

# Reduction of fruit splitting by root pruning and mulching of wax apple<sup>1</sup>

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## Abstract

High temperature and large amount of rains during the fruit developmental stages of the 'Pink' wax apple (*Syzygium samarangense* Merr. Et Perry) lead to fruit splitting. In this study, we conducted two types of treatment, (1) root pruning at different fruit development stages and (2) root pruning and ground mulching by plastic sheets at the small fruit stage to document the effectiveness to reduce fruit splitting. The results showed that root pruning plus ground mulching treatment at small fruit stage in 2016 and 2017 had the lowest percentage of the fruit splitting, were 20% and 9.8% lower than control treatment, respectively. Additionally, those treatments had no negative effects on fruit quality. With giving root pruning treatment at different fruit development stages, the results showed that root pruning at petal fall stage had 45.4% fruit splitting, which was 8.3% lower than control treatment. Root pruning at petal fall, small fruit or middle fruit stage would not affect the fruit quality. Furthermore, ground mulching treatment may have stabilized the changing of soil volumetric water content, and would not affect the ambient temperature inside the canopy and soil temperature.

Keywords: splitting (cracking), fruit quality, soil water, precipitation

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