

Thesis Title Analysis and Quantitative Changes in Cytokinin-like Substances in Stem
Apex prior to Leaf Flushing of Lychee cv. Hong Huay

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Abstract

The study on analysis and quantitative changes in cytokinin-like substances in stem apexes prior to leaf flushing of Lychee cv. Hong Huay was performed during October 1995 to January 1998 at Horticultural Department, Faculty of Agriculture, Chiang Mai University, Chiang Mai, Thailand. Effect of extracted quantity on cytokinin-like substances analysis of Lychee cv. Hong Huay by Soybean Hypocotyl Bioassay (SHB) was studied. It was found that the extracted quantity of 0.5, 1, 2 and 4 gram fresh weight had no effect on quantification of cytokinin-like substances.

Changes in cytokinin-like substances in stem apexes prior to leaf flushing of Lychee cv. Hong Huay (20 years old) were studied at Suan Song Sand, Doi Pui, Chiang Mai, Thailand. The study was performed from October 1995 to January 1998. The treatment was the number of week as 0, 2, 4, 6 and 8 prior to leaf flushing. It was found that the activities of cytokinin-like substances were low in the 8th week prior to leaf flushing and remained constant until the 4th week. Then the activities increased in the 2nd week and increased to the maximum level when leaf flushing occurred.

Effect of storage time of sample on cytokinin-like substances quantification by SHB was studied. The treatments were 4 storage times of Lychee apexes cv. Hong Huay at -30 °C for 4

hours, 1, 2 and 3 months. It was found that those storage times had no effect on cytokinin-like substances quantification.