AGRONOMY PRACTICES, POSTHARVEST TECHNOLOGY, PROSPECT AND POTENTIAL MARKET OF DURIAN FROM MALAYSIA TO CHINA

By

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Abstract

Durian (Durio zibethinus) often invokes a love or hate relationship. Being describe the internal yellow carpels as a rich, butter-like custard, with hints of chives and caramel in whipped cream. Others are repulsed by its polarizing smell, which has been likened to rotting garbage and dirty gym socks. However, getting the whole fruit is a rare treat when a Malaysian durian festival in Southern China in late 2017 attracted about 165,000 people lining up to taste the thawed, wholefruit samples of the country's premium Musang King variety. Musang King was determined as one of the best out of over 200 durian varieties in Malaysia and getting popular and well known in the planet. To get the best quality of durian, it has to be grown under the right agronomy practices. Good agronomy practices in planting durian are considering many aspects including suitable of soil pH (5.0 - 6.5), temperature $(17^{\circ}\text{C to } 32^{\circ}\text{C})$, annual rainfall of 1700 mm to < 5000 mm per year, 60:20:20 ratio of planting system, $10 \text{ m} \times 10 \text{ m}$ of planting distance, 2 times a day of watering, 2 to 6 times a year of weeding, fertilization and pruning and 2 - 4 times a year of pest and disease control. Days after anthesis (DAA) or full bloom is recommended as maturity indices for selected durian cultivars for examples D24 (105 - 115 DAA), D99 (90 - 100 DAA), D114 (120 - 130 DAA), Musang King (120 – 130 DAA) and Monthong (120 – 135 DAA). Several indicators such as bulging abscission zone and abscission layer, spines, carpel sutures, sound from tapping, smell of durian are ready to be harvested as the fruit getting ripen. The postharvest technology processing began from harvesting, in-field handling, unloading, sorting, cleaning, grading, packaging, storage, transportation and market the product are important to ensure the quality control of the product. In term of potential to export durian into China market, in 2017, China was determined as one of the most attractive market in the world for the fourth consecutive year via the dimensions of market size, consumption capacity, and commercial infrastructure. In conclusion, the successful for Malaysia to consistently supported demand of durian is strongly depending on their agronomy practices and postharvest management in order to produce good quality of durian to be exported to China.