

Flowering synchronization in pineapples (*Ananas comosus* L. Merr): a review

ABSTRACT

Natural flowering in pineapple is precocious, lacks synchronization in reproductive phenology and consequently leads to significant losses due to fruits being harvested out of schedule. Several factors influencing the flower initiation in pineapple have been identified, including the cultivar, plant size, temperature, nutrients, and water stress. To increase the synchronization, pineapple flowering can be artificially induced by hormones such as auxin and ethylene. However, despite the artificial induction, the simultaneous full flowering emergence is still difficult to achieve in the industry. Thus, a greater understanding of factors affecting pineapple flowering before hormone application may help in enhancing flowering efficiency. This review discusses the initiation and development of pineapple flowering, as well as the use of exogenous hormones to improve efficacy and provide insight into better pineapple management.

Keyword: Artificially induced flowering; Flowering susceptibility; Hormone efficiency; Auxin; Ethylene