

Integrated Pest Management and Sustainable Grape Production in Sonoma County

Nick Frey (Farmer/Rancher Grant Program)

Project Number: FW03-007

Title: Integrated Pest Management and Sustainable Grape Production in Sonoma County

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SARE Grant: \$13,000



Nick Frey, right, consults with vineyard managers John Clendenen of Clendenen Vineyard Management, middle, and Keith Horn of Clos du Bois Wines.



Field day participants review the fish-friendly farming exhibit. – Photo by Judy Tuthan

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Grape growers listen to a vineyard manager discuss his IPM and organic practices. – Photo by Judy Tuthan

Situation

The Sonoma County Grape Growers Association initiated in 2000 an integrated pest management program that facilitated grower-to-grower education. The program proved effective in changing grower practices. Continuing the program, it was thought, could broaden IPM perspectives and help growers reduce the use of pesticides being reviewed under the Food Quality Protection Act.

Further, the program could facilitate the association's initiative to promote the Sustainable Winegrowing Program sponsored by the Wine Institute and the California Association of Winegrape Growers, which, in turn, will encourage growers to self-assess the sustainability of their farming practices and develop improvement plans.

Objectives

- Decrease unnecessary pesticide use whenever possible
- Increase use of reduced-risk or organic pesticides when treatments are needed
- Reassure the non-farming community that grape growers are committed to safe, sustainable grape production

Actions

Venues for grower-to-grower meetings were four demonstration vineyards established in Sonoma County, one for each major American Viticulture Area (AVA), or wine appellation, in the county: Alexander Valley, Dry Creek Valley, Russian River Valley, and Sonoma Valley.

Monthly grower meetings were held April through July to facilitate IPM education. An annual field day was held in August to review pest monitoring data and pest management decisions for each demonstration vineyard.



Judy Tuhtan, right, IPM project coordinator with the Sonoma County Grape Growers Association, chats with Kristi DeOrme of the Sonoma County Farm Bureau.



Nick Frey explains information on the IPM fact sheet during the field day summary at Santa Rosa Junior College Shane Farm. – Photo by Judy Tuthan

Results

Two-thirds of those surveyed for the IPM grower appellation meetings said they changed their management practices as a result of the meetings. Changes included:

- Minimized use of pesticides and fungicides
- Exhibited greater tolerance toward wildlife
- Started managing nymph counts with monitoring sheets from the IPM book
- Showed a greater tolerance for pests
- Experimented with using mulch, owl boxes, and new pesticides
- Conducted more monitoring before spraying
- Edged toward the use of 'softer sprays'



Grape growers check out the regional water quality control exhibit. – Photo by Judy Tuthan



This presentation is by the Southern Sonoma County Resource Conservation District. – Photo by Judy Tuthan

The project had hoped to draw at least 90 producers to monthly meetings, at least 125 to the annual IPM Field Day, and at least 25 non-farming community members to the IPM Field Day. Average grower attendance at monthly meetings was 93 in 2003 and 99 in 2004. Field day attendance exceeded 150 both years, and 25 from the community attended in 2003 and 30 in 2004.

The project team also hoped to implement the Code of Sustainable Winegrowing Program with at least 75 growers. As a result of the program:

- More than 370 growers and wineries attended a code workshop in Sonoma County
- 200 vineyard owners and managers, who farm 15,000 acres (25% of Sonoma County's wine acreage), have completed and submitted self-assessments to be used for county and state summaries

Potential Benefits

The greatest impacts from the IPM program are that growers are:

- Increasing their use of pest monitoring results
- Showing an increased tolerance for uneconomic levels of pests, including weeds, insects, and mites
- Increasing their use of reduced-risk pesticides

The monthly growers meetings are attended by 10% of Sonoma County's 963 grape growers.

The program has also increased awareness of reduced-risk alternatives, particularly to pesticides under Food Quality Protection Act Review.

The IPM program may not increase yields, but it does contribute to sustainable production and improved quality. As an indicator of quality, Sonoma County grape prices were \$1,947 a ton in 2003 compared with a California statewide average of \$471 a ton, as reported in the CA Grape Crush Report.

"The continuity of using the four demonstration vineyards as working examples of grape growing for five consecutive years and having those cutting edge vineyard managers share their knowledge of grape growing imparts example over word," said Principal Investigator Nick Frey in the project's final report.