Note: The information provided on products/pesticide use below, is from other states and thus the products may have no current Hawaii registration. Always read the label before making any product/pesticide applications. Due to environmental effects the effectiveness of particular products may also vary across locations.

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1.0. Spinosad (Success) management update from Randy Hamasaki

Spinosad (Success) Resistance Management Program Is Successful

Spinosad (Success) is an environmentally friendly insecticide registered on many crops for control of caterpillars and several other types of insects such as thrips. At about the summer of 2000, some Hawaii growers started to notice a diminished effectiveness of Success insecticide (spinosad) in controlling the diamondback moth (DBM).

Laboratory tests on DBM populations collected around the state confirmed that the problem was insecticide resistance. This was the first report of DBM resistance to spinosad and the manufacturer was concerned about the situation. In order to prolong the usefulness of spinosad as an important tool for controlling DBM and to avert the possibility of losing the use of spinosad in Hawaii, Dr. Ronald Mau and other CTAHR extension personnel, affected growers, and crop consultants, held meetings throughout the state in consultation with experts from the agrichemical industry to develop an action plan.

The plan included a voluntary stop of the use of Success insecticide on DBM host crops (crucifers) to prevent any further selection of resistant DBM. In addition, even crucifer crop growers in areas where the DBM was largely susceptible were also asked to voluntarily refrain from the use of spinosad during the same period. The action plan did not affect the use of Success insecticide on non-DBM host crops such as corn, lettuce, tomato, pepper, etc.

It was agreed through group action that the use of Success insecticide would resume on crucifer crops only after laboratory testing had confirmed that the proportion of the susceptible population had been restored to near normal levels. At such time,
Success insecticide would only be used on crucifer crops as part of a well planned, integrated pest management (IPM) program.

As a result of these concerted efforts, recent tests have showed that resistance levels in certain areas have dropped to a point where growers in these areas will be able to use Success again according to a well-planned rotation schedule. Contact your extension agent for schedules applicable to your area (Randy Hamasaki, University of Hawaii at Manoa, Cooperative Extension Service, Kaneohe Office).

2.0. High spring lettuce prices in the Western U.S.

An unusually cold spring in the Western U.S. may result in unusually high prices for lettuce this year. The lettuce crop in California is currently about 4 weeks behind schedule. Over 50% of the nation's lettuce crop comes from three areas in California- the Imperial Valley, Fresno County, and Salinas. The Imperial Valley crop normally comes out in the fall, Fresno harvests in the winter, and Salinas in late spring and summer. The Arizona lettuce harvest which also comes out in the winter has also been delayed by the unusually cold weather. In Northern California the price of a carton has jumped from $12 to about $50 per carton (Jessica Brice, Los Angeles Times, March 13, 2002).

3.0. Organic Food as safe and nutritious as conventional food

[Editor's note: The abstract of the review below, found no differences in nutrition quality between organic and conventional produce. The review also found no difference in the food safety characteristics (microbial contamination) between organic and conventional produce.]

A Comparison of the Nutritional Value, Sensory Qualities, and Food Safety of Organically and Conventionally Produced Foods

Given the significant increase in consumer interest in organic food products, there is a need to determine to what extent there is a
scientific basis for claims made for organic produce. Studies comparing foods derived from organic and conventional growing systems were assessed for three key areas: nutritional value, sensory quality, and food safety. It is evident from this assessment that there are few well-controlled studies that are capable of making a valid comparison.

With the possible exception of nitrate content, there is no strong evidence that organic and conventional foods differ in concentrations of various nutrients. Considerations of the impact of organic growing systems on nutrient bioavailability and nonnutrient components have received little attention and are important directions for future research. While there are reports indicating that organic and conventional fruits and vegetables may differ on a variety of sensory qualities, the findings are inconsistent. In future studies, the possibility that typical organic distribution or harvesting systems may deliver products differing in freshness or maturity should be evaluated.

There is no evidence that organic foods may be more susceptible to microbiological contamination than conventional foods. While it is likely that organically grown foods are lower in pesticide residues, there has been very little documentation of residue levels. (Diane Bourn Critical Reviews in Food Science and Nutrition Volume 42, Issue 1 1 January 2002 Pages 1-34, thank-you to Professor Joe Cummings for passing along this reference, e-mail, Feb. 29, 2002).

4.0. Food-safety update: Lettuce with e-coli after manure or sludge applications

Lettuce Takes Up E. Coli, Defeating Normal Cleaning

Lettuce that has been fertilized with manure or irrigated with water contaminated with E. coli O157:H7 can take the bacteria up through its root system and internalize it inside its leaves, resisting traditional external sanitizing methods.
Researchers from Rutgers University report these findings in the January 2002 issue of the journal Applied and Environmental Microbiology.
"In recent years, E. coli O157:H7 has been isolated with increasing frequency from fresh produce, including bean sprouts, cantloupes, apples and leaf lettuce. The mechanisms by which the pathogen is introduced into the lettuce plant are not fully understood," say the researchers.

The researchers tested the hypotheses that the source of the contamination may be poorly treated manure (it is estimated that the pathogen is present in over 8 percent of dairy and beef cattle) or irrigation water that has been contaminated with cattle feces.

The bacteria were isolated from plants grown using either medium, but interestingly, the researchers found bacteria in the inner tissues of the plants.

"We have demonstrated that lettuce grown in soil containing contaminated manure or irrigated with contaminated water results in contamination of the edible portion of the lettuce plant," say the researchers.

"Moreover, the results suggest that edible portions of a plant can become contaminated without direct exposure to a pathogen but rather through transport of the pathogen into the plant by the root system," they add.

"The inaccessibility of a large number of organisms, as a consequence of their subsurface location, is perhaps the reason for the lack of effectiveness of surface-sanitizing treatments," the authors conclude.


5.0. Serenade organic fungicide
AgraQuest Inc., the Davis, Calif., developer and manufacturer of natural pest management products, has entered the organic farming industry after a new formulation of the grower-proven biofungicide Serenade was registered by the U.S. Environmental Protection Agency and added to the list of approved crop protection products by the Organic Materials Review Institute (OMRI).

The Eugene, Oregon-based OMRI added Serenade to its list of materials allowed for use in production, processing and handling of organic food and fiber after the new formulation received its federal registration. The California Environmental Protection Agency's Department of Pesticide Registration and the Washington State Department of Agriculture's Organic Food Program also have approved the new formulation.

Serenade is based on AgraQuest's patented strain of Bacillus subtilis, a microorganism that is effective against several crop damaging pathogens, including powdery mildew, walnut blight, Botrytis bunch rot and fire blight.

The original wettable powder and the newly registered organic formulation of Serenade are approved for use on vines, fruits, vegetables and walnuts. Three new crops—carrots, broccoli and onions—have been added to the U.S. EPA label for the organic formulation.

Other than copper and sulfur, Serenade is the only fungicide with a broad spectrum of disease control approved for organic use in the United States.

6.0. Telone and Inline fumigants receive national label

Vegetable growers now have Telone EC, a soil fumigant, and InLine, a fungicide and nematicide for use in drip irrigation under plastic. The two products from Dow AgroSciences have received both the federal and California registrations.

Both Telone EC and InLine contain the same active ingredient found in Telone II. Inline also contains 35 percent chloropicrin to help manage soil-borne diseases. Special emulsifiers allow both products to mix properly with water.

"With proper treatment coverage, drip fumigation is an extremely effective method for controlling soilborne pest," said
Debbie Shatley, Dow AgroSciences customer agronomist. "The goal of soil fumigation is to protect young root systems so that plants get off to a fast, healthy start. Applying Telone EC or InLine through drip systems puts the fumigant in the right place, at the right time, with the right concentrations." It also reduces the potential for worker exposure, as the closed-system applications do not require workers to be in the field during application.

"Drip fumigation may be advantageous where multiple crops are grown using the same drip lines or the same plastic, thus reducing the amount of drip line and plastic disposal," said Shatley. "Growers may also like the convenience of being able fumigate a field on a more flexible schedule rather than having to work around application rig availability.

For the last two years, InLine has been used in many states under an Experimental Use Permit (EUP) label. University and grower trials, mostly in California strawberries, have shown that InLine is an effective methyl bromide alternative, producing yields equal to or better than methyl bromide. (Vegetables WEST Magazine, August 2001, pg. 18.).

7.0. Whitefly management (Florida)

Whitefly populations have exploded across southwest Florida over the past two weeks. In some areas, scouts report counts as high as 50 whiteflies per plants in some fields. Although many locations are reporting high numbers of adult whiteflies it appears that systemic insecticides are working, as scouts report finding many dead adults on the plastic and no crawlers or nymphs. Along with the high whitefly numbers, growers are reporting a dramatic increase in the incidence of TYLCV.

It appears that several factors are contributing to this situation. A strong tomato market late in the season lead many growers to hold plants longer than usual – many going back for a third pick and then continuing on to pinhook the crop thereby allowing whitefly populations to increase. In addition to this, unseasonably warm weather this winter has favored whitefly growth and reproduction while the absence of any really cold weather has
not helped knock back populations as it did last year. Lastly holding the fall crop longer caused some growers to run tight on time to get double crop melons planted and in some locations they did not get a very good kill of the old tomato crop and now have many tomato plants re-sprouting.

Reports from Palm Beach County indicate that whiteflies numbers are also beginning to increase but not at the levels being seen around Immokalee.

**The silverleaf whitefly developed into a major economic pest in Florida, around 1986.** At first it was thought to be a biotype of the sweet potato whitefly, *Bemisia tabaci* (Gennadius). In 1994, the new biotype was described as a new species, *Bemisia argentifolii* Bellows & Perring and named based on its ability to induce silverleaf disorder in squash. In addition to tomato whiteflies are major pests of squash, cucumber, beans, eggplant, watermelon, and cabbage.

Adults whiteflies typically fly short distances moving around on the same plant or over to adjacent plants. Migrating individuals that develop on senescing plants may migrate up to several miles. These migrations can be massive and lead to infestation of nearby crops.

In many instances growers report applying multiple pesticide applications in an attempt to knock down adult whiteflies flying into new plantings. After the residual effects of soil-applied nicotinoids abate, growers may turn to a variety of materials to suppress whitefly populations. These include insecticidal soaps and oils, IGR’s such as Knack and Applaud and insecticides such as endosulfan –Thiodan, Phaser, Monitor, Neem based materials and some of the pyrethroids. With Knack® or Applaud, growers will need to work around the 14 and 7 day PHI’s where treatment is needed at harvest. In recent trials, pymetrozine - (Fulfill- Syngenta) has been demonstrated to be effective in preventing viral transmission by whiteflies.

Some reports indicate that some growers are resorting to foliar applications of nicotinoids (Actara, Provado) on top
of soil-applied nicotinoids (Admire, Platinum). Growers should refrain from this practice and observe good resistance management techniques. If you think whiteflies are tough now – just think back to the days before Admire – I don’t think that anybody would want to the “good old days” of whiteflies.

Organic growers can use biocontrols like Mycotrol-Beauveria bassiana, insecticidal soaps, oils and Neem based materials for whitefly management. (Note: use of Neem products is provisionally allowed but regulated – check OMRI for status)

Growers are also reminded of the importance of sanitation and rapid destruction of crop residues once harvest is complete. If whitefly counts are high in abandoned fields prior to destruction, growers would do themselves and their neighbors a big favor by spraying the residue before crop destruction to prevent the migration of large numbers of whiteflies to new fields (Gene McAvoy, South Florida Pest and Disease Hotline, February 15, 2002).

8.0. Pinworm management (Florida)

Pinworms are beginning to show up in scattered locations across south Florida. Most reports are on tomato but there have been some finds on eggplant in Palm Beach County. Numbers remain low in most areas but populations have reached threshold levels in some hotspots with growers applying pheromone sprays. Around Naples traps have detected as many as 20 moths per night.

As with all pests early detection of pinworms is important. Pheromone traps can help provide an early warning. At planting, place a minimum of one trap per 10 acres at least 25 paces inside of field. When 3 to 5 moths are caught per trap per night, then mating disruption should be initiated. If pinworms are present, increase trap numbers to ensure an accurate estimate of the population. Pinworms can be controlled with mating disruption techniques and pesticides. Mating disruption is most successful where fields are isolated or whole areas are treated.

If using insecticides, treatment must begin when populations reach economic thresholds. The UF/IFAS Florida Tomato Scouting Guide Tomato has recommends season-long action
thresholds of 5 adults/Trap/night to initiate the application of mating disruptants and an action threshold of 0.7 larva per plant for the initiation of control measures.

**Once begun, treatments may be required until harvest.** Treat again when populations return to damaging levels. If nearby infested tomato fields are terminated or abandoned, adults can immigrate into later planted fields in large numbers. If scouting detects a significant movement, consider border treatments.

**Pheromone-based mating disruptants, such as No Mate TPW spirals or Checkmate TPW dispensers provide a very effective means of combating pinworm.** These should be applied according to label instructions with good distribution throughout field.

**Chemical controls include Agri-Mek (Abemectin) and Spintor which both have the advantage of being effective against leafminers as well as the additional benefit of being soft on beneficials.** Lannate (Methomyl) and a variety of synthetic pyrethroids are also effective materials for the control of pinworm. Development of resistance to Lannate has been documented in pinworms in some parts of the country and excessive use of these broad-spectrum insecticides may result in outbreaks of leafminers and mites if they are present.

Organically acceptable biological and cultural control methods include the use of mating disruptants, field sanitation, and pyrethrin. **Parasites can also be important in aiding in pinworm control.** *(Gene McAvoy, South Florida Pest and Disease Hotline, February 15, 2002).*

9.0. Broadmite management (Florida)

**Broadmites continue to hang on across south Florida in both pepper and eggplant.** Populations are relatively low in most places with no reports of fruit damage coming in.

**Chemical control is not difficult but should be timely and typically requires two to three consecutive applications for control.** Kelthane or dicofol, micronized sulfur, (i.e., Thiolux),
Neemix and AgriMek have all given good results locally. Sulfur is effective but may require two to three weeks to achieve control in some cases. It should be noted that none of these materials kills eggs or seems to have enough residual to kill all hatching larvae. Therefore to achieve control it is necessary to make two or more applications about five days apart to allow time for eggs to hatch and target emerging larvae to break the reproductive cycle.

**Pyrellin, and insecticidal soaps and oils are also labeled for broad mites on pepper and eggplant.** Oil has been known to cause phytotoxicity under certain conditions.

Specific acaricides are usually recommended over broad-spectrum acaricide/insecticides to better conserve beneficial insects. **Chemicals should be carefully applied and care should be taken to not interfere with natural enemies that may contribute biological control of other insects in the crop pest complex (Gene McAvoy, South Florida Pest and Disease Hotline, March 1, 2002).**

10.0. Powdery mildew on veggies (Florida)

**Powdery mildew remains active on squash.** Powdery mildew is widespread in older cucurbits especially squash. Incidence and severity is generally low to moderate although some severe infections have been noted in older plantings.

Reports from Palm Beach indicate powdery mildew continues to have a significant presence in pepper, especially in jalapenos and older bell peppers. It’s also being found in eggplant and has been found in tomato leaves on plants approaching maturity, but before first pick. The disease in pepper is caused by the fungi *Leveillula taurica.*

**Powdery mildew primarily affects leaves, but is occasionally seen on other parts of the pepper plant.** Although the disease commonly occurs on older leaves just before or at fruit set, it can develop at any stage of crop development. Symptoms include patchy, white, powdery growth that enlarges and coalesces to cover the entire lower leaf surface. At times the powdery growth is present on the upper leaf surface as well. Leaves with mildew growing on the undersurface may show a patchy yellowish or brownish discoloration on the upper surface. The edges of infected leaves may roll upwards.
exposing the white, powdery fungal growth. Diseased leaves drop from the plants and leave the fruit exposed to the sun, which may result in sunburning.

**Powdery mildew can be severe and can cause heavy yield losses.** The pathogen has a very wide host range and inoculum from one host plant species can cross infect other host plants. Infection of plants can occur over a wide temperature range (64 to 91° F) under both high and low humidity. Under favorable conditions, secondary infections occur every 7 to 10 days and disease can spread rapidly.

**The fungus survives between crop seasons on other crops and on weed species.** The degree of survival depends on environmental conditions. Because of the wide host range of the fungus, it is difficult to control the amount of inoculum that survives from one season to the next. Thus, simple sanitation methods in and around pepper fields may not provide a sufficient reduction in the primary inoculum to provide disease control. Most pepper cultivars do not possess acceptable levels of resistance to powdery mildew.

**Fungicides can provide satisfactory control and prevent economic loss if applied during the early stages of the epidemic.** Effective control requires spraying with high pressure and high volume for optimum penetration of the crop canopy by the fungicide. Good coverage is necessary for satisfactory control.

**Dr Ken Pernezny reports diagnosing powdery mildew on snap bean.** Ken indicates that the pod symptoms are hard to properly identify. You get a purplish to black netting appearance with little, if any, actual sign of the fungus (the talcum powder-like growth) that most people associate with powdery mildew on most crops. (Gene McAvoy, *South Florida Pest and Disease Hotline, March 1, 2002*).

11.0. **Methyl bromide alternatives**

[Editor's note: a list of potential methyl bromide alternatives, based on recent research, from *The Grower Magazine.*]

Researchers say it will take a mixture of chemicals and farming practices to replace methyl bromide. Here are a few alternatives:

**Chemical cocktail approach**-Using three different chemicals, such as 1,3-dichloropropene and chloropicrin, marketed under the
name InLine; Telone C-17 or C-35; and a separate, but complementary, herbicide such as Tillam.

**Chloropicrin**-In University of Florida tests, this chemical was found to be effective against soilborne diseases but not nematodes or weeds.

**InLine**-Labeled for use with drip irrigation under plastic, InLine, manufactured by Dow AgroSciences, contains 61 percent 1,3-dichloropropene and 33 percent chloropicrin to help manage soilborne diseases and weeds.

**Integrated pest management**-Using multiple practices. It could mean taking care of the plant through better water and better nutrition while managing pesticide use wisely.

**Metam sodium** - a soil fumigant marketed under the name Vapam and used to control weeds. According to the label, it also can control or suppress some soilborne diseases, such as Phytophthora, Verticillium, Rhizoctonia and Pythium.

**Methyl iodide**-A nematicide that the Environmental Protection Agency has yet to register. Tomen Agro plans to seek registration, but it is unknown whether the company will obtain EPA approval before 2005. In field trials conducted in Parlier, Calif., by the U.S.
Department of Agriculture's Agricultural Research Service, methyl iodide was found to be as effective as methyl bromide in its ability to control peach replant disorder.

**Solarization**-This practice can work in limited areas, meaning places that have enough sunlight to provide enough heat for killing soilborne pests, says Gary Obenauf, a consultant.

**Telone**-Controls nematodes but not weeds and disease. Chemical's toxicity has led the Environmental Protection Agency to set up regulations, such as protective suits for anyone applying the chemical.

**Telone C-17**-A mix of 78 percent 1,3-dichloropropene and 17 percent chloropicrin for soilborne disease control. University of Florida tests show Telone C-17 was good to excellent in controlling nematodes and diseases.

**Telone C-35**-A mix of 61 percent 1,3-dichloropropene and 17 percent chloropicrin. The best method for applying Telone C-35 in Florida is broadcast, instead of in-bed, with the Yetter rig.

**Tillam**-Used as an herbicide on tomatoes, but it is not registered for use on many other crops.
(Jeff Gelski, Biting the bullet., The Grower Magazine, November 2001, pg. 18-19.)
12.0. Particle film technology for insect management

PARTICLE FILM STRATEGY EXPANDS  Tests conducted in California during 2001 showed that particle film technology, used for management of insect pests in a variety of horticultural crops, also was effective in grape crops for limiting spread of _Homalodisca coagulata_ (glassy-winged sharpshooter, GWSS), a vector of the devastating _Xylella fastidiosa_, (Pierce's disease). Scientists, using Surround [TM] WP crop protectant, developed a barrier strategy that forced GWSS away from vineyards adjacent to citrus groves. The kaolin-based product was sprayed onto plants before pest infestation, leaving a white particle film that was both visually unattractive and physically unappealing to GWSS; the material sticks to wings, legs, and mouth parts and deters oviposition. Surround WP's white coating also helps reduce sunburn as well stress of summer heat by reflecting harmful UV and infra-red light; it easily rubs off fruit and vegetables under running water. Surround WP is said to significantly reduce use of conventional pesticides. It has gained approval for organic culture. The product was collaboratively developed by the Engelhard Corp. and the Agric. Research Service (ARS) of the U.S. Dept. of Agriculture. *--> J.T. Mosko, Engelhard Corp., PO Box 770, Iselin, NJ 08830-1598, USA. E-mail: <John.Mosko@engelhard.com>. Fax: 1-732-321-1598. Phone: 1-732-205-7140. Website: <www.engelhard.com>. (IPMnet NEWS, March 2002, Issue 99).

13.0. Orthene Update

Orthene (Acephate) Status (PEP-TALK March, 2002)

Most acephate uses will remain available as long as a wide-range of risk mitigation measure are put in place. The
insecticide is used on sod, golf course turf, field borders, fence rows, roadsides, ditch banks as well as greenhouse and horticultural-nursery floral and foliage plants. Crop uses include several vegetables. Acephate, a broad spectrum organophosphate (OP), also has public health uses in restaurants, food handling establishments, warehouses, stores and hotels.

Acephate was part of the review of OPs in response to the Food Quality Protection Act (FQPA). Assessing the risks of acephate is particularly tricky because one of its metabolites, methamidophos, is itself a registered OP. The use of acephate in residential situations brought concern regarding the risk of children exposed through food and drinking water. This concern has since been mitigated by a registrant decision to eliminate indoor residential and residential turf uses. By deleting these uses, EPA's concerns over aggregate risk were reduced. (Source: Pesticide & Toxic Chemical News, Vol. 30, No. 15) (Robert J. Precheur, ed., Ohio State University Extension Vegetable Crops VegNet Vol. 9, No. 2. February 28, 2002)

14.0. Leafhopper pest advisory for Hawaii


The "New Pest Advisory" provides information on new pests and diseases that have become established in Hawaii. Individuals can help reduce the spread of these pests and diseases by being aware of their signs and symptoms and not moving them to other islands in the State.

These advisories are intended for the general public and are purposefully not too detailed or technical. (Randy Hamasaki, UHM, e-mail, March 1, 2002).
15.0. More rigorous review of biotech crops recommended

National Research Council Recommends More Rigorous Review of Transgenic Plants by USDA

The U.S. Department of Agriculture should more rigorously review the potential environmental effects of new transgenic plants before approving them for commercial use, according to a new report from the National Academies' National Research Council. The report recommends also that the public be more involved in the review process, that ecological testing and monitoring continue after transgenic plants have entered the marketplace, and that the USDA re-examine which transgenic plants should be tested and allowed to grow commercially through notification. "Environmental Effects of Transgenic Plants: The Scope and Adequacy of Regulation" is available on the Internet at www.nap.edu, or from the National Academy Press, 1-800-624-6242. (Henry A. Wallace Center for Agricultural & Environmental Policy at Winrock International, Alternative Agriculture Newsletter, March 2002).

16.0. Concentration of Businesses in Agriculture

Concentration in Most Agricultural Markets Is Increasing, New Study Finds

Concentration is increasing in all agricultural markets except ethanol production, according to a new, updated study by Mary Hendrickson and William Heffernan of the University of Missouri. Their study found that the top four beef packers control 81 percent of the market; four pork packers control 59 percent; and four poultry processors control 50 percent. Three companies-Cargill-Continental Grain, Archer Daniels Midland, and Zen Noh-have an "incredibly high level of control" in corn exports, with 81 percent, and soybean exports, with 65 percent. The report, "Concentration of Agricultural Markets," which was commissioned by the National Farmers Union, is available on the Internet at www.foodcircles.missouri.edu and also www.nfu.org. (Henry A.
17.0. The fruit Corner: Integrated production of olives

An acrobat pdf file describing the integrated production of olives can be found at (last logged in on Feb. 28, 2002):
http://www.sar.admin.ch/faw/docu/portrait/IOBCOliveINTERNET.pdf

similar guides for the ecological production of grapes and other crops can be found at:

http://www.sar.admin.ch/scripts/get.pl?faw+portrait/iobc.html+0+60#olive

18.0. National Poison Control Center- Toll-free number

New Central Hotline for U.S. Poison Control Centers

Americans for the first time can use a single toll-free telephone number to reach a poison control center anywhere in the nation, officials announced Wednesday.

 Officials launched the national hotline, 1-800-222-1222, and applauded it as an overdue coordination of the country's 65 separately run poison centers. **Callers dialing the number will be automatically linked to the closest poison center.**

The nation's first poison center opened in 1953, and subsequent centers have opened on an independent basis. **``Until now...nationwide poison prevention education was hindered by the very structure by which poison centers evolved,'''** said Dr. Alan D. Woolf, the president of the American Association of Poison Control Centers.
This country's 65 centers had more than 130 individual and separate telephone numbers," he said.

The new number is part of a $21.2 million federal effort to update poison control centers across the country. Centers field calls on approximately 2.2 million suspected poisonings per year, mostly involving young children. About 75% of all poisonings can be safely handled at home with the help of a poison center aide, though 700 to 800 calls to centers per year-end in fatalities, Woolf said.

Rep. Edolphus Towns (D-NY) said that the new national hotline would "help save lives and prevent costly trips to emergency rooms." **Towns crafted the House legislation that led to congressional approval of the centers' new money.**

Half of all calls to poison centers involve preschool-age children, though calls involving adults or elderly persons tend to be more serious. **Officials said that they would accompany their new national phone number with a print and radio-based education campaign urging children to avoid household poisons and urging parents to post poison control numbers near their phones.**

Household cleaners and chemicals make up the bulk of poisonous substances in homes, though perfumes, medications, and spider and animal bites can also lead to poisoning. **Members of the public can obtain stickers, magnets, and other promotional materials by calling the toll-free number, Woolf said.**

WASHINGTON (Reuters Health) (Gene McAvoy, Univ. Florida CES, South Florida Pest and Disease Hotline, February 1, 2002)

19.0. Idea of the month (Record Book)

[Editor's note: Below is a $100 idea provided by dairy farmer Viola Steffes to the Farm Journal:]
"To help me find parts numbers quickly, I record them in an address book using the name of the machine for the alphabetical reference and the manufacturer's name as a cross-reference. For instance, if a piece of equipment needs belts, I include the sizes and numbers. When I need a belt, all the information is at my fingertips. I also have driving directions to parts houses that I seldom visit. Knowing the best and shortest routes saves me lost time and miles." She also "lists household items in her quick reference guide too. For her home she includes things such as furnace filter sizes and house paint numbers." (Farm Journal, July/Aug. 2000, pg. 39).

20.0. Finding parts and chemicals on the WEB

www.xsag.com

This site offers crop protection chemicals, seed, and equipment parts.

21.0. WEB Site USDA The Crop Insurance Cycle

http://www.rma.usda.gov/policies/cycle/insurance_cycle_g.html

22.0. Peppermint IPM website (Oregon)

http://mint.ippc.orst.edu/

23.0. Farmbill website

The Senate Farm Bill is now available on the Thomas Website: thomas.loc.gov

To access the bill, you should search for H.R. 2646. The search tool will bring up several versions of the bill. The version passed by the Senate is the Senate Engrossed Amendment (H.R.2646.EAS) You can then download a text or pdf version of the bill. Beware, the whole bill is 1335 pages long.
24.0. EPA biopesticides Web site
Includes factsheets and updates, including updates on Bt.

www.epa.gov/pesticides/biopesticides

25.0. USDA Wetlands Workshop in Washington DC
US EPA Office of Wetlands Oceans and Watersheds and EPA Region 4 are sponsoring a two-day workshop on May 7 and 8, 2002 in Charleston, SC, entitled, “Tools for Wetlands and Watershed Protection: A Workshop for Local Governments.” This workshop is designed for all individuals interested or involved in wetland and watershed protection programs. For more information, or to register on-line, visit www.horsleywitten.com/epaworkshop. You may also contact Ellen Barros, Workshop Coordinator, at 508-833-6600 Ext. 101.
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Website: www.horsleywitten.com

26.0. Hawaii Banana Conference April 2002
The 34th Annual Hawaii Banana Industry Association Conference will be held at King Kamehameha's Kona Beach Hotel, Kailua-Kona, April 19-20, 2002. For additional information contact Dr. Leng Chia, chian@hawaii.edu, 808-956-7899, Fax: 808-956-3894.

27.0. Upcoming Professional meetings for 2002-2003

AMERICAN PHYTOPATHOLOGICAL SOCIETY ANNUAL MEETING, 27-31 July, 2002 *
Milwaukee, WI, USA. Contact: APS, 3340 Pilot Knob Road, St. Paul, MN 55121-2097, USA. E-mail: <aps@apsnet.org>.
13TH AUSTRALIAN WEEDS CONFERENCE, Perth, WA, AUSTRALIA. 08-13 September, 2002  *Contact: 13th AWC, PO Box 257, South Perth, 6951 WA, AUSTRALIA.  E-mail: <convlink@iinet.net.au>. Fax: 61-8-9450-2942. Phone: 61-8-9450-1662. Website: <members.iinet.net.au/~weeds/conference/index.htm>.

1ST INTERNATIONAL CONFERENCE ON TROPICAL AND SUB-TROPICAL PLANT DISEASES, 05-08 November, 2002  * Chiang Mai, THAILAND.  Contact: TPS2002 Secretariat, PO BOX 1064, Kasetsart Post Office, Bangkok 10903, THAILAND.  E-mail: <Amara@doa.go.th>. Fax: 66-2-940-5419. Phone: 66-2-579-9585. Website: <www.doa.go.th/diseases/index.html>.

ENTOMOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING, Fort Lauderdale, FL, USA. 17-20 November, 2002  * Contact: ESA, 9301 Annapolis Rd., Lanham, MD 20706-3115, USA.  E-mail: <meet@entsoc.org>. Fax: 1-301-731-4538. Phone: 1-301-731-4535. Website: <www.entsoc.org>.

8TH INTERNATIONAL CONGRESS OF PLANT PATHOLOGY, 02-08 February, 2003  * Christchurch, NEW ZEALAND.  Contact: ICPP2003 Conference Secretariat, PDG, PO Box 84, Lincoln Univ., Canterbury, NZ.  E-mail: <icpp2003@lincoln.ac.nz>. Fax: 64-3-325-3840. Phone: 64-3-325-2811. Website: <www.lincoln.ac.nz/icpp2003/>.

WEED SCIENCE SOCIETY OF AMERICA ANNUAL MEETING, 09-12 February, 2003  * Jacksonville, FL, USA.  Contact: WSSA Mtg. Manager, PO Box 7050, Lawrence, KS 66044-7050, USA.  Fax: 1-785-843-1274. E-mail: <WSSA@allenpress.com>. Phone: 1-785-843-1235. Website: <www.WSSA.net>.
19TH ASIAN-PACIFIC WEED SCIENCE SOCIETY CONFERENCE, 18-22 March, 2003 *
Manila, PHILIPPINES. Contact: L. Fabro, NCPC, Univ. of the Philippines, Los Banos, College, Laguna, PHILIPPINES.
E-mail: <LFabro@yahoo.com>. Fax: 63-49-536-2409.

15TH INTERNATIONAL PLANT PROTECTION CONGRESS, 06-11 July, 2003 * Beijing,
CHINA. Contact: W. Liping, Inst. of Plant Prot., Chinese Acad. of Agric. Sci., #2 West Yuanmingyuan Rd., Beijing 100094, CHINA. E-mail: <cspp@ipmchina.cn.net>. Fax: 86-10-628-95451. Website: <www.ipmchina.cn.net/ippc>.

ANNUAL MEETING, SOCIETY OF NEMATOLOGISTS, Ithaca, NY, 12-17 July, 2003*
USA. Contact: W. Brodie, USDA-ARS, Dept. of Plant Path., 334 Plant Science, Cornell Univ., Ithaca, NY 14853, USA.
E-mail: <BBB2@cornell.edu>. Fax: 1-607-255-4471.
Phone: 1-607-272-3745.

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AMERICAN PHYTOPATHOLOGICAL SOCIETY ANNUAL MEETING, 09-13 August, 2003 *
Charlotte, NC, USA. Contact: APS, 3340 Pilot Knob Road, St. Paul, MN 55121-2097, USA. E-mail: <aps@scisoc.org>.

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ENTOMOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING, 26-30 October, 2003 *
Cincinnati, OH, USA. Contact: ESA, 9301 Annapolis Rd., Lanham, MD 20706-3115, USA. E-mail: <meet@entsoc.org>.
Phone: 1-301-731-4535.