

Grafted watermelon transplants: a new business opportunity[©]

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Grafting vegetable plants onto specific rootstocks that 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. Grafting often represents the only feasible measure to control a diversity of problems such as soilborne disease and saline soil conditions. In this poster presentation we provide an overview of the steps for grafting cucurbit plants, particularly watermelon, 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. Also included is a 9-day healing regimen which is appropriate for watermelon in western Washington conditions and has 90% survival for grafted watermelon transplants. Our future goal is to conduct more research 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 will test grafted plants to control *Verticillium* wilt caused by *Verticillium dahliae* in Washington.

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