



California Certified Organic Farmer

Volume 1, Number 1 : February 1974

Howdy Friends,

Here's the first issue of the California Certified Organic Farmers Newsletter. We hope it will serve primarily as a means of communication among farmers and as a source of organic farming and marketing information that would be helpful to all. Any and all articles, letters or farming information will be gladly accepted for printing. Please write and tell us of your farming operation so that we can get to know each other.

Crop Happenings

It looks like it's going to be a good year for farmers, especially for organic growers.

As usual there is a shortage of commercial quality, organically grown produce. Here's a few ideas on what is needed.

FRESH PRODUCE:

Early tomatoes will be in demand, and there will be a sharp demand for well-packed tomatoes until at least the end of July or even later. Generally, the organic tomato market doesn't get really saturated until all the local areas are ripe, which is pretty near the end of the summer.

There'll be plenty of early onions this year coming from the Fresno area, so don't plan to make a killing there. However, there is a strong demand for organically grown garlic with almost none available. This is a crop that would be profitable in limited acreage.

I have yet to see a good supply of green beans in California. If you're considering growing these, make sure your area is suited climatically for beans before you go ahead and plant 10 acres!

FRUITS:

The organic market is starved for organically grown tree fruit with the exception of apples and citrus. A large supply of well-packed peaches, nectarines, plums or apricots would be gobbled up.



Strawberries are another crop that can be very profitable on small acreage. They also happen to be in short supply on the organic market. Also, if you are not too remote, the berry patch can be run as a U-pick operation when production begins to slack or the price falls.

HAY AND GRAIN:

There's no organically grown alfalfa seed. There is a demand for organically grown hay and feed grains such as wheat, oats, barley, corn and milo. It may take some active selling on your part but the market is there.

Here's a report from Larry Watson, Certification Chairman.

Thus far in my work on the certification committee, I have realized some evident problems which must be worked out before a smooth running program can progress easily.

(1) Regarding actual testing:

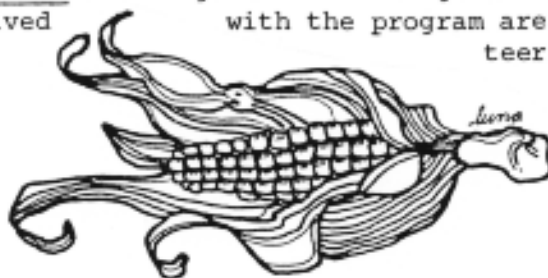
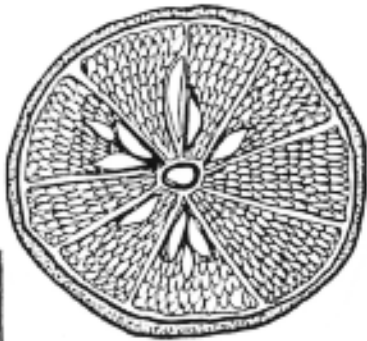
A. Samples need to be gathered at the appropriate time during the growing season. Many times, by the time the sample gatherer gets to the farm, the crops which need to be sampled are already turned under.

B. There should be an actual listing of tests to be made, determined with regard to various crops and soil conditions. It is felt by many that some definite black-and-white (if not greyed) guidelines should be set down for distribution to all members regarding testing requirements, test availabilities, procedure through which to obtain testing and certification, specifications for certified "organic" verifiability, etc. This listing should be made available to the farmers so that they know what tests are in fact available to them, which of these each needs for his particular circumstance, and why. There appear to be many "vague generalities" within the organization which could be of more help to the members if they were clearly defined. I believe that with a few basic guidelines, various procedures could be run through with more efficiency and expediency and less "What do I do's" and "How do I do it's" from members and prospective members.

C. We must establish reliability of lab reports and then make test findings available to the farmers.

(2) Another commonly voiced area of concern involves the farmer who grows non-organic crops one season, then claims "organic" produce the next season. For those genuinely interested in the quality of their food, this is indeed a valid question for concern. Should there not be some sort of criteria and/or time allotment for soil producing "organic" products after having been non-organic a short time previously?

(3) One practical factor existing within the organization is the fact that most of us involved with the program are first farmers, and secondly volunteers. Farmers, because of the commitment of their work, find it difficult to devote to their work, find to get enough time actual field work



let alone the paperwork and reporting that should be done for an informative, helpful program.

A suggestion in regard to this aspect of the work: Perhaps it would be advisable to appoint one person--a wife; a young person interested in organic farming (there have been a lot of young people who come to me wanting to work and "get into" the organic movement and who are intensely interested); an aspiring would-be farmer who hasn't quite made the break into actual farm work; or a retired farmer, etc.--if not on a voluntary basis, even a time-paid basis from the various persons involved in correspondences (treasurer, president, committee heads, etc.) so that replies to one person can be noted for others who also need such information. Many times needed information doesn't get to all persons dealing with a particular issue in concern.

Enough for the "snags". As to the enthusiastic support of the program, there are increasingly more and more individual and group farmers who are moving into the organic field. "Home Grown", a two-couple venture here in Escondido headed by Greg Pommerenck and Jerry Weiss, has done well this past year having had good production and sales. Their main crops were cherry tomatoes and melons. They sold mainly to natural food restaurants. Phyllis Pavone continues to do well in nation-wide distribution of organic oranges. Robert Taft, of Valley Center, is into organic oranges and avocados. And now, Erehon of Los Angeles has a group of people on a farm here in Escondido. The project was started by Art Galindo who is now attending Emerson College in England. We have heard of various individuals starting into organic farming in outlying areas around Escondido, Vista, Fallbrook, etc. So, definitely, the movement has participating enthusiasts.

With support and encouragement, our movement will grow and gather strength! And farming the land and strengthening the good earth is where it's at for the basic survival of our planet, especially now as the general public is finally being made to realize the importance in ecology and conservation of our natural resources.



Insect Notes

Cats Love It; Bugs Hate It!

A student doing independent research has shown that a catnip solution spray can be effective in repelling pests from crop plants.

"Nepeta cataria" is catnip and researchers at Cornell University have found it to contain a compound called nepetalactone, which acts as an insect repellent.

The student, Rick Borchelt of University High School of SEMO State University, Cape



Girardeau, Mo., found that when the catnip/water infusion was applied under field conditions, it acted to repel insects from treated plants. This repellance resulted in less crop damage and higher individual productivity. Insects that were repelled included the squash bug *Anasa*, the Japanese beetle, bean leaf beetle, the tomato hornworm, the spotted cutworm *Amanthes*, the blister beetle *Epicanta* and several species of the imported cabbage worm.



Why doesn't someone out there try some catnip spray and let us know how it works under California conditions.

TIME FOR TRICHOGRAMMA IN YOUR ORCHARD

The fruit trees are starting to bloom now and it will soon be time to begin introducing *Trichogramma* wasps to your orchards. Early releases of *Trichogramma* allow the population of wasps to become established on common minor pests such as leaf roller. This is the first step in maintaining a large population of *Trichogramma* with successive releases. Then, when major pests such as the Peach Twig Borer show up, the wasps can help keep this pesky insect under control.

Source for *Trichogramma*: Rincon Vitova Insectaries, Inc.
Box A
Rialto, California 92370

When ordering *Trichogramma* make sure to specify whether you will be using them on field crops and vegetables or for control of pests in orchards. There are two different species, one adapted to seeking hosts in trees and the other to field crops and gardens.

<i>T. minutum</i>	-	orchard
<i>T. evanescens</i>	-	vegetables

It's still a little early for vegetable growers to begin releasing *Trichogramma*.



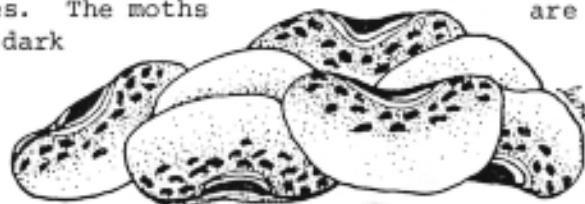
BUG OF THE MONTH CLUB

TOMATO HORNWORM

The best known tomato insect is this large, green, white-striped worm, up to 3 or 4 inches long, with a slender horn projecting near the rear end. They eat leaves ravenously, attacking tomatoes, eggplant, peppers, potatoes, and related weeds. They look fearsome with their horns but they are unable to hurt a person in any way.

The winter stage of the hornworm is often spaded or plowed up in the spring. It is a mahogany-brown, hard-shelled, spindle-shaped pupa about 2 inches long, with a slender tongue case projecting from the front and bent around like a pitcher handle. From these cases appear in May or June large swift flying hawk moths with a wingspan of 3 inches or more. They fly at dusk and hover near patches of Jimson weed or other flowers with deep tubular corollus, from which they sip nectar with their long tongues. The moths are grayish or brown in color, with white and dark mottlings.

The moths themselves



do no injury, but



deposit spherical greenish-yellow eggs, one in a place, on the lower side of the leaves. The larvae hatch out in about a week and begin to eat like crazy for 4 or 5 weeks, during which they shed their skins five times and grow to 3 or 4 inches in length.

When full grown, the larvae dig into the soil 3 or 4 inches and change to pupae, which may go through the winter before emerging as moths in the spring. In mild climate areas two generations may occur per season.

Control Measures.

The best overall approach is to maintain a diverse and varied garden ecosystem to encourage and support the naturally occurring beneficial insects that will help control the hornworm. One of the more common ones is a small braconid wasp. The wasp lays its eggs under the skin of the worm where the larvae emerge, feed on the worm and then migrate out and spin cocoons on the hornworm's back. These small white cocoons can be mistaken for eggs. Do not destroy worms that show signs of parasitism.

There are commercially available egg parasites that can be purchased and released in mass in your fields. *Trichogramma* is one of these. In order for *Trichogramma* to have an effect, releases must be made throughout the season.

The larvae of the green lacewing is a ravenous feeder that will consume any moth egg in its path. The lacewing is released by distributing its eggs in the field. In addition, food sprays can be used to provide the adult lacewing with sufficient amounts of the proper diet to encourage abundant egg production and continued presence of hungry larvae.

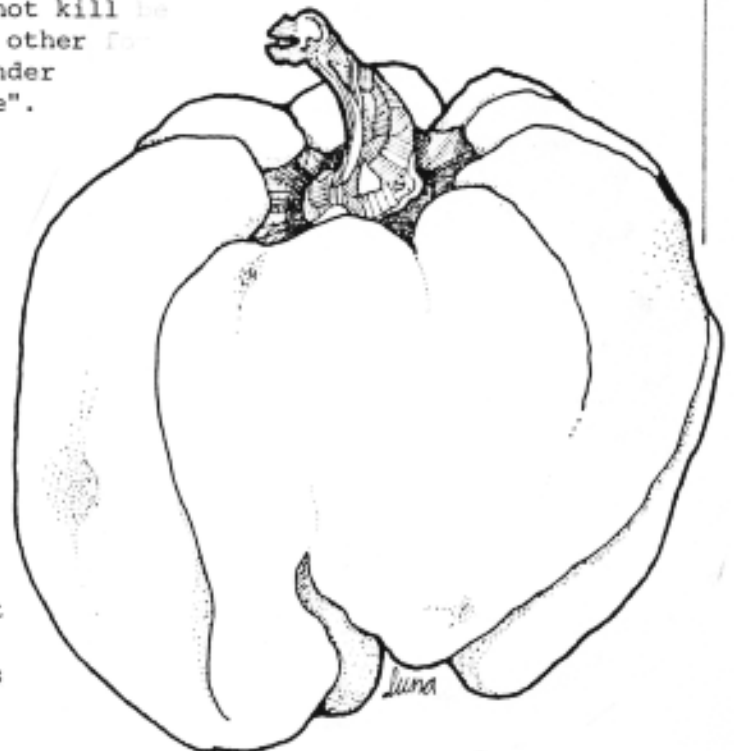
If large numbers of hornworms threaten to devour your tomato patch, you can spray with a preparation of *Bacillus Thuriniensis*. This is a naturally occurring bacteria that only is toxic to insects of the order *Lepidoptera*, the moth family. Use of this spray will not kill beneficial insects and it is non-toxic to other life. It is readily available and sold under brand names such as "Dipel" and "Thuricide".

In small gardens, the worms can be picked off by hand and fed to the chickens.

Fall plowing destroys many of the pupae that are overwintering in the soil.

Old farm books recommend using a 5% solution of tartar emetic in isoamyl salicylate as an attractant, put out in bait pans, to attract and kill the adult. I have no experience with this method but it sounds reasonable, and I'd recommend giving it a try.

Insect traps using fluorescent ultraviolet "black light" lamps can be very useful in fixing the time of appearance of the moths





on your farm. These traps are easy to build and operate and they serve to give you advance warning of the appearance of eggs and larvae in the field.

For more info on light traps see:

Light Traps and Moth Identification, Falcon, Bauer, Okomura, Burton, and Van den Bosch; California Agricultural Experiment Station; Extension Service Leaflet #197, June 1967.

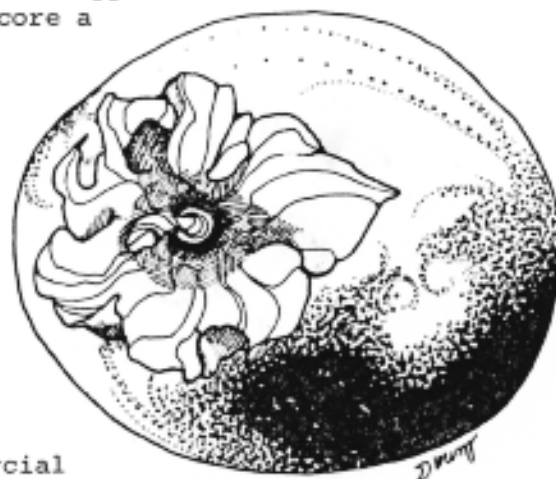
Blacklight Trap - Standards for General Insect Surveys, Harding, Hartsook, and Rohwer; Ent. Soc. of Amer. Bul. 12: 31-32, 1966.

Practical Application of Insect Attraction in Use of Light Traps, Hartsook, Deny, Barret; Ent. Soc. of Amer. Bul. 12: 375-377, 1966.

COMING NEXT ISSUE! CODLING MOTH

Are you an apple or pear grower? You've all probably seen this pinkish-white worm with a brown head about 3/4 inch long when full grown. He'll burrow right into an apple from the blossom end and leave the core a dark mass of castings.

If you know this critter, please write in and tell us of your control program. Be sure to give exact rates of application for different materials, timing, and sources of control materials. Everything will be printed in the next issue along with a complete rundown on the codling moth, its life habits and its demise.



KELP SPRAY

Has anyone used a kelp or seaweed spray on a commercial planting? If so, drop a note and let us know how it worked so we can put it in the next issue.

~~~~~ grafting ~~~~~  ~~~~~

The following notes on grafting is an excerpt from Homesteaders Handbook, by Reny Slay and Richard Israel.

When working with orchard crops, a knowledge of grafting can be a very useful skill. You can use grafting techniques to place a good fruit-producing variety on the rootstock of a stronger cold- or disease-resistant variety and can also graft branches of one variety onto another to ensure cross-pollination. You can even produce a tree with 3 or more varieties of fruit just for the fun of it.

Each branch of to produce different times. be grafted to almonds, nec-

a tree can be grafted fruits that ripen at A peach tree may bear peaches, tarines, and





apricots, along with Japanese and European plums. Apples, cherries and pears will not grow on peach but any one of these can be grafted to support different varieties of that particular species. This experimentation is not very practical on a large scale but can be an interesting addition to the home garden.

When making a graft, the procedure is to place a scion (branch or bud) of one variety into an opening in the rootstock of another. One year old wood (3/8 - 1/2" thick) is best but 2 year old wood may be used (fig should always be 2 years old). Scions are at their best when the buds are dormant or nearly so and are not too soft or pithy in the center. Don't use frost-injured wood and don't collect scions when the temperature is below freezing. It's good practice to pick scions for fall grafting on the day you graft them. If you are grafting in the spring, dip the ends of the scion in paraffin and store in the refrigerator (36 - 40° F) or bury in the ground 10 - 12" where there is adequate drainage.

#### CHART OF COMPATIBLE GRAFTS

G= GOOD    F= Fair    P= Poor    U= Unsatisfactory

| STOCK<br>SCION       | Almond | Apple | Apricot | Cherry | Peach | Pear | Myrobalan<br>Plum | Quince | English<br>Walnut | No. Cal.<br>Black<br>Walnut |
|----------------------|--------|-------|---------|--------|-------|------|-------------------|--------|-------------------|-----------------------------|
| Almond               | G      | U     | P       | U      | G     | U    | P                 | U      | U                 | U                           |
| Apple                | U      | G     | U       | U      | U     | P    | U                 | P      | U                 | U                           |
| Apricot              | P      | U     | G       | U      | G     | U    | G                 | U      | U                 | U                           |
| Cherry               | U      | U     | U       | G      | U     | U    | U                 | U      | U                 | U                           |
| Nectarine            | F      | U     | F       | U      | G     | U    | P                 | U      | U                 | U                           |
| Peach                | F      | U     | F       | U      | G     | U    | P                 | U      | U                 | U                           |
| Pear                 | U      | P     | U       | U      | U     | G    | U                 | G      | U                 | U                           |
| Plum-Jap.<br>& Euro. | G      | U     | G       | U      | G     | U    | G                 | U      | U                 | U                           |
| Quince               | U      | P     | U       | U      | U     | P    | U                 | G      | U                 | U                           |
| English<br>Walnut    | U      | U     | U       | U      | U     | U    | U                 | U      | G                 | G                           |

\* adapted from Table I, Circular 471,  
U. C. Agricultural Extension Service

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