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WALAIPORN SASIPRAPA: LAND SUITABILITY ASSESSMENT FOR PUMMELO CV. KHAO TAENG GUA IN CHAINAT PROVINCE. THESIS ADVISORS: SARANYA SUTCHARITAKUL, M.S., CHARLIE NAVANUGRAHA, Ph.D., PRAPEUT KERDSUEB, M.Sc. 122 P. ISBN 974-664-227-8.

Land suitability assessment for pummelo cultivar Khao Taeng Gua in Chainat province is the study of the environment that influences Khoa Tang Kua plantation. It consists of physical biological and economic factors. Land suitability assessment are based on secondary physical data and diagnosed by the most limiting factor(s) method. Primary classification is evaluated by ground survey and collected quantitative data: yield, cost, benefit and individual cultivation problems. Correlation analysis had been used to test the relationship between primary classification and ground survey.

Two kinds of land utilization types were studied: flat terrain and ridging type. These were classified for Khoa Tang Kua suitability in Chainat province into highly, moderately, marginally suitable and not suitable for flat terrain the plots were 16,688, 148,074, 184,909 and 1,193,920 rais or 1.08%, 9.59%, 11.99% and 77.34 % total area of Chainat province, respectively, and for ridging type were 86,406, 453,117, 556,117 and 447,135 rais or 5.60%, 29.35%, 36.08% and 28.97 % total area of Chainat province, respectively. The results of primary socio-economic data analysis showed that the average yield was 554 kg./rai, the average cost and benefit 4,710 and 14,785 baht/rai, respectively and the gross margin average 10,136 baht/rai. The study has high standard deviation. The result of correlation analysis showed, primary classification was related to the economic classification in flat terrain land utilization type but no relationship with in ridging land utilization type was found.