other eatable oil	63 g
Wooden ash extractive (0.767 N).....	5.18 mL
(or borax 0.8 g)	
Tap water	<u>15.82 mL</u>
To make about	100.00 g

The cold cream so obtained is a water in oil emulsion. The cream had a glossy surface appearance and had the characteristic odor according to the specific kind of vegetable oil used.