

Case Studies on Integrated Planning

Water Quality Conference: February 9, 2012

Marcia Gibbs, Director, Sustainable Cotton Project, SJSFP
(530) 370-5325, marcia@sustainablecotton.org
www.sustainablecotton.org



Lower San Joaquin River Water Quality

- In December 2006, the US EPA adopted TMDL #23010 for chlorpyrifos and diazinon in the San Joaquin River (SJR)
- In the SJR watershed, agriculture significantly contributes to the exceedence of Federal water quality objectives. UC scientists and others have found that pesticide pollution is widespread and agriculture is one of the main sources of pollution
- Westside SJR Watershed Coalition reports (June 2010) "the most common pesticide exceedence in the watershed was chlorpyrifos, used on almonds, alfalfa, corn and walnuts." Conventional farming practices for these crops result in year-round use of diazinon and chlorpyrifos
- This project addresses SWRCB Region 5 priorities ("Projects that result in the measurable reduction in the discharge of pesticides...")
- SCP's San Joaquin Sustainable Farming project helps growers implement UC proven BMPs to help reduce the use of these chemicals and their impacts on water quality

SCP/SJSFP

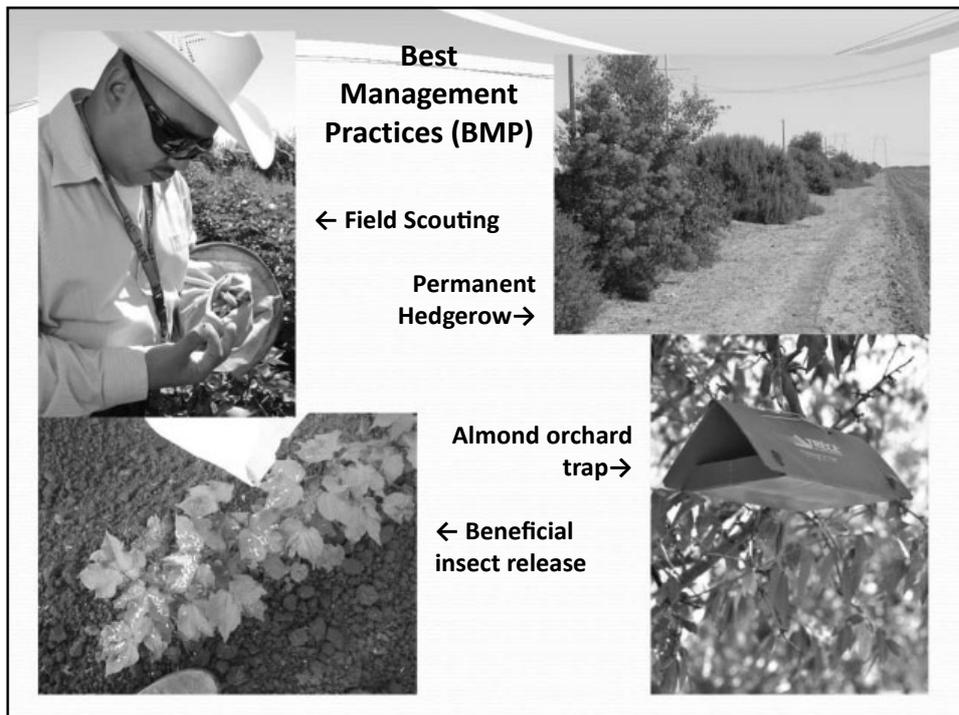
- Working with growers in Fresno, Madera and Merced counties for more than 10 years. Funding from SWRCB and EPA
- Promoting BMPs and reduced risk pesticide use
- Work with growers to implement BMPs and provide intensive weekly field scouting to supplement their PCA and provide additional information to growers
- Growers complete a self-assessment workbook that helps them look at their farming operation and assess their environmental outcomes. They create action plans to address those issues that need improvement

SCP/SJSFP

- Project provides growers with a list of chemicals to avoid (such as chlorpyrifos, diazinon and aldicarb) prepared for each crop which helps them make spray choices based on water quality information
- SCP/SJSFP coordinates with the Westside San Joaquin River Watershed Coalition to help prevent exceedences and educate growers about practices that protect water quality
- At the end of each season, growers complete a crop survey about their practices and results
- Growers complete a program evaluation that tells us how they felt about the program and how it can be improved

SCP/SJSFP has extensive outreach to over 1,000 growers of the three crops in the region.

- Six targeted field days per season
- Weekly blog during growing season on timely topics with additional resources
- Bi-annual newsletter with information and news about the project and crops
- Weekly field notes publication for growers that includes the scouting results of all the fields and orchards enrolled in the project
- Weekly distribution of timely information about each of the three crops provided by UC crop experts
- On-on-one technical support as needed
- Annual farm tour for industry and media folks to learn more about our project and understand farming community better



Technical Support

- UC crop experts work one-on-one as needed to help growers implement BMPs
- SCP provides manuals, brochures and timely crop information



Growers agree:

“The program is very focused on looking at alternative ways to handle pest control, and this alternative way is dealing with pests in maybe a more holistic manner, in looking at the whole picture where you have both natural and man-made methods of control. I've actually taken some of the practices and incorporated them into my organic farming. It's been a very fascinating way of approaching pest control in cotton, almonds and melons as well.” – Joe Del Bosque



Results

Growers have been able to reduce their use of the targeted chemicals by up to 73% of the county average

"Cleaner Cotton™ really opened up my eyes. Farmers can still make a profit growing cotton and reduce chemicals. That's a great feeling. It's a very good concept. It does work." - Chad Crivelli



Cleaner Cotton™



CLEANER COTTON

- Growers in the cotton side of the program have come together and decided to market their cotton grown as part of the project - avoiding the most toxic chemicals used on cotton, using non genetically modified varieties, and participating in our grower assessment. SCP has trademarked Cleaner Cotton™ and is now seeking markets for this fiber

Marketing Efforts

- Meetings and potential collaborations with fashion retailers such as the Gap and Levi's. These companies and many others have a keen interest in sustainable practices in the cotton fields and in their own operations

<http://www.youtube.com/watch?v=HVbbIZpGm24>



“We went to a meeting and they were offering scouting and beneficial insects and marketing of cotton, and so we gave it a try. We've learned a lot from all the people that come out to field meetings and from the information that you guys provide.”- Mark Fickett, Windfall Farms

Thanks to our partners!

- State Water Resources Control Board
- US EPA Region 9
- University of California Cooperative Extension
- University of California Integrated Pest Management
- Westside San Joaquin River Watershed Coalition
- Goldman Environmental Fund
- GAP Inc.
- Patagonia
- Our program growers