

# Grafted watermelon transplants: a new business opportunity<sup>©</sup>

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## **Abstract**

**Grafting vegetable plants onto specific rootstocks which are resistant to soilborne diseases is a unique horticultural technology attracting interest among intensive vegetable crop producers as well as organic growers. In many parts of the world including the USA grafting represents the only feasible measure to control a diversity of problems such as soilborne disease and saline soil conditions. Cucurbit plants, particularly watermelon (*Citrullus lanatus*), are grafted using the one-cotyledon method. The optimal stage of growth for grafting watermelon is the 1 to 2 true-leaf stage for the scion and the 1 true leaf stage for the rootstock. A 9-day healing regimen was found to be successful for watermelon in western Washington conditions and had 90% survival for grafted watermelon transplants. Our current research studies are investigating how to further optimize the success rate for grafting watermelon transplants, such as applying antitranspirants to reduce water loss and utilizing the splice grafting method to eliminate rootstock regrowth. Additionally we are testing grafted plants to control verticillium wilt caused by *Verticillium dahliae* in Washington.**

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