UNIVERSITY OF CALIFORNIA
COOPERATIVE EXTENSION ❖ SUTTER & YUBA COUNTIES
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ORCHARD NOTES

OCTOBER 2001

WALNUT CODLING MOTH FIELD MEETING

When: November 8, 2001, 9:30 a.m.

Where: Deseret Farms, Chico Ranch - very end of Wilson Landing Road, Chico
(turn west on Wilson Landing Road from Highway 99 just north of Chico)

AGENDA:

- Overview of the Walnut Pest Management Alliance Project,
  Bob Elliott, Associate Environmental Research Scientist, DPR
- Why Consider Alternative Pest Control Measures?
  Bob Voorhees, Supervising Agricultural Biologist
- Results from 2001 Codling Moth Trial,
  Carolyn Pickel, UC IPM Advisor
- Codling Moth Monitoring Techniques
  Bill Olson, UC Farm Advisor
- A Lure to Attract Female Codling Moths?
  Doug Light USDA Research Entomologist
- Mating Disruption Methods & Applications
  Pheromone Ties
  Carolyn Pickel, Bill Olson
  Aerial Application of Pheromone
  Russ Stocker, Arena Pest Management
  Sprayable Pheromone & Puffers
  Justin Hill, Consep Technical Sales Representative

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UNIVERSITY OF CALIFORNIA
COOPERATIVE EXTENSION
WALNUT PEST MANAGEMENT
ALLIANCE

2.5 HOURS OF CONTINUING
EDUCATION CREDIT REQUESTED

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UPCOMING MEETINGS

Look for announcements in November issue of Orchard Notes

PEACH PRUNING MEETING
Thursday, November 29, 2001

PEACH PEST MANAGEMENT ALLIANCE MEETING
To be scheduled

DORMANT SPUR SAMPLING WORKSHOP FOR PEACH GROWERS
Wednesday, December 5, 2001

MINIMIZING FROST DAMAGE TO WALNUTS

Last spring there were a few young walnut orchards around our area that had winter kill damage. The initial damage most likely occurred the previous November when temperatures dipped down into the mid-20's before there were any nights at 32° F. Young vigorous walnut trees whose terminals have not ceased growing or adequately hardened off at the time of the freeze are most susceptible to this type of injury. For this year, the warm days we had in September and early October did not help to slow growth. The shorter days and lower night temperatures now will help trees to harden off. Cutting off irrigation water in the early fall is a practice a grower has control of to help trees harden off to better withstand a sudden autumn frost.

Trees are also more prone to frost injury if the soil is dry. Once trees are hardened off, they should be irrigated if we do not start getting rains by early November. Walnut trees that are dormant and have some soil moisture will also better withstand the really cold temperatures that can occur in December (remember the Yukon Express in 1990). When soils are dry, more cold damage can occur through dessication of shoots as water is drawn away from cells in the freezing process.

If frost injury occurs, the first symptom seen is a darkening of the cambial tissue. Subsequently, more damage can occur to the initial injury from sunburn through the winter months. That is why much of the dark tissue damage seen from winter kill often occurs on the south or west sides of the limbs. Damage from sunburn after a frost was reported as far back as 1919, where keeping trees covered with whitewash during the winter months was recommended to reduce injury from sunburn by maintaining a lower temperature in the twigs. A more recent study in the 21st century conducted by Yolo/Solano Farm Advisor Wilbur Reil, showed the benefits of using white latex paint following frost damage. One week following the November 2000 freeze, he compared painting the trunk on vigorous growing young Tulare trees to about seven feet versus trees left unpainted. From his evaluation in June 2001, he found that 46% of the trees that were not painted showed damage to the tree whereas only 18% of the trees that were painted had damage. He observed that the bark got darker and showed more injury on unpainted trees as the winter progressed. The paint may reduce the drying and desiccation (moisture loss) of damaged cells from the sun during the winter and allow cells to repair and

continue to function.

He speculated that the benefit from the paint would decrease the longer the application was delayed. Painting the trees with white latex paint will be something to consider quickly if we should experience a sudden autumn frost this November.

PRUNING WALNUTS

Pruning **young trees** should be postponed until the delayed dormant period (next March) and the threat of freeze injury has passed. After harvest is a good time to start pruning **mature trees** when deadwood is very obvious. Pruners can also better manipulate light penetration within and around the canopy to maintain fruitwood when leaves are still on the tree.

CHANDLER "BLACK HUSK"

Late September and early October, some growers observed the hull turning a blackish color and drying upon the nut in several area Chandler orchards. The hulls were dry and could be easily peeled from the nut. The kernel quality varied from okay to much too dark for a Chandler, and in some nuts, the kernels had very dark brown areas and some shrivel. Our ideas on the cause are still preliminary, but we think it is related to a combination of water stress, high temperatures that occurred in August, September and early October and the earlier maturity of the Chandler kernel this season. This problem is not caused by walnut husk fly nor sunburn. We plan to address this situation during our Walnut Day program next February.

KIWIFRUIT GROWERS NOTE

The EPA recently published their formal cancellation notice for vinclozolin (Ronilan) on kiwifruit for control of Botrytis Fruit Rot:

•Last Date for Sale and Distribution of Existing Stocks by Registrant - December 31, 2002

•Last Date for Sale and Distribution of Existing Stocks by Others- November 30, 2003

•Last Date for Legal Use - January 30, 2004

NEW INFORMATION

VIDEO
(available on a 2 day checkout from our office).

➪ Glassy-winged Sharpshooter identification and Monitoring. Describes the insect's biology, the diseases caused by the bacteria it spreads and pest monitoring. English and Spanish versions.

BROCHURES
➪ Managing the glassy-winged sharpshooter in vineyards. Available from our office.

➪ A new brochure produced by CDFA on Red Imported Fire Ants describes what they are, the damage they can inflict and how to protect yourself from them. The Fire Ant hotline is also listed if you think you've found Red Imported Fire Ants. These are available from the Agricultural Commissioner and also from our office.

ARTICLE
➪Cover Cropping in Walnut Orchards - This article covers the benefits and potential problems of cover crops and how to choose a species. These are available from our office.

➪Tree Replacement Calculator for Walnuts
Available as a printout or on disk (you supply disk) from our office. This updated spreadsheet calculates the value of a single walnut tree lost to any cause then replanted and grown to maturity or to the age at which it is lost, whichever occurs first.

Janine Hasey, UC Farm Advisor

IN MEMORY OF HAROLD I. FORDE

Most of you never had the opportunity to meet Harold Forde, but walnut growers are very familiar with many of the walnut varieties he helped to breed. He grew up in rural Marysville with his rancher parents and attended Marysville High School and Yuba College. He transferred to the University of California and attended both Berkeley and Davis earning a bachelors and a masters in science. The following was excerpted from the program at his funeral.

Harold Isaacs Forde died October 13, 2001 at his Davis home. Harold was employed by the University of California, Davis, Department of Pomology for over 30 years as a Staff Research Assistant in the area of walnut research. He received a distinguished service award from the California Walnut Commission and the Walnut Marketing Board for his meritorious service. He was named for his pioneering of the successful breeding program for walnuts at UC Davis and his many years of outstanding service to the walnut industry. He co-developed the Chandler variety which has become the mainstay of the California walnut industry and accounts for more than half of all nursery sales.