

Aimon Lertsamran 2009: Production System for Export of Pummelo (*Citrus maxima* (Burm.) Merrill) in Nakhon Pathom Province. Master of Science (Agriculture), Major Field: Horticulture, Department of Horticulture. Thesis Advisor: Associate Professor Kawit Wanichkul, Dr.agr. 400 pages.

The objectives of this study were to study the production system for export of pummelo in area of Nakhon Pathom province and to submit the Good Agricultural Practice (GAP) for efficient production system and export market. Cost and benefits analysis were also studied. The results of this research revealed that most of the farmer had more than 10 years experience of pummelo cultivation for export. The pummelo production area was in average 6-10 rai and the labors used in pummelo production came from family member and hired labor. The pummelo orchards were in raised beds system. The pummelo cultivar grown for export was “Tong Dee”. The planting distance was mostly 6×8 meters and some cash crop also grown during 2-3 years after planting of pummelo. Pummelo were irrigated by pumping. Both chemical fertilizer and manure were used monthly and yearly, respectively. The major pests of pummelo were phytophthora foot and root rot, thrips and oriental fruit fly. The pummelo harvesting indices were coloring peel and oil grand. Pummelo fruits were either sold to the exporter at the orchards or sent to the buying area for export. Seventy-one to eighty percent of all pummelo produced attended export quality and sixty to seventy percent of pummelo produced in season were suitable for export, whereas fifty to sixty percent of the off-season harvesting were suitable for export. Recommendations for improving production system were wrapping the pummelo fruits to protect from insect pest and increasing of the organic matter to soil. Whereas, reduce in amount of chemical fertilizer were also recommended. Furthermore, SWOT analysis and GAP for pummelo was created by using data from this research. Cost and benefits of pummelo production in range of 1-20 years were also studies. The farm with size of 10 rai was proposed as the farm model for financial analysis. For the situation of before financing, the financing measures in terms of NPV at 4% discount rate, B/C ratio and IRR of the pummelo farming investment were 1,740,694.23 baht, 1.23 and 32.30%, respectively. These results show that the pummelo for export farming investment was financial worthiness.

Student's signature

Thesis Advisor's signature