

# Effect of Plant Growth Regulators on Annona Culture

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Key Words : Annona, Plant growth regulator, Ethylene, Pollination, Seedless, Fruit set

## SUMMARY

Annona is protogym that the stigma mature earlier than anther, which means the stigma lose its receptability when the anther mature.

It showed that the ethylene increased before anther dehiscence. The anther produce more ethylene than petal and other reproductive organs in flower tissues.

Auxin application may induce ethylene that promote male stage. However, hypobaric pressure may retard endogenous ethylene production and delay the male flower induction.

The climate factors such as humidity and temperature may affect the germination and viability of the pollens. High humidity and temperature improve germinability which enhances fruit set.

Plant hormones such as GA<sub>3</sub>, NAA applied biweekly at 25-250 ppm promote fruit set. GA<sub>3</sub> spray produced better result in fruit setting, higher fruit quality and seedless fruit which is good for fresh consumption and processing, but causing smaller fruit. Further studies of growth regulators on Annona are required.

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