

Current trends of tropical fruit waste utilization

ABSTRACT

Recent rapid growth of the world's population has increased food demands. This phenomenon poses a great challenge for food manufacturers in maximizing the existing food or plant resources. Nowadays, the recovery of health benefit bioactive compounds from fruit wastes is a research trend not only to help minimize the waste burden, but also to meet the intensive demand from the public for phenolic compounds which are believed to have protective effects against chronic diseases. This review is focused on polyphenolic compounds recovery from tropical fruit wastes and its current trend of utilization. The tropical fruit wastes include in discussion are durian (*Durio zibethinus*), mangosteen (*Garcinia mangostana* L.), rambutan (*Nephelium lappaceum*), mango (*Mangifera indica* L.), jackfruit (*Artocarpus heterophyllus*), papaya (*Carica papaya*), passion fruit (*Passiflora edulis*), dragon fruit (*Hylocereus* spp), and pineapple (*Ananas comosus*). Highlights of bioactive compounds in different parts of a tropical fruit are targeted primarily for food industries as pragmatic references to create novel innovative health enhancement food products. This information is intended to inspire further research ideas in areas that are still under-explored and for food processing manufacturers who would like to minimize wastes as the norm of present day industry (design) objective.

Keyword: Tropical fruit wastes; Bioactive compounds; Chromatography; Fruit waste utilization; Spectrophotometry