

Section 2: Implementation

CONTROL OF WESTERN FLOWER THRIPS IN APPLES USING SUCCESS* NATURALLYTE* INSECT CONTROL

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Introduction

Thrips can be a significant problem causing pansy spots in certain varieties of apples such as Granny Smith and Gala. Additional restrictions under FQPA have decreased the amount and number of applications on some insecticides used for thrips control. Previous research has shown good efficacy with Success on western flower thrips. This study was established to determine the efficacy of Success on western flower thrips under field conditions when compared to the commercial standard, Carzol 92SP.

Material and Methods

Three blocks of Granny Smith apples located in Vantage, WA were chosen to use in the study. Each block was split in order to receive treatments of Success or Carzol for thrips control. Treatments included Success at 6 oz of product/A and Carzol 92SP at 1 lb/A product both applied at full bloom (early petal fall). Timing of the sprays was based on monitoring data. Noticeable increase in numbers of thrips and a treatment threshold of 0.2-0.3 triggered the sprays. Applications of other pesticides were at the discretion of the field person and the grower. The grower's airblast sprayer, under the supervision of the field person, was used to apply all materials.

Thrip counts were taken by tapping three times on a limb with flowers. At each evaluation interval 10 limbs were sampled at 10 sites in the treatment block for a total of 100 limbs. Pretreatment limb tap sampling were done in the late afternoon where sprays were to be applied the same evening. In orchards where Surround (kaolin clay) had been used the fruit was wiped clean using moist cotton cloths in order to sample for pansy spot.

Results and Conclusion

Success at 6 oz product/A gave comparable control of western flower thrips to Carzol 92SP at 1 lb/A (table 1) under operational conditions. Historically optimum application timing for control of thrips in apples is between pink and petal fall. If thrips are the primary target pest then the optimum timing should be pink. If leafrollers are the primary target pest applications may be timed at petal fall in order to control both pests. But if applications for leafroller are delayed to late petal fall, thrips will be controlled but it is past the time for fruit injury (pansy spot) to occur.

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TABLE 1. Average number of thrips at pretreatment and 3 and 7 days after treatment in Granny Smith apple blocks treated with Success or Carzol 92SP.

Average number of thrips/100 limbs		
	Success	Carzol 92SP
Pretreatment	3.0	2.2
3 DAT	0.4	0.5
7 DAT	1.8	1.9