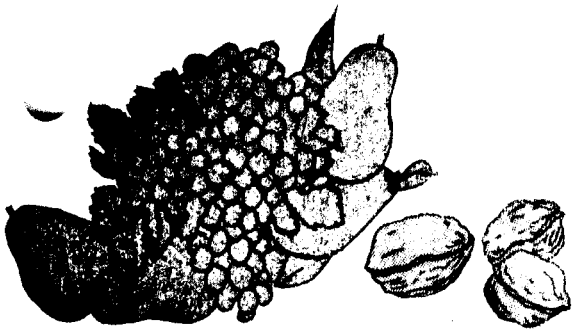
UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION COUNTY OF LAKE



your Lake County HORTICULTURAL NOTES

883 LAKEPORT BOULEVARD
LAKEPORT, CALIFORNIA 95453
TELEPHONE 263-2281

APRIL 1990

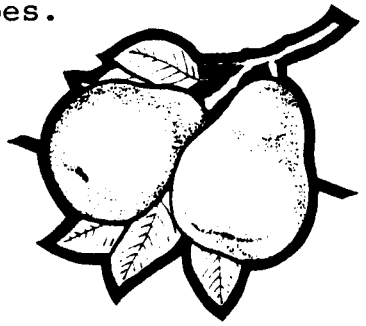
HORT NOTES SUBSCRIPTION FORMS: LAST CHANCE!!

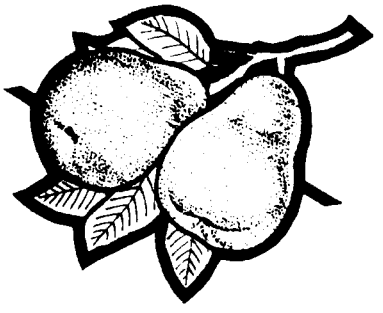
If you have not filled out and returned the subscription form that was in the February issue, you will not receive a May Hort Notes! It is required by the USDA to renew our mailing list each year. We want all growers to receive updated information, but we must obey the rules. NO FORM, NO NEWSLETTER!

Contact our office if you need a form or stop by and fill one out. This is your LAST CHANCE!

ORGANIC OR SUSTAINABLE: TWO POSSIBILITIES

It is impossible for any commercial grower to avoid the current controversies over pesticide and fertilizer use. These controversies (e.g. Alar), as well as new market potential, have resulted in almost frantic desire to convert to "low-input" or "organic" production for many commodities. Past issues of Hort Notes have contained comments on the future for organic pears (see November 1988 and August 1989 issues). Following are some thoughts and observations about the potential for walnuts and grapes.





REDUCED-INPUT WINE GRAPE MANAGEMENT

Over the past months, several workshops have been held focusing on growing wine grapes with less reliance on "synthetic" chemicals. Regardless of one's personal philosophy on the definition or virtues of "sustainability", consumer concerns about pesticide residues, groundwater contamination and worker safety should prompt all growers to carefully consider all their practices as related to environmental and public health effects.

It is important to keep in mind that many alternative strategies are difficult to research because plant-pest-soil-water relationships are extremely complex and in many cases, undefined. "Whole systems" research takes years to accomplish and, in the end, there will likely still be many missing pieces of the puzzle. An open but cautious attitude will serve growers well as they are beseiged with the claims of "organic" miracle products, soil amendments, and testimonial-based recommendations. Remember, all products and advice cost money; "organic", "alternative" and "low-input" do not equal "cheap".

Another potential misassumption is that low-input equals low management. Exactly the opposite is true. Vineyard managers must become "vineyard ecologists", well-grounded in the interrelationships (as far as they are known) among the plant/insect/pathogen/soil/water conponents of the vineyard ecosystem. More importantly, growers must be in the game for the long haul, ready to withstand failure as well as success. Monitoring will take on new meaning; cursory glances to assess pest status will be unacceptable. Vines must be monitored on a systematic basis by observant, knowledgeable professionals (yes, the growers can be a professional).

Fortunately, California grape growers benefit from years of excellent research, especially in pest management. Monitoring, sampling and control programs, although developed under San Joaquin Valley conditions, can be modified for local conditions. In many ways, Lake County vineyards are already "low-input". Leafhoppers, mites and other insect pest are treated sparingly, if at all. Powdery mildew is largely handled with sulfur. Sanitation, leaf removal and canopy management are increasingly utilized against Botrytis bunch rot. Fertilization is limited to a few micronutrients. Many vineyards are French plowed for weed control, or strip sprayed and mowed or disked. Growers with hillside vineyards are experimenting with various cover crops to assess water use and compatibility with vineyard operations. The key to maintaining the "sustainability" of the system is to prevent leafhoppers, mites, mildew, bunch rot and water-using perennial weeds from building up, tempting greater pesticide use and the resultant "treadmill".

Interested growers can contact me for a copy of "Introduction to Reduced-Input Grape Management", proceedings of a seminar held in Stockton last November ($2.10 for xerox costs).

IS THE FUTURE FOR LAKE COUNTY WALNUTS SPELLED O-R-G-A-N-I-C?

Last October I wrote letters to 19 companies listed in the 1989 Organic Wholesalers Directory and Yearbook (published by California Action Network, P.O. Box 464, Davis, CA 95617, (916) 756-8518) as buyers and/or sellers of organic nuts, nut butters and other processed nut products. The letter said the following:

> 'As the local walnut farm advisor, many growers have contacted me about selling their walnuts in the organic market.
>
> There are about 8000 acres of walnuts in Lake County. Sixty to eighty percent of them are non-irrigated and many orchards have been completely unsprayed for many years. This is because we grow mainly the late varieties, Hartley and Franquette, which manage to escape codling moth, navel orangeworm and walnut blight, the three major pests which are sprayed.
>
> Because we are largely non-irrigated, the average county yield is about half of the valley orchards. Thus, growers depend on low input costs and high quality (i.e. characteristically light meats) nuts to make money.
>
> For all the above reasons, interest in the organic market has increased but growers have little to no information on who will buy their nuts, in what form, for how much, etc.
>
> Your company was listed as a buyer of nuts and/or nut products in CAN's 1989 Organic Wholesalers Directory and Yearbook. Could you inform me of the varieties you buy, sales policy and prices paid for in-shell and shelled nuts? Would you be interested in hearing from Lake County growers? This information will help me answer growers' questions about the organic and low-input (IPM) marketplace.
>
> Thank you very much for your time and help with these questions.'

To my surprise, 6 companies responded very favorably to this request for information; in fact, there was interest in contacting growers immediately if product was available. This response was heartening, enlightening and certainly, thought provoking.

To these buyers, QUALITY had replaced QUANTITY and PRICE as the main focus of their marketing strategy. They were generally not volume buyers and thus were willing to pay some premium over standard marketing channels, generally from 10-20%. All the responding buyers described a favorable supply-demand situation for producers - there simply are not enough organically-grown walnuts to supply the current in-shell and shelled demand (i.e. organic baked goods, cereals, confections, etc.).

So, what exactly is required to be considered organic? Growers must farm according to criteria established in California Public Health and Safety Code Sections 26569.11-.17, as Enacted by the California Organic Food Act of 1979 and Amended in 1982. The Code sections are voluntarily enforced by the growers themselves through the California Certified Organic Farmers (CCOF). Although it is perfectly legal to sell organic produce without joining CCOF, many buyers demand certification. Once an organic program has been established, there is a one year "transition" period (bud break to bud break) before an orchard can be certified. New legislation will lengthen this period to three years by 1992. If you want to get started, the sooner the better!

The main components of organic production are pest management (i.e. insects, diseases, weeds, nematodes and vertebrates) and fertility. CCOF publishes an annual grower manual which lists permitted/restricted/non-permitted materials. For many Lake County walnut growers, walnut husk fly control and fertility would be the only problems needing "creative" solutions. This contrasts with the Central Valley, which must deal with codling moth, navel orangeworm and walnut blight on a regular basis. Lake County suffers from low yields but in quality and input costs, we have a distinct advantage.

If these very preliminary observations have inspired anyone out there, feel free to contact me about any aspect of organic walnut production and I will be happy to work with you as best I can. Be warned, there is very little data on many aspects of organic orchard management - we will all be learning as we go (see above). I will also be happy to provide a list of the six buyers who responded to my informal survey. To modify a (supposedly) Chinese saying, for Lake County walnuts, opportunity may indeed by synonymous with crisis.

HANDOUTS FROM JANUARY GRAPE MEETING AVAILABLE

Contact me for the following which were handed out at the Grape Scion Quality Considerations Seminar on January 5:

1) Grapevine importation: the process and the problems.
   Deborah Golino, USDA/ARS.
   Grapegrowing, May/June, 1989.

2) Chemical and sensory effects of microorganisms on grape musts and wine.
   K.E. Nelson and C.S. Ough, U.C. Davis
   ASEV 17(1):38-47, 1966.

3) The Mold complex of Napa Valley grapes
   Louis P. Martini, 1965

4) Research note: powdery mildew sensory effect on wine
C.S. Ough and H.W. Berg, U.C. Davis
ASEV 30(4): 321, 1979

PESTICIDE SAFETY TRAINING RESOURCES

Contact our office if you are interested in any of the following:

1) Handouts from the pesticide safety/regulation update held January 16

- Farm Property Environmental Reports - What the Farmer Should Know
  Dr. Karen Klonsky and Kim Norris, U.C. Davis
- Property Transactions-Preliminary Environmental Checklist
  Dr. Karen Klonsky, U.C. Davis
- Generic Guidelines for Development of a Respiratory Protection Program in Accordance with Department of Food and Agriculture Regulations
  Dennis Gibbons and Harvard Fong, CDFA
- Training Outline-Respiratory Protection
- Respiratory Protection-Pesticide Safety Information Series A-5 (contact Dave Niemann for this)
- Pesticide Storage, Transportation and Disposal-Pesticide Safety Information Series A-2 (contact Dave Niemann for this)
- Farm Worker Workplace Literacy Training
  California Human Development Corporation

2) Handout from California Grape and Tree Fruit League Food Safety Seminar held in December 1989.

3) U.C. Statewide IPM Project resource lists

- People and Places to Contact for Information on Pests, Pest Management and Pesticides
- Publications, Slide Sets and Video Tapes for Growers, Pesticide Applicators and Pest Control Advisers

4) EXTOXNET - Extension Toxicology Network

- Pesticide Information Profiles (PIPs)
  health and environmental effects of specific pesticides
- Toxicology Information Briefs (TIBs)
  short descriptions of a variety of issues that pertain to pesticides, e.g. carcinogenicity, ecological effects and epidemiology

Sincerely,

Rachel

Rachel Elkins
Farm Advisor

COOPERATIVE EXTENSION
U.S. DEPARTMENT OF AGRICULTURE
UNIVERSITY OF CALIFORNIA
Berkeley, California 94720

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