

**Project 86 Control of Bean Thrips in Navel Orange Using Ethyl Formate
Fumigation**

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Bean thrips frequently infest the navel of navel oranges and disrupt trade of California navel oranges to Australia. The industry has implemented a pre-clearance program that is difficult to implement and does not solve the problems with trade disruption. An alternative treatment to kill bean thrips in the navel oranges is desired. Preliminary work with ethyl formate fumigation has shown promise for controlling bean thrips without phytotoxicity to the fruit. However, a more extensive investigation is needed to confirm complete insect control and lack of phytotoxicity to navel oranges of various strains and harvest maturities. This proposal will address these issues and determine the feasibility of using ethyl formate fumigation to control bean thrips. A large-scale treatment is also planned.