

A STUDY ON THE PROCESS OF PINEAPPLE FLOWERING TREATED BY ETHEPHON

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Summary

Aimed at finding out the most effective way for pineapple flowering induction treatment, plants of Queen cultivar were treated with flower induced substance named "ethephon" at different concentrations, volumes and durations. In addition, changes in physiological indicators in the stem apex and changes in morphology and anatomy of pineapple inflorescence were also investigated. The results showed that: utilization of 20 ml of ethephon at a concentration of 525 mg.L⁻¹ in the morning or evening effectively stimulated flower initiation in pineapple plants with the effective duration of 20 minutes. At the 5th day after treatment, the high ratio of C/N favorable for pineapple flowering process was reported in plant stem. At the 10 th day, the pineapple inflorescence was visibly observed to the naked eye and primary organs of flower had been available. Pineapple flower is a bisexual one that consists of 3 sepals, 3 petals, 6 stamens in 2 whorls and tricarpellary pistil. The increasing rate of photosynthesis in "D" leaves meets the carbohydrate requirement for floral initiation.

Keywords: *Pineapple (A. comosus (L.) Merr. cv. Queen), ethephon, flowering, morphology, anatomy.*