North Coast Olive Fruit Fly Life Cycle

Ellie Andrews, UCCE Specialty Crops, Sonoma, Marin, and Napa Counties









Eggs & larvae

- can be found year-round in fruit on trees & ground
- eggs laid in fruit leave brown spots on fruit
- larvae developing in the summer in fruit pupate & emerge as adults
- in the fall, some larvae leave the fruit & pupate in the soil where they overwinter, while others overwinter in the fruit on trees & pupate in the spring



Generations & Temperatures

- multiple generations occur during summer & fall
- can complete a generation in <30 days when temperatures are 68-86F
- activity thresholds are 60-95F, not very active outside this range
- · hot dry conditions reduce population buildup
- no true stages of dormancy



Damage

- · larvae destroy olive fruit pulp
- allow entry of secondary microbes that cause fruit rot
- degrade olive quality
- can cause premature fruit drop





Adult olive fruit fly

- active year-round
- · can fly long distances
- · females lay eggs in fruit