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Value addition in peanut, Gingelly and Coconut

Major oilseeds except cottonseed all the other commodities have relevance to Sri Lankan economy as far as agroprocessing industries are concerned. In domestic preparation of food in Sri Lanka, Coconut is an indispensable commodity it provides 80% fat and nearly 6% protein. Possibilities exist to use other oilseeds for utilization in curry preparations.

Experiments were conducted to evaluate the possibilities of manufacturing sterilized Peanut and Gingelly milk in fluid from as Coconut milk substitutes. Further, the above commodities were spray dried. Their organoleptic properties were evaluated. For these purposes both sterilized and spray dried Coconut milk was manufactured. In sensory evaluation studies, the panelist preferred a milk curry prepared using Coconut milk to both Peanut and Gingelly based milk. However, based on sensory evaluation studies it was observed that milk prepared using Peanut based milk, both fluid and dried forms have potential as a replacer for Coconut milk.

Moisture sorption studies of Coconut based spray dried commodity were conducted. The objectives of moisture sorption studies were to determine Bruner-Emit-Teller (BET) monolayer value which gives an indication as to the optimal levels of moisture in the product for long term storage. The monolayer values were evaluated at room temperature 30 ^{o}C and 5 ^{o}C. They were 4.67 and 6.93 g water per 100g dry Coconut milk powder, respectively. Moisture sorption studies indicated that the heat of sorption values at 4, 6 and 8 percent moisture levels were 5765, 2174 and 1427 calories per mole of water sorbed by the product. Therefore, the product is most hygroscope and need moisture proof material for packaging.