

4-2013

2013 Grower Survey: Reduced Risk Pesticide Use and IPM Survey

Hilary A. Sandler

University of Massachusetts - Amherst, hsandler@umass.edu

Katherine Ghantous

UMass Amherst, kghantou@umass.edu

Follow this and additional works at: https://scholarworks.umass.edu/cranberry_research_repts



Part of the [Agriculture Commons](#), and the [Plant Sciences Commons](#)

Sandler, Hilary A. and Ghantous, Katherine, "2013 Grower Survey: Reduced Risk Pesticide Use and IPM Survey" (2013). *Cranberry Station Research Reports and Surveys*. 5.

Retrieved from https://scholarworks.umass.edu/cranberry_research_repts/5

This Article is brought to you for free and open access by the Cranberry Station Research Reports and Surveys at ScholarWorks@UMass Amherst. It has been accepted for inclusion in Cranberry Station Research Reports and Surveys by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

REDUCED RISK PESTICIDE USE AND IPM SURVEY 2013

Katie Ghantous and Hilary Sandler

UMass Cranberry Station, East Wareham, MA

A survey about cranberry grower practices regarding “Reduced-risk Pesticides (RRP) and Non-chemical Pest Management” was distributed at the 2013 Pesticide Safety Training held in East Wareham, MA on April 9, which was attended by 95 growers. Completed surveys from 66 growers were returned (70% response rate). Of those who responded, 71% identified themselves as the decision maker for the cranberry farm where they work. Avaunt, Delegate, Intrepid, and Abound were more commonly used than Altacor and Ridomil (see Figure 1).

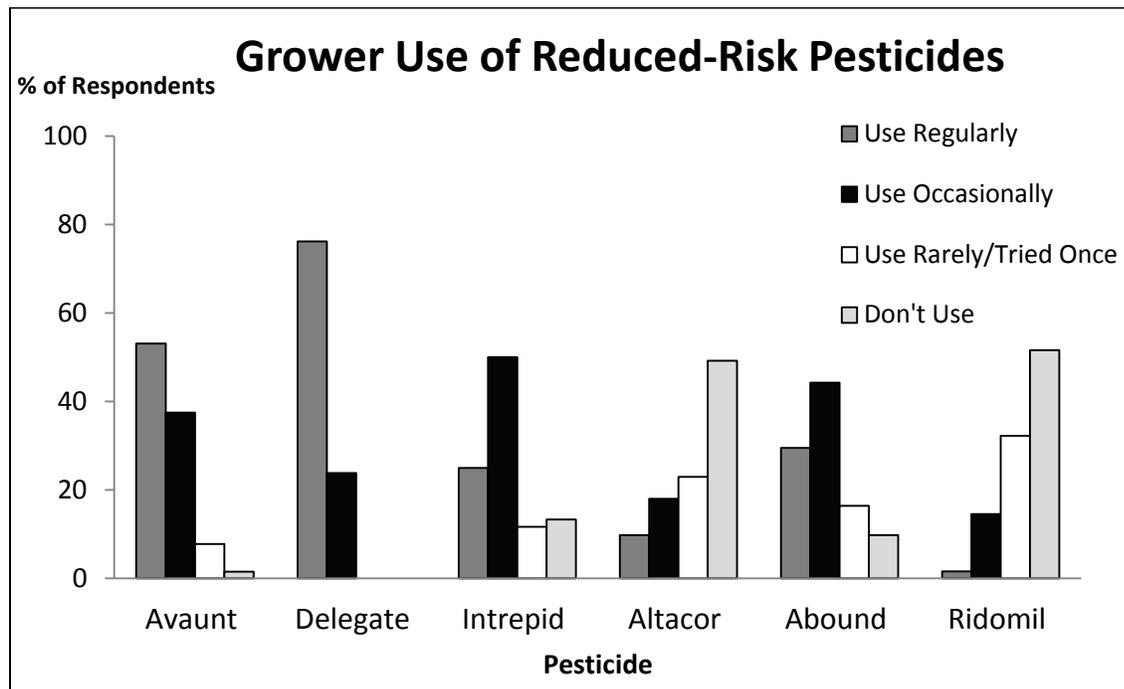


Figure 1. Cranberry growers response to survey question on frequency of use of reduced-risk pesticides registered for cranberry use. N=66.

Obstacle to Use. When asked about the obstacles to using RRP, cost and inefficient irrigation systems were most commonly cited. For Avaunt, Delegate, and Intrepid, most growers responded that they were either “too expensive” (56%, 69%, and 48%, respectively) or “irrigation rinse time too long” (26%, 27%, and 24%, respectively); only a few said “does not work” (7%, 0%, and 17%, respectively) or “do not know enough about it” (11%, 4%, and 10%, respectively). For Altacor, many more respondents said that they “do not know enough about it” (44%) compared to the other products. Fewer (39%) thought it was “too expensive” and “irrigation rinse time too long” (11%); a similar number said it “does not work” (7%).

For Abound, 44% felt it was “too expensive”, and 27% reported that they “cannot hold water” (required by label) as an obstacle to use. Few said Abound “does not work” (7%) and

19% said “do not know enough about it”. Ridomil is used mainly to treat Phytophthora infestations, and 24% reported not having this problem on their farm, while 45% said that the fungicide was “too expensive”. Similar to other RRP, only 7% said it “does not work” while 24% said they “do not know enough about it”

Cost Perceptions. When asked about cost of RRP over the last 10 years, 64% said the cost had increased over time, 7% felt the cost had decreased and 29% felt that it has stayed the same. Despite the fact that growers commonly cited high cost as obstacle to use of RRP, and perceived the cost of these chemical as increasing over time, the RRP are similarly priced to non-RRP (with the exception of Ridomil).

Non-chemical Pest Management. Growers were asked about their use of: Spring Floods, Fall Floods, Improved Drainage, Mowing, Hand Weeding, Renovation Floods, and Flame Cultivation (see Figure 2). The majority of growers who responded do not use floods for pest management. Most growers (60%) were using improved drainage, and reported that their use of mowing and hand weeding had increased or stayed the same. Flame cultivation was used the same or less by several growers, but the vast majority (91%) reported that they do not use this method. Growers were asked about their experiences using hand-held flame cultivators (FC). Most reported that they have never tried them (83%). No one used them regularly. Occasional use was indicated by some growers (7%), while 7% said that they used them once or rarely and 4% did not know what they were. Only eight growers answered the question about FC efficacy; two said they were effective, four selected “somewhat effective”, and two felt they were not effective. When asked about the obstacles to using FC, the most popular answer was “don’t know enough about it” (37%), followed by “worried about bog damage” (23%), “too time consuming” (16%), “it is dangerous” (12%), “doesn’t work” (7%), and “not cost effective” (5%).

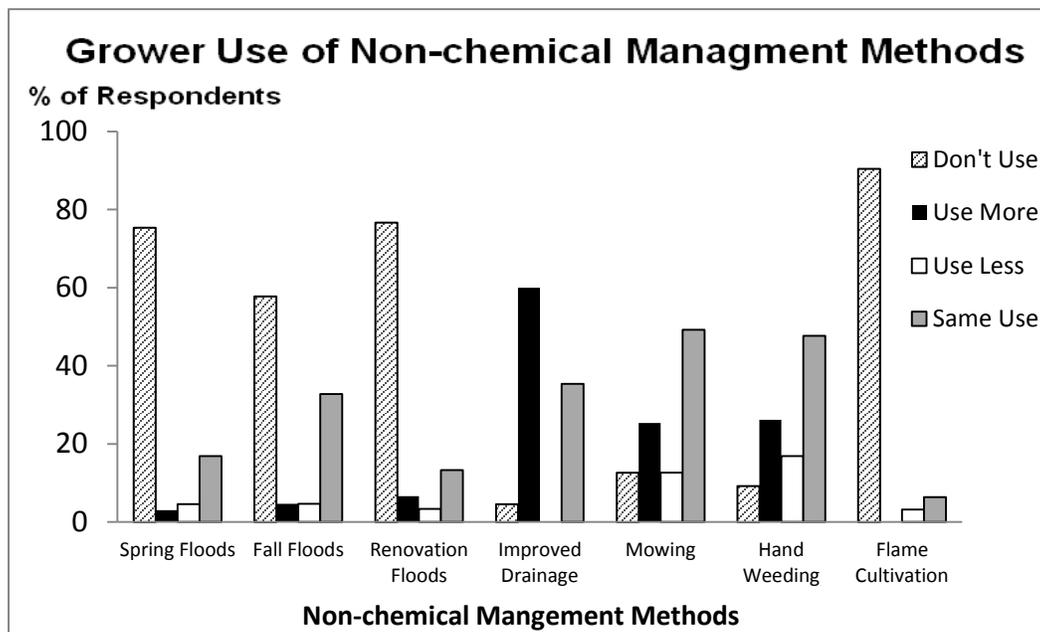


Figure 2. Cranberry growers response to survey question on frequency of use of non-chemical management tools for cranberry pest management. N=65.

When asked about their use of late Water (LW), only 10% reported using this practice regularly, while 32% used it rarely, 13% tried it once, and 45% have never used it. Growers indicated they were using LW to control fruit rot disease, cranberry fruitworm, black-headed fireworm, and weeds such as dewberry, briers, and dodder. When asked about their perception of the efficacy of LW to control these pests, most growers reported fair or good efficacy (see Figure 3). Despite the perception of positive results (only 7% said “doesn’t work” as an obstacle), growers cited “worried about crop loss” as the top obstacle to LW (39%), followed by the physical obstacle “don’t have enough water” (23%). Respondents also indicated “winters too warm”, “don’t need to”, and “I use fall floods instead” as obstacles to use of LW (12%, 12%, and 8%, respectively).

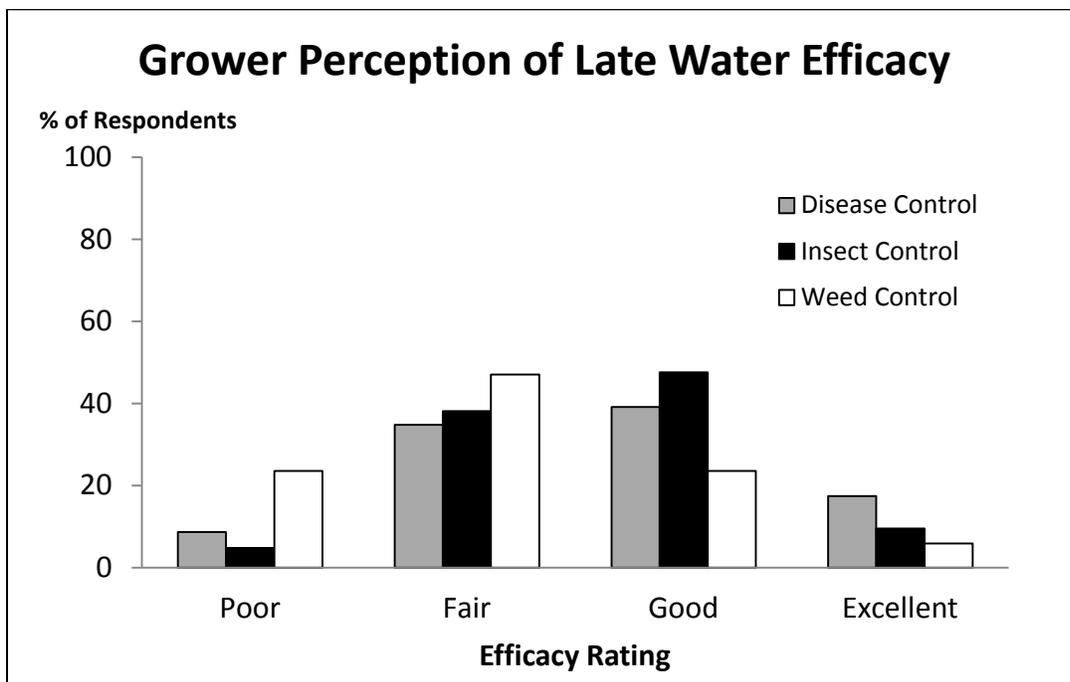


Figure 3. Grower perception of the efficacy of late water (a 30-day spring reflood) for managing disease, insects, and weeds. N=23.

This work was supported by EPA Region 1 Strategic Agricultural Initiatives Grant, X8-96128001-0