

**Title** Postharvest fruit fly disinfestation strategies in rainy season guava crop  
**Authors** S.P. Singh, R.K. Pal  
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#### **Abstract**

The rainy season guava (*Psidium guajava* L.) crop suffers huge economic losses due to fruit fly menace which renders the fruit unfit for consumption. The recommendation of crop regulation in guava, to avoid rainy season crop, economically not advisable and thus profitability of guava growers is challenged. The preharvest insecticidal sprays and postharvest fumigation treatment pose a great threat to consumer health and environment. In WTO regime, stringent quality norms and quarantine measures as well as declaration of zero tolerance for pesticides by some countries for selected commodities, demand for chemical free and biologically safe alternatives for postharvest insect disinfestations. This paper discusses the pragmatic assessment of these alternatives like insecticidal controlled atmospheres (ICA), irradiation and hot-water immersion treatments to control fruit fly at postharvest stage. The effect of these treatments on postharvest life and quality of fruit are also studied. These alternatives can be successfully utilized for fulfilling the quarantine requirements of various countries to boost guava export.