

## Viewpoint on IPM

In 2012 a team of California-based IPM Specialists and Researchers sought to capture views on the status of IPM from those who practiced or worked with it in their careers. While many worked on orchard crops, many did not, but the principles still applied. The lead PI for this project was Dr. Marshall Johnson, then a Specialist and Entomologist with UC-Riverside, but located near Fresno, CA. His instructions to the selected interviewees gave no direction but to “Just talk to us about IPM”. Their backgrounds are diverse and include university researchers, farm advisers and extension agents, growers and consultants. The videos are less than 10 minutes in length.



1. Johnson, M. W., A. J. Molinar, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Don De Boer**. 9 min 55 sec. *Don de Boer attended Modesto Junior College and then completed his BS degree at California State University at Fresno, CA, in 1985. He has been a Pest Control Advisor (PCA) for more than 30 years and currently works with Mid-Valley Agricultural Services in Livingston, CA. He is also an organic grower who produces orchard crops.*  
<https://www.youtube.com/watch?v=McfiP26qheY>

2. Johnson, M. W., A. J. Molinar, L. M. Lebeck, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Justin E. Nay**. 13 min 14 sec. *Dr. Justin Nay earned BS and PhD degrees in Entomology at the University of California (UC) at Riverside, CA. Following his PhD, Dr. Nay worked as an independent pest control advisor (PCA). In 2008, he established his own IPM consulting company, named Integral Ag., Inc, based out of Durham, CA. His company advises on pest management programs for over 20,000 acres in Northern California. Dr. Nay enjoys educating growers to the advantages of using IPM methods as compared to conventional calendar treatments for pest suppression in orchard crops.*  
<https://www.youtube.com/watch?v=xMJYnoM7UEQ>

3. Johnson, M. W., A. J. Molinar, L. M. Lebeck, W. J. Bentley, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Kim Gallagher Horton**. 8 min 15 sec. *Kim Gallagher Horton has a B.S. degree in Entomology and Nematology from the University of Florida, Gainesville. She has more than 15 years of experience working with the mass rearing of beneficial insects and mites. In 2003, she relocated to the San Joaquin Valley in southern California to mass rear predatory mites and beneficial insects for field crops. She currently works for Biobest USA, Inc., at its production facility in the San Joaquin Valley of*

*California as a technical advisor and the production manager. Her focus has been developing sustainable programs for controlling spider mites and mealybugs in vineyards, orchards, and foliage plants.*

<https://www.youtube.com/watch?v=m3exQH2rU>

4. Johnson, M. W., A. J. Molinar, W. J. Bentley, S. L. Weir, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Parry Klassen**. 14 min 33 sec. Parry Klassen farms 20 acres of peaches and pomegranates near Reedley, CA. He is Executive Director of the East San Joaquin Water Quality Coalition, a group that encourages the use of agricultural practices that reduce surface water contamination by pesticides. He also works with the Coalition for Urban, Rural, and Environmental Stewardship. He received his B.A. degree in Communications in 1981 from California State University at Fresno, CA.

<https://www.youtube.com/watch?v=wxNFra7H2NY>

5. Johnson, M. W., A. J. Molinar, W. J. Bentley, L. M. LeBeck, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Patrick Weddle**. 13 min 06 sec.

*Patrick Weddle earned his BS and MS degrees in Entomology at the University of California (UC) at Berkeley in the 1970's. During his studies, he interacted with the pioneers of integrated pest management including Drs. Ray Smith, Robert van den Bosch, and Vernon Stern. Following graduation, he worked 2 years as a UC Cooperative Extension Farm Advisor in Eldorado County, CA, where he provided information to pear and apple growers. Afterwards, Mr. Weddle became an independent IPM consultant and was president of Weddle, Hansen and Associates, Inc., for almost 30 years. The last 10 years of his career, he was a technical representative for the Pacific Biocontrol Corporation, which provides pheromone-based products and techniques for insect management via mating disruption.*

<https://www.youtube.com/watch?v=AjPp-fClrv0>

6. Johnson, M. W., A. J. Molinar, C. Molinar, W. J. Bentley, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Scott Johnson**. 8 min 20 sec. *Dr. Scott Johnson received his PhD in Pomology from Cornell University, Ithaca, NY, in 1982. He is a University of California (UC) Cooperative Extension Pomologist located at the UC Kearney Agricultural Research and Extension Center, Parlier, CA, and he is affiliated with the UC Davis Department of Plant Sciences. He focuses on apples, kiwifruit, fresh shipping peaches, nectarines, and plums. His responsibilities include the coordination of research and extension activities for these commodities by acting as a liaison between Farm Advisors and the Plant Sciences Department and between the fresh fruit industry and the University of California.*

<https://www.youtube.com/watch?v=y4sjnaC4rDk>

7. Johnson, M. W., A. J. Molinar, C. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Larry Burrow**. 7 min 41 sec.

*Larry Burrow has worked in California agriculture all of his life. He earned BS and MS degrees in Agriculture at California State University at Fresno. He has held various positions in the commercial agriculture industry. Since 2000, he has worked as an Agricultural Field Technician at the University of California Cooperative Extension (UCCE) Office in Merced County. In his job, he assists UCCE Farm Advisors with planting, monitoring, spraying, and evaluating their research trials. Much of his work is related to the development of integrated pest management (IPM) approaches in various crop systems. His viewpoint provides perspective from that of a field worker.*

<https://www.youtube.com/watch?v=740hh-f17Ws>

8. Johnson, M. W., A. J. Molinar, W. J. Bentley, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Pete Goodell**. 7 min 01 sec.

*Dr. Pete Goodell received his PhD in Entomology and Nematology from the University of California (UC), Riverside, in 1986. He is a Cooperative Extension Advisor, IPM, located at the UC Kearney Agricultural Research and Extension Center, Parlier, CA, and attached to the UC Statewide IPM Program. His primary mission is to develop and deliver IPM tactics and strategies to the agricultural community in the San Joaquin Valley. He deals with insects and nematodes on field crops including cotton, alfalfa seed, dry beans, and forage. He supports the program of County Farm Advisors by providing expertise and educational support for local farmers and pest control advisors.*

<https://www.youtube.com/watch?v=BljIAipO2Eg>

9. Johnson, M. W., A. J. Molinar, C. Molinar, W. J. Bentley, and M. Robertson. 2013. Viewpoint- The Value of IPM in Orchard Crops: **Dr. Spencer Walsh**. 7 min 36 sec.

*Dr. Spencer Walse received his PhD in Analytical Chemistry in 2003 from the University of South Carolina, Columbia, SC. He is a Research Chemist employed by the USDA Agricultural Research Service and is located at the USDA San Joaquin Valley Agricultural Science Center, Parlier, CA. His research efforts focus on solving chemically-based problems in agriculture. Research activities involve the development and integration of predictive chemical kinetics, modeling strategies, and field /in situ results as they relate to quantitatively understanding the interaction of molecules with their surroundings. He investigates molecules that are produced naturally, as well as, those that are produced by humans.*

<https://www.youtube.com/watch?v=HrD2G3nOxTo>

10. Johnson, M. W., A. J. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Scott Long**. 6 min 38 sec.

*Scott Long is a fourth generation California grower and continues a 100 year tradition of farming the land. He jumped into the family farming business when he was 5 years old when he began to follow his father through the orchards. He attended Modesto Junior College initially and completed a Bachelor's degree in Agribusiness at California Polytechnic State University at San Luis Obispo. In 1985, he became foreman of the Superior Fruit Ranch, his family's farm. He manages over 200 acres of cling peaches, 150*

acres of almonds, and 50 acres of wine grapes. He is a member of the California Cling Peach Board and is active in overcoming the challenges that face California Agriculture.  
<https://www.youtube.com/watch?v=HPLxbikBVw8>

11. Johnson, M. W., A. J. Molinar, C. Molinar, W. J. Bentley, and M. Robertson. 2013. Viewpoint- The Value of IPM in Orchard Crops: **Dr. Tom Sparks**. 5 min 35 sec. *Dr. Tom Sparks received his PhD in Entomology from the University of California (UC), Riverside, in 1978. He is an insect toxicologist and contributes toward developing low risk pesticides. He has worked both in academia and industry. He is currently a Dow AgroSciences Research Fellow working in Indianapolis, IN. He was instrumental in the development of the spinosyn class of insecticides, which provides excellent control of a variety of insect pests while maintaining a very favorable environmental profile. These compounds are used commonly in vegetables, and fruit and nut orchards. He currently holds a dozen patents/patent applications and has published extensively in scientific journals and books with 150 refereed journal publications, book chapters, and other articles.*

<https://www.youtube.com/watch?v=ABh1k9m7jM8>

12. Johnson, M. W., A. J. Molinar, C. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Ted Batkin**. 7 min 51 sec. *Ted Batkin is a fourth generation California farmer. He earned his BS degree in the College of Sciences & Math at California State University at Fresno, and his MS degree in Physics at the University of South Carolina, Columbia, SC. Prior to his current position, he spent 10 years as the Manager of the research programs for California-grown potatoes, tomatoes, celery, and melons. For the last 20 years, he has served as President of the California Citrus Research Board, which sets the direction for and funds citrus research in the state. He has also served as the President of the Exotic Fruit Fly Coalition, Inc., which promotes research and management strategies for invasive Tephritid fruit flies that establish in the USA.*

<https://www.youtube.com/watch?v=8J5LoO68jdl>

13. Johnson, M. W., A. J. Molinar, S. L. Weir, W. J. Bentley, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Tom Larsen**. 6 min 14 sec. *Dr. Tom Larsen has over 35 years of experience in agricultural crop protection and integrated pest management (IPM). He started at Suterra in 1993 and has played a seminal role in the development of the company's pheromone blends, product design, field trials, and regulatory work across six continents. Tom brings a wealth of knowledge to bear for Suterra's customers around the world for a variety of pests and crops. He received his PhD in 1985 from North Carolina State University, Raleigh, in the field of Crop Science with a minor in Entomology. He worked for Monsanto for 12 years in field product development and later as Technical Manager of glyphosate products. He then spent 4 years as the Product Development Director at Mycogen Corporation, an early-stage research company focused on biological insecticides. He currently serves as Director of Product Development for Suterra.*

<https://www.youtube.com/watch?v=951svajfc-o>

14. Johnson, M. W., A. J. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Adin Hester**. 8 min 41 sec.

*Adin Hester helped to coordinate the official beginning of the Olive Growers Council of California (OGC) in 1978-79. He joined the OGC in 1980 as President and CEO. The Council negotiates prices and contract terms with olive processors and buyers on behalf of its members. Mr. Hester worked for Hunt-Wesson Foods from 1963-1969 as a Regional Field Manager. He was Executive Vice President of CalAgra Industries, Stockton, from 1969-1977; and President of California Citrus Mutual from 1977-1980. Mr. Hester is a graduate of Oregon State University, Corvallis, OR. He is a graduate of Class III, California Ag Leadership Program (1975).*

<https://www.youtube.com/watch?v=7zWL4rbbJf8>

15. Johnson, M. W., A. J. Molinar, L. M. Lebeck, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Cliff Ohmart**. 11 min 11 sec.

*Dr. Cliff Ohmart earned his BS degree in Forestry from the State University of New York, College of Environmental Sciences & Forestry, and his PhD in Forest Entomology from the University of California at Berkeley in 1976. Following graduation, he went to Australia where he worked as a Research Scientist for the Commonwealth Scientific & Industrial Research Organization (CSIRO) studying pests of Eucalyptus and Monterey Pine. In the mid-1990's, Dr. Ohmart worked as a Pest Control Advisor (PCA) advising on IPM measures for pests in various California crops including almonds, walnuts, prunes, pistachios, apples, and citrus. Afterwards, he worked for 14 years as the Sustainable Winegrowing Director for the Lodi Winegrape Commission assisting growers in the development and implementation of sustainable winegrape production practices. During the last 3 years, Dr. Ohmart has been the Vice President of Professional Services for all SureHarvest grower programs. SureHarvest provides solutions for growers, grower-groups, and agrifood companies interested in developing sustainable programs.*

<https://www.youtube.com/watch?v=LGYZ-oyQleY>

16. Johnson, M. W., A. J. Molinar, L. M. Lebeck, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Lynn Wunderlich**. 12 min 23 sec.

*Lynn Wunderlich received a BS degree in 1985 in Bacteriology & Plant Pathology from the University of Wisconsin at Madison, WI, and a MS degree in 1997 in Plant Protection & Pest Management from the University of California (UC) at Davis. She is a UC Cooperative Extension Farm Advisor working in the Central Sierra foothill region, which includes Calaveras, Amador, El Dorado, and Tuolumne Counties. She works mostly with small*

growers of apples, pears, plums, peaches, cherries, olives, wine grapes, and Christmas trees. She focuses on delivering IPM information to her grower clientele.

<https://www.youtube.com/watch?v=pcuCe7fme9U>

17. Johnson, M. W., A. J. Molinar, L. M. Lebeck, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Frank Zalom**. 9 min 06 sec.

*Dr. Frank Zalom earned BS and MS degrees focusing on Ecology at Arizona State University, Phoenix, and a PhD degree in Entomology at the University of California (UC) at Davis. He is a Professor of Entomology at UC Davis and has been associated with that university for 34 years. Dr. Zalom served 16 years as the Director of the UC Statewide IPM Program. He has conducted research and extension education programs in a number of orchard crops including almonds, stone fruit, and olives. He is an internationally recognized expert on orchard crop IPM, and has received numerous awards and recognitions for his contributions and achievements. In 2014, he will serve as the President of the Entomological Society of America.*

<https://www.youtube.com/watch?v=th2s7Pli84g>

18. Johnson, M. W., A. J. Molinar, L. M. Lebeck, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Charles Pickett**. 9 min 01 sec.

*Dr. Charles Pickett earned a BS degree in Biology (1976) focusing on plant ecology at the University of California (UC) at Irvine and a MS degree in Botany (1978) focusing on plant-insect interactions at Arizona State University at Tempe. He attended Texas A&M University at College Station where he received a PhD degree in Entomology (1985) concentrating on biological control. He is currently a Staff Environmental Research Scientist (Entomologist) at the California Department of Food & Agriculture (CDFA), where he has worked the past 25 years. Dr. Pickett's focus at CDFA is manipulating natural enemies to control crop pests, which includes the importation of exotic arthropod predators and parasitoids to control invasive insect pest species. He is also a non-salaried Research Associate affiliated with UC Riverside. He has co-authored a book on conservation biological control and is an editor of the journal Biocontrol Science and Technology.*

[https://www.youtube.com/watch?v=5zYteT\\_-9q4](https://www.youtube.com/watch?v=5zYteT_-9q4)

19. Johnson, M. W., A. J. Molinar, W. J. Bentley, S. L. Weir, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Beth Grafton-Cardwell**. 8 min 29 sec.

*Dr. Beth Grafton-Cardwell received a AB degree in Biology from the University of California at Berkeley (UCB) in 1977. She then attended Purdue University, West LaFayette, IN, where she received an MS in Entomology. She returned to Berkeley and received a PhD in Entomology in 1985, studying under Dr. Marjorie Hoy. She is a UC Cooperative Extension Specialist and Entomologist in the Department of Entomology at UC Riverside and has been stationed at the UC Kearney Agricultural Research and Extension Center, Parlier, CA, since 1990. She focuses on developing IPM strategies and programs for citrus produced in*

California. She is widely recognized for her excellence in research and extension. She is currently the Center Director for the Lindcove Research and Extension Center.

<https://www.youtube.com/watch?v=djiFPNeVZm0>

20. Johnson, M. W., A. J. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Elizabeth Fichtner**. 7 min 27 sec. *Dr. Elizabeth Fichtner has a BS degree in Plant Sciences from Cornell University, Ithaca, NY, and M.S. and PhD degrees in Plant Pathology & Soil Science from North Carolina State University in Raleigh, NC. Following her PhD, she did postdoctoral research on emerging forest diseases at the University of California (UC) at Davis. She became a UC Cooperative Extension Farm Advisor in 2009 working in Tulare County, CA. She mainly works with growers of almonds, pistachios, walnuts, prunes, and olives.*

<https://www.youtube.com/watch?v=Hd186wG1Tnc>

21. Johnson, M. W., A. J. Molinar, C. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Bill Thompson**. 9 min 10 sec.

*Bill Thompson is an independent pest control advisor (PCA) and owner of Four Seasons Ag Consulting in Livingston, CA. Prior to starting his consulting business, Mr. Thompson worked for Chevron Chemical Ortho where he gained knowledge on agricultural pesticides. Since 1979, he has provided pest management consulting and currently advises on approximately 6,000 acres of tree fruits and nuts and 1,000 acres of grapes. He also organically farms with his wife at Riverdance Farms. He received his college education at California State University at Chico where he received a B.S. degree in 1969 with a major in Agricultural Business and a minor in Pomology. One of the most rewarding accomplishments of his career has been the implementation of IPM programs, such as mating disruption, that reduce pesticide inputs without reducing production.*

<https://www.youtube.com/watch?v=SLRT8vxHJ7I>

22. Johnson, M. W., A. J. Molinar, L. M. Lebeck, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Pam Marone**. 9 min 19 sec.

*Dr. Pam Marrone has a BS degree in Entomology from Cornell University, Ithaca, NY, and a PhD in Entomology from North Carolina State University in Raleigh, NC. She is an international expert in agricultural biotechnology, biopesticide science, and business. She headed the Insect Biology Group at Monsanto Agricultural Co. after receiving her PhD. In 1990, she became President of Entotech, a Davis, CA, based biopesticide subsidiary of the Danish company Novo Nordisk. She founded AgraQuest Inc., in 1995 in Davis, where she was the Chairman and CEO. She went on to establish Marrone Bio Innovations, Inc., in Davis, which focuses on finding solutions to current market needs, especially weed control for organic growers. Products produced by her companies have received several recognition awards such as the Presidential Green Chemistry Award and DPR's IPM Innovator's Award.*

<https://www.youtube.com/watch?v=E8hOmryBfkw>

23. Johnson, M. W., A. J. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Jim Stewart**. 7 min 32 sec.

*Jim Stewart is an independent Pest Control Advisor (PCA). He has consulted for over 40 years on citrus, stone fruits, and vine crops produced in California's Central Valley. After attending Ventura College and the University of California at Davis, Mr. Stewart received his B.S. degree in Entomology from the University of California at Berkeley in 1962, where he interacted with IPM pioneers Drs. Ray Smith, Kenneth Hagen, Robert van den Bosch, and Vernon Stern. He was one of the early uses of IPM and contributed significantly to its adoption among California growers. Mr. Stewart is a highly respected PCA, who continues to serve the agricultural community of the San Joaquin Valley.*

<https://www.youtube.com/watch?v=-R-zV2B8b7w>

24. Johnson, M. W., A. J. Molinar, C. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Garret Nydam**. 9 min 19 sec.

*Garret Nydam grew up on an almond ranch. Following high school, he initially attended Modesto Junior College, earning an AS degree in Agricultural Sciences. He then completed a BS degree in Crop Protection in 1982 at California State University at Fresno, CA. He has been a Pest Control Advisor for 30 years and currently works for Mid Valley Ag Services, Hughson, CA. Mr. Nydam advises on pest management mainly in the Modesto, CA, area. He works in several crops including almonds, nectarines, peaches, walnuts, and grapes.*

<https://www.youtube.com/watch?v=sqqgX5wM-cs>

25. Johnson, M. W., A. J. Molinar, C. Molinar, W. J. Bentley, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Kelley Morrow**. 6 min 39 sec.

*Kelley Morrow received her BS degree in Crop Science in 1985 from California Polytechnic State University, San Luis Obispo. After graduation, she worked in a variety of agricultural consulting and research jobs before accepting a supervisory position at Belridge Farms, Bakersfield, CA, as an in-house consultant. There, she honed her trapping and predictive modeling skills. She moved to the Fresno area for a 15-year stint with Crop Care Associates, Inc., working with orchard & row crops. In 2006, she initiated her own consulting business focusing on orchard & vineyard crop management. In 2007 she assumed a phenology project started by UC Cooperative Extension that included a weekly newsletter with trapping and phenology information for growers and consultants in the San Joaquin Valley.*

<https://www.youtube.com/watch?v=SEfdKjqKEQs>

26. Johnson, M. W., A. J. Molinar, W. J. Bentley, S. L. Weir, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Devin Carroll**. 10 min 51 sec.

*Dr. Devin Carroll earned his PhD degree in Entomology from the University of California at Riverside, CA. He is a pest management consultant with Bio Ag Services of Fresno, CA. He has advised orchard and vinyard growers on IPM practices in the southern San Joaquin Valley of California for 24 years. He loves his job and derives great satisfaction from educating his grower clientele on the benefits of switching from pesticide-dependent suppression programs to integrated pest management approaches. Dr. Carroll has a wide number of interests and is highly active in the leadership of the Association of Applied IPM. He has authored several articles on biological control and pest management including one on IPM guidelines for pomegranate production.*

<https://www.youtube.com/watch?v=otvcc0vxzyE>

27. Johnson, M. W., A. J. Molinar, L. M. Lebeck, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Betsy Boyd**. 10 min 07 sec.

*Dr. Betsy Boyd as a child was heavily influenced by her Grandfather's love of nature and science. To pursue knowledge in the biological sciences, she earned BS and MS degrees in Entomology at Washington State University in Pullman, WA, focusing on integrated pest management (IPM) and biological control. Following, she completed a PhD degree in Entomology at the University of California (UC) at Riverside, concentrating on biological control and insect behavior. After doing postdoctoral research sponsored by UC Berkeley, she joined the faculty of the Department of Plant Sciences at California State University at Chico, where she is an Assistant Professor. She teaches courses that focus on economic entomology, weed science, IPM, and laws and regulations pertaining to agriculture. She is also a pest control advisor (PCA) and walnut grower.*

<https://www.youtube.com/watch?v=U7xaCi1RPQE>

28. Johnson, M. W., A. J. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Bob Beede**. 14 min 56 sec.

*Bob Beede has lived and worked in the San Joaquin Valley of California his whole career. He earned BS and MS degrees focusing on Plant Science, Agrarian Studies, and Postharvest Physiology at the University of California (UC) at Davis. Mr. Beede is a UC Cooperative Extension Farm Advisor working out of Kings County, and has held this position for 35 years. He advises on a broad range of topics including pest management, entomology, plant pathology, cultural practices, plant physiology, herbicides, irrigation practices, soils, and water. His goals are to extend knowledge to farmers and agriculturalists through educational programs and farm calls, and to perform research related to his areas of expertise.*

<https://www.youtube.com/watch?v=-d1st-z7kpk>

29. Johnson, M. W., A. J. Molinar, C. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Bill Weir**. 5 min 23 sec.

*Dr. Bill Weir attended Texas A&M University where he received a BS degree in Chemistry and then headed to the University of California (UC) at Davis where he earned a MS degree*

*in Vegetable Crops and a PhD in Soil Chemistry. In 1966, he was hired as a Staff Research Associate in the UC Davis Vegetable Crops Dept and then in 1974 he was appointed to the Cooperative Extension position of Field Crops Farm Advisor in Merced County, CA. He made many useful contributions to the cotton industry in the way of improved production methods. Additionally, he did research on crop varieties, IPM, and plant nutrition in a wide array of field crops. Dr. Weir has authored 195 peer-reviewed scientific publications and received significant regional, state, and national recognition for his contributions. He retired in 2002 after serving 36 years as a Farm Advisor.*

<https://www.youtube.com/watch?v=N0PEhJAKljk>

30. Johnson, M. W., A. J. Molinar, C. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Maxwell Norton**. 4 min 57 sec.

*Maxwell Norton was raised on a diversified farm near Salida, CA. He earned BS and MS degrees in Plant Science from California State University at Fresno. He has farmed almonds and walnuts in Stanislaus and San Joaquin Counties. He has been a University of California (UC) Cooperative Extension Farm Advisor for 32 years and works out of the Merced County Extension Office. His expertise is in tree fruit, grapes, and farmland preservation. He has been a statewide UC Agriculture & Natural Resources Program Leader for agricultural productivity. He is active in business and agricultural organizations in Merced County.*

<https://www.youtube.com/watch?v=8ZQq0VY5mCc>

31. Johnson, M. W., A. J. Molinar, W. J. Bentley, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Richard Molinar**. 7 min 30 sec.

*Richard Molinar received his M.S. degree in Behavioral Science with a minor in IPM from California State University, Bakersfield, in 1990. He has been a University of California Cooperative Extension Farm Advisor since 1986. He currently works out of the Fresno County Extension Office. He works with crops produced on small farms and focuses on vegetable crops, organic farming, insect/weed management, specialty crops, sugar peas, strawberries, eggplant, squash, Asian vegetables such as basil, lemongrass, green beans, long beans, gailon, and bittermelons. He is fluent in Spanish and works with many ethnic groups including Hmong and Lao farmers.*

<https://www.youtube.com/watch?v=k82N0VUYdC0>

32. Johnson, M. W., A. J. Molinar, C. Molinar, W. J. Bentley, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Rodrigo Krugner**. 6 min 37 sec.

*Dr. Rodrigo Krugner received his PhD in Entomology from the University of California (UC), Riverside, in 2009. He is a Research Entomologist employed by the USDA Agricultural Research Service and is located at the USDA San Joaquin Valley Agricultural Science Center, Parlier, CA. His research focuses on the glassy-winged sharpshooter (GWSS) and includes the identification and phenology of weed hosts of the plant pathogen *Xylella fastidiosa* that can serve as potential sources of inocula for infection of almond and grape plants, the identification and evaluation of stimuli that control GWSS reproductive biology*

and behavior; and the evaluation of potential pathogenicity of *Xylella fastidiosa* in olive plants.

<https://www.youtube.com/watch?v=ceAmFdmA-k>

33. Johnson, M. W., A. J. Molinar, C. Molinar, W. J. Bentley, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Dr. Vicki Yokoyama**. 6 min 51 sec. *Dr. Victoria Yokoyama received her MS and PhD degrees from the University of California, Berkeley, and began her career in research at the Institute for Cancer Research, Columbia University, New York. She served as an Associate Professor in the Department of Biology at California State University at Long Beach before joining the USDA Agricultural Research Service in 1984 as a Research Entomologist, San Joaquin Valley Agricultural Sciences Center, Parlier, CA. She has developed quarantine treatments and strategies to control pests of regulatory concern in commodities exported from the western USA with current emphasis on Hessian fly and olive fruit fly in California canned olives.*

<https://www.youtube.com/watch?v=WSLAHqw-ps>

34. Johnson, M. W., A. J. Molinar, C. Molinar, S. L. Weir, W. J. Bentley, K. Steinmann, and M. Robertson. 2013. Viewpoint - The Value of IPM in Orchard Crops: **Christeen Abbott**. 7 min 51 sec.

*Christeen Abbott grew up in Vacaville, CA, surrounded by apricot, peach, and prune trees. She earned a BS degree in Plant Science from the University of California (UC) at Davis and a MS degree in Plant Science from the California State University at Fresno, CA. She loves agriculture and being outdoors. She worked her entire 30-year career in agriculture, which included agricultural research and product development. She is a Technical Support Manager for Suterra, LLC, and works with pheromone-based products. Earlier work experiences included positions with the agrochemical company Syngenta and its legacy companies Zeneca and Ciba.*

[https://www.youtube.com/watch?v=nuxpfk\\_Fmvg](https://www.youtube.com/watch?v=nuxpfk_Fmvg)

35. Johnson, M. W., A. J. Molinar, W. J. Bentley, and M. Robertson. 2013. Viewpoint - The Future of IPM in Orchard Crops: **Dr. Vince Jones**. 14 min 30 sec.

*Dr. Vince Jones earned a BS degree in Biology from San Diego State University. He attended the University of California (UC) at Riverside for his PhD degree and focused on spider mites attacking citrus for his dissertation research. He did postdoctoral research at UCR on ornamental pests. He spent 3 years on the faculty of Utah State University at Logan where he conducted research on arthropod pests of deciduous fruit tree crops. Afterwards, Dr. Jones accepted a professorship in the Entomology Department at the University of Hawaii at Manoa in Honolulu. He conducted research and taught for 12 years in Hawaii, focusing on IPM and biological control in tropical fruits, coffee, and macadamia nuts. In 2000, he joined the Entomology faculty stationed at the Washington State University Tree Fruit Research & Extension Center at Wenatchee, WA. He is currently a Professor of Entomology and focuses on non-chemical control of insects and mites attacking apples.*

<https://www.youtube.com/watch?v=ILxGlf3HioA>

36. Johnson, M. W., W. J. Bentley, A. J. Molinar, S. L. Weir, K. Steinmann, and M. Robertson. 2013. On Target – **Reducing Pesticide Drift and Runoff with a Smart Sprayer**. 11 min 26 sec.

<https://www.youtube.com/watch?v=5WLjy36wNo4>