

LABUsimsoft - A Software to Predict Fruit Drying Condition for Industrial Use

TECHNOLOGY DESCRIPTION

This technology is a device created to predict drying conditions of fruits such as pumpkin for industrial usage.

TECHNOLOGY FEATURES

This technology is very dynamic and can be easily customized. It is also very light with a total size of 511kb. Furthermore, there is technical feasibility of manufacturing the software in different computer languages. This technology contains software that can serve as a baseline for other tropical fruits such as Papaya, Malay apple, Mango, Guava, Orange and so on. This invention may also be used for academic purposes.

ADVANTAGES

- · Software has interactive features
- · User friendly
- Easy to use and operate.

INDUSTRY OVERVIEW

Prospect: Food and Beverage Industry, Pharmaceutical Industry, Agriculture Industry

The population of Malaysia is considered as upper middle income with a per capita income of about \$24,770 (PPP) per year. The organized food retail sector accounts for less than half of grocery sales in Malaysia. Food spending is expected to grow more than 8 percent annually to reach \$45.6 billion by 2020. This phenomenon is boosted by rising incomes and awareness of the health benefits of fresh foods. Pumpkin is a very economical fruit that can be used in various forms. However, due to its highly perishable nature, it is always preserved by drying. In order to optimize the drying process, it is therefore, important to develop a program that will effectively predict the best drying conditions and time. There is currently no software that can predict the drying conditions of fruits available in the market although an effort of designing mathematical modeling the drying of pretreated and untreated pumpkin was done in the past. In contrast, this software is user friendly, and easy to operate. LABUsimsoft is very dynamic and can be easily customized. It is also very light with a total size of 511kb. The four key players in the food and Beverage industry operating in Malaysia which are Nestle, Unilever, Cerebos, and Campbell Soup have been identified as the potential users of such program. Apart from these four, other companies operating in the food and beverage, Pharmaceutical, and Agriculture industries may also find the software to be relevant. So far there are 3829, 342, and 355 SMEs in those categories respectively. Since the software can serve as a baseline for other tropical fruits such as Papaya, Malay apple, Mango, Guava, Orange and others, the expansion in the market user is also expected.



Dr. Norhashila Hashim Faculty of Engineering