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. Update on the watercress yellows/aster leafhopper situation from Randy Hamasaki.

Background: In October 2001, it was discovered that declining watercress from Oahu was infected by the Aster Yellows phytoplasma. At about the same time, the aster leafhopper, a vector of the Aster Yellows phytoplasma was also discovered on Oahu. This was the first time that the phytoplasma and leafhopper were found in the state.

Phytoplasma & Aster Leafhopper Surveys: Surveys for the watercress (aster) yellows and its vector the aster leafhopper (Macrosteles fascifrons) are in progress. Samples from suspect watercress plants, weeds, and other crop plants are being collected from the field and being submitted to the CTAHR Virology Lab (Dr. John Hu and Dr. Wayne Borth). The samples are tested for phytoplasma by a test called polymerase chain reaction (PCR) using primers specific to phytoplasmas. Mr. Ronald Heu from the Hawaii Department of Agriculture is using a motorized vacuum to collect insect samples for the vector survey.

Update: Watercress samples from 10 different farms on Oahu have tested positive for the phytoplasma. In addition to watercress, the following plants have tested positive for the phytoplasma to date: Common name (Scientific name): parrots feather (Myriophyllum brasiliense); plantain (Plantago major); amaranth (Amaranth sp.); false daisy (Eclipta prostrata); and sowthistle (Sonchus sp.)

Aster leafhopper (Macrosteles fascifrons): The aster leafhopper has been found on watercress and on certain weeds at watercress farms in the Waiawa and Waipahu areas of Oahu. The leafhopper has not yet been found outside of the watercress farms.

Aster leafhoppers were collected from the following plants on Oahu: Watercress, (Nasturtium microphyllum); Parrotsfeather, (Myriophyllum brasiliense); Bacopa or water hyssop, (Bacopa monnieri); and Spanish needles, (Bidens pilosa). (Randall Hamasaki, CTAHR-CES County Extension agent, Kaneohe, Oahu CES Office, e-mail, Jan. 26, 2002).
2.0. Apple snail control with ducks on paddy rice

Abstract from a study conducted in Malaysia: "The varieties of duck recommended for the biological control of snail in decreasing preference were William Siam 'Taiwan 'Mallard 'Peking 'Muscovy.Cherry Valley, a variety with a bigger body size was not suitable for snail control because of its poor adaptation to rice " conditions. A density of 5 ducks/ ha in continuous grazing for a period of 1-2 months significantly reduced the pest density from 5 snails/ meter square to less than 1 snail/ meter square. This density of ducks was recommended for biological control of snails in rice. Timely release of ducks was crucial as they damaged young rice seedlings. In transplanted rice, it was appropriate to release the ducks when the seedlings were 4 weeks old. For direct seeded rice, a longer waiting period of 6 weeks was necessary. Numerically, ducks preyed on more snails in transplanted than in direct seeded rice, but the difference was not statistically significant. The increase in plant density under direct seeding probably reduced the browsing efficiency of the ducks. This difference would be expected to diminish under prolonged grazing. It is suggested that ducks were an e! biological control agent against the golden apple snail." (Su tin Seo, Evaluation of different duck varieties for the control of the golden apple snail Pomacea canaliculata in transplanted and direct seeded rice, Crop Protection Journal, 20:599-604 (2001)).

3.0. Attracting golden apple snail with newspaper?

Ordinary newsprint was nearly as effective at attracting the rice field pest Pomacea canaliculata (golden apple snail) as banana, taro, and papaya leaves during tests conducted in the Philippines. R.C. Joshi, <Joshiravi@hotmail.com>. (IPMnet NEWS, February 2002, Issue 98)

4.0. Algae control in hydroponic beds?

Abstract from a study conducted in Japan: "The chemical control agent 3-(3-indolyl)butanoic acid, previously reported as a control agent for the bacterial wilt pathogen Ralstonia solanacearum, was shown to suppress the growth of green algae during hydroponic
culture of tomato. The algicidal activity of the compound was effective at 10 m ml, completely preventing generation of green algae under non-shaded greenhouse conditions. The algicidal effect was mainly due to suppression of the growth of motile unicellular algal cells tentatively identified as Chlamydomonas spp., which are commonly occurring in the hydroponic solution and vigorously multiply to form an algal mat on the sponge supports. The compound has potential as a non-phytotoxic algicide for hydroponically cultured crop plants. (Nonomura et al., Algicidal effect of 3-(3-indolyl)butanoic acid, a control agent of the bacterial wilt pathogen, Ralstonia solanacearum, Crop Protection, 20:935-939(2001)).

5.0. Agriculture Entrepreneurial Center in Kentucky

[Editor's note: There has been talk in Hawaii and at CTAHR about developing 'incubator' projects to promote specific high value ag industries. Ideas that come to my mind include incubators for a) greenhouse production; b) specialty vegetable production; c) organic farming; d) sustainable agriculture; e) establishment of IPM programs; and e) Incubators for new farmers. Below is an example of an Entrepreneurial Center being established in Kentucky to help farm families move from tobacco production into diversified ag].

Daviess County Kentucky (Owensboro) has asked my firm to establish an Agriculture Entrepreneurial Center in the county. The goal is to suggest and demonstrate ways in which farm families can capitalize on the land, skills, and work ethic they have to wean themselves from tobacco as a cash crop. Stabilization of the family farm community is the prime interest.

We are open to suggestions for projects. I can tell you that value added and small scale projects are of great interest even if they mean a cooperative may have to be formed to take advantage of the opportunities.

We will recommend organic crops and livestock, vermiculture, hydroponics, recirculating aquaculture of fin fish and shrimp, small livestock processing plants, oil production from soybeans, biofuels,
alternative energy, and specialty crops with medicinal or cosmetic value. This last idea is the one I am least familiar with.

If you have any thoughts on these topics or on any other suitable idea, please send it along. We will sponsor seminars and demonstrations so you may even have a chance to market your ideas. The site is a 750 acre research farm with classroom facilities for 250 and overnight accommodations for 35 persons. The city of 50,000 souls is about 12 miles away.

Neal Van Milligen Kentucky Enrichment Inc. 2725 Russell Rd Utica, KY 42376 270-275-9164 voice 270-275-4505 fax CAVM@AOL.com (Neal Van Milligen, e-mail, Jan. 22, 2002).

6.0. Rhizoctonia management (Florida)

There have been reports of scattered problems with Rhizoctonia and blackleg in potato fields around Immokalee.

Control of Rhizoctonia can be difficult and erratic. Because of the versatility of Rhizoctonia spp., growers are advised to utilize several control measures, often in a sequence, to attain maximum control if soil fumigation is not used. The following control measures used collectively will reduce blights caused by Rhizoctonia and other fungi.

The major objective with these measures is control on stems of young plants by establishing a fast growing plant that essentially reduces the "hazard time" as young tender plants are more susceptible than older plants.

1) Use only healthy disease-free seed pieces. Although Rhizoctonia is not notorious for being seed-transmitted, poor quality seed pieces will grow slowly, which offers a distinct advantage to Rhizoctonia spp.

2) Avoid deep seeding, if moisture permits, as deep planting is advantageous for infection.

3) Especially in fields where fumigation was not used, plant when the soil temperature is suitable for rapid growth.
4) Seed pieces should be treated with a fungicide for protection against infection from Rhizoctonia spp. in the soil.
5) Use crop rotation where possible.
6) Prepare land so that a minimum amount of old plant debris is on the soil surface in the seeding zone.
7) Control soil insects and nematodes. These organisms weaken the plant, thereby predisposing the plant to infection (Gene McAvoy, Univ. Florida, South Florida Pest and Disease Hotline, January 18, 2002.)

7.0. Leafminer management (Florida)

Reports from around southwest Florida, indicate that leafminer pressure is variable with many growers indicating that they are spraying every 7 - 14 days depending on pressure to achieve control. In new tomato plantings respondents indicate that most fields require treatment within a week or two of planting. Growers also report some problems with leafminers in range of crops including tomato, potato, pepper, cucurbits and beans.

On the east coast, leafminer pressure is low to moderate and has dropped off compared to the higher pressure reported in mid-December.

Growers have obtained good results with abamectin (Agri-Mek), cyromazine (Tri-gard) - peppers, spinosad (Spintor) and azadirachtin (Neemix). These materials are relatively soft on beneficials. Although there are a number of other labeled materials that will give good control, growers should avoid the use of harsh chemicals to control other insects if possible to help preserve beneficial populations.

Natural enemies, primarily parasitic wasps, will often help control leafminers. If these parasites are killed by pesticides leafminer outbreaks may become more severe.

As always, growers are advised to practice resistance management and avoid repeated back-to-back applications.
Attention to sanitation and destruction of old fields is also important as leafminer populations can build in abandoned fields. (Gene McAvoy, Univ. Florida CES, South Florida Pest and Disease Hotline, February 1, 2002)

**8.0. PHYTOPHTHORA-RESISTANT PEPPER VARIETIES**

Dr. Steve Johnston of Rutgers, speaking at the NEV&BC, provided a list of pepper cultivars with resistance to Phytophthora blight. This disease attacks pepper, eggplant, tomato and all cucurbits, and is a growing problem on vegetable farms in the Northeast. In addition to avoiding poorly-drained soils or low lying areas and using raised beds, the use of resistant varieties can help reduce the incidence of this disease. Resistance bell pepper varieties include: Ada, Emerald Isle, Reinger, Paladin and Aristotle. Of these, Paladin and Aristotle have performed best in New Jersey, with good horticultural characteristics, yielding as well as Camelot. However, they sometimes they get a condition called 'silvering' on the fruit, which appears to be related to Phytophthora resistance. Paladin has the best overall resistance, and it is widely accepted and has been effective in reducing the crown rot phase of Phytophthora blight in NJ fields where it has been grown. Since fine cracks tend to develop when Paladin's fruit matures it should be limited to production of green fruit. Aristotle is a newer variety which yielded better than Camelot in field trials, but it did not show as consistent a level of resistance as Paladin. (Vern Grubinger, University of Vermont Extension VERMONT VEGETABLE AND BERRY NEWS, February 1, 2002)

**9.0. Strawberry variety update from No. Carolina**

“Chandler continues to dominate in the mid-South for reasons related to very reliable yields and high customer satisfaction with quality. We are mainly a direct marketing region with almost no shipping like you in Florida. Camarosa continues to grow in importance each year for reasons related to excellent appearance, great handling characteristics and it does give the grower an improved of shelf life vs. Chandler for retail marketing at roadside stands or farmers markets, such as the large one we have here in
Raleigh. Sweet Charlie continues to decline in importance. It is poorly adapted to our region flowering all through the winter months is typical. Yields are always much lower for Sweet Charlie than Camarosa or Chandler, and that is why it is disappearing. Good yields for us are from 18,000 – 24,000 lb/A. Sweet Charlie will often come in at 12-14,000 lb/A. So, it’s strictly a bottom-line issue.

Right now we critically need more research on the potential of newer varieties like ‘Ventana’ and ‘Camino Real’ from California. Dr. Ballington has not indicated to me that we need to be looking at ‘Festival’, based on his preliminary work. ‘Gaviota’ has been disappointing in terms of yield. This will probably be a deciding year for JP-2 (Gemstar), as a fair amount of this has been planted around the state (Barclay Poling, Editor & Ext. Small Fruit Specialist, NC State NC Strawberry Plasticulture - January 25, 2002 (Friday) Vol. 3 No. 4 ).

10.0. Powdery mildew (Florida)
Powdery mildew remains active on squash.

Powdery mildew is widespread in older cucurbit species especially squash. Incidence and severity is generally low to moderate although some severe infections have been noted.

Since an initial report of powdery mildew on tomato in the last edition of the South Florida Pest and Disease Hotline, several respondents have noted the scattered occurrence of powdery mildew on both pepper and tomato.

An integrated spray program that rotates products in order to prevent development of pathogen resistance is recommended. Bravo typically included in a tomato spray program contribute to powdery mildew control Quadris (azoxystrobin) and Nova (myclobutanil) provides excellent preventative and residual protection. The biofungicides AQ10 (Ecogen) - Ampelomyces quisqualis and Serenade (AgriQuest) - Bacillus subtilius are also reported to be effective in controlling the disease. Refer to product labels for spray intervals. (Gene McAvoy, Univ. Florida, South Florida Pest and Disease Hotline, January 18, 2002.)
11.0. Fusarium crown rot (Florida)

The incidence of fusarium crown rot in tomato has increased dramatically in some fields especially in those fields with a history of the disease where water levels were raised as a measure of frost protection.

Crown rot is associated with particularly cold periods during fruit maturation. The causal organism is a fungus, Fusarium oxysporum f. sp. radicis-lycopersici. It grows best from 50°F to 68°F, which is lower than the optimum for the fungus that causes Fusarium wilt.

Symptoms of Fusarium crown rot are distinctly different from those of Fusarium wilt of tomato. The brilliant yellowing of the foliage typical of Fusarium wilt does not occur with crown rot. Crown rot generally first appears as marginal chlorosis or necrosis of the oldest leaves of scattered individuals plants as the crop nears first fruit maturity. These symptoms may be followed by a rapid wilt-to-death or more typically a slow wilt with upward progression of leaf chlorosis. Infected plants will often wilt during the day and recover during the night. Unlike the vascular symptoms associated with Fusarium wilt; the vascular discoloration evident in stem and/or roots is limited to the lower 12" of the stem. In addition with crown rot, definite root and crown rots occur. The pith of the stem at soil line may be necrotic, and will often display external cankers or lesions on the stem from soil line upward.

Control of crown rot is similar to that of Fusarium wilt (e.g., crop rotation, sanitation, increased soil pH, minimize use of ammoniacal nitrogen, and soil fumigation). Successful control of Fusarium crown rot begins with healthy transplants, and properly prepared land.

The primary control for Fusarium crown rot is the combined use of disease free transplants, and pre plant fumigation with a broad-spectrum fumigant (e.g., methyl bromide + chloropicrin, Telone + chloropicrin, vapam, etc). Changes of soil fertility, avoidance of
plant stresses (biological and physical), and cultural manipulations can be used successfully in some situations.

Recontamination of fumigated soil with non-fumigated soil and surface water should be avoided because fumigated soil has less natural biological diversity. Soils with less microbiological diversity may allow for a rapid increase of a plant pathogen (Gene McAvoy, Univ. Florida, South Florida Pest and Disease Hotline, January 18, 2002.).

12.0. Rust on Beans (Florida)

Dr Ken Pernezny: Plant Pathologist at the UF/IFAS Everglades Research and Education Center reports that there have been some outbreaks of rust on snap beans in the Devil's Garden area. This is early for rust at the level of severity observed, so growers should be especially vigilant in managing this disease. Ken indicates that rust is likely to get worse as the spring season progresses. He cautions that rust is tough to control, but that he has had ok results in tests with Bravo (chlorothalonil) and has also had some positive results with flowable sulfurs. (Gene McAvoy, Univ. Florida CES, South Florida Pest and Disease Hotline, February 1, 2002)

13.0. The fruit Corner: BLUEBERRY PRUNING TIPS

Eric Hanson from Michigan State University gave these pointers at the NEVBC. The goal when pruning young bushes is to encourage vigorous, upright growth by removal of damaged wood, spindly growth, and prostrate branches from the base of the plant. As bushes approach and reach maturity, pruning goals change to managing bush size, shape and fruiting capacity. Since the most fruitful canes are 4 to 6 years old, some of the oldest canes should be removed regularly (at least every second year) to stimulate growth of new replacement canes. This keeps the bush in balance where 15 to 20% of the canes are in the young and old categories, and the rest are productive, intermediate aged canes. It is often difficult to determine how many older canes to remove, and this varies by variety and location, but it is helpful to remember that
branches must receive at least 15% of full sun to initiate flower buds. Bushes need to be open enough to allow sufficient light to penetrate to support flower bud and fruit growth well into the canopy. If bushes produce fruit only in the periphery of the canopy, heavier pruning is needed. More aggressive pruning also tends to increase fruit size which is important for PYO marketing (Vern Grubinger, University of Vermont Extension, VERMONT VEGETABLE AND BERRY NEWS, February 1, 2002).

14.0. Colored Potatoes have nutritional benefits

Colorful Potatoes Pack More Nutrients

Potatoes are not only are tasty, they also provide a good source of complex carbohydrates, potassium, vitamin C, folic acid and iron. Now, studies are being conducted to examine additional health benefits of dark-pigmented varieties not often found in the United States. That's because brightly colored orange, red and purple potatoes might one day provide health-promoting properties beyond those found in ubiquitous white- and cream-colored spuds.

So far, the primary benefit likely to be derived from boldly colored potatoes seems to be heightened antioxidant activity. Indeed, orange-fleshed potatoes have been developed with up to four times the antioxidants zeaxanthin and lutein as white potatoes. In addition, the darker colored potatoes score well against other foods in a standard test for antioxidant capacity named ORAC, or oxygen radical absorbance capacity. The red- and purple-fleshed potatoes achieved ORAC scores comparable to brussels-sprouts, kale, or spinach. And the bright colors occur naturally. The researcher identifies and selects test plants from mainstream potato breeding programs. Still, more research must be conducted to learn about traits such as composition and quantity of pigment, growing requirements, and yields before colorful spuds such as these can be commercialized. (USDA Food and Nutrition Research Briefs, Jan. 2002).
15.0. Calcium in your veggies: Making Ca More Available

Understanding why some plants like spinach store much of their calcium in a crystalline form could help scientists develop more nutritious varieties of vegetables. One cup of cooked spinach contains plenty of calcium—around 244 milligrams. But because most of the calcium is in calcium oxalate crystals that we can't digest, humans absorb a mere 12 milligrams—or five percent.

Turnip greens, on the other hand, are nearly crystal-free, making them an excellent source of calcium. One cup of cooked turnip greens provides us with about as much calcium as a cup of cow's milk.

To unlock the mystery of crystal formation and function, an ARS molecular biologist is studying a small, fast-growing plant called Medicago truncatula. His lab has inspected thousands of genetic variations of this simple plant, which normally stores much of its calcium in crystals. While the genetic variants look nearly identical to the naked eye, some have leaf cells packed with calcium oxalate crystals while others are nearly crystal-free, the researchers reported in Plant Physiology, 2000 (vol. 124, pp. 1097-1104).

They hope to determine whether calcium oxalate crystals play an important role in helping plants adapt to stressful growing conditions or fend off attacks by pathogens and insects. And they are looking for the genes that control crystal formation. Since the plants that don't make crystals appear to thrive as well as those that do, the researchers should be able to breed out or remove this characteristic from M. truncatula. If successful, this would be a first step toward making calcium oxalate-rich vegetables like spinach a better source of calcium for humans. (USDA Food and Nutrition Research Briefs, Jan. 2002).

16.0. Organic Farmers Sue Monsanto (Canada)

Canadian Organic Farmers Sue Monsanto, Aventis Over Genetically Modified Crop Drift
A group of Canadian organic farmers sued the Monsanto and Aventis Companies last month, seeking compensation for damages caused by genetically modified canola they say is blowing onto their fields, according to Environmental News Network (January 11, 2002). The class-action suit by the Saskatchewan Organic Directorate is on behalf of the province's 1,000 organic growers, whose farms represent one million acres. About 60 percent of the canola grown in Saskatchewan is genetically modified; organic producers say that pollen from the genetically modified canola is contaminating their crops and seed supply when it blows onto their fields, driving away premium-paying customers who want to purchase certified organic crops. The lawsuit is aimed also at halting plans to introduce genetically modified wheat in the region. (Alternative Agriculture News, Volume 20, Number 2 (February 2002))

17.0. On the light side: Food Safety Guidelines to Eat Pretzels

Pretzel Safety Guidelines

The new instructions...


Congratulations on purchasing a bag of "Mr Salty" Pretzels. Correctly used, these salty snacks should provide minutes of healthy enjoyment, however, in order to derive optimum pleasure, and minimal injury, we do recommend that the following procedure is studied and followed.

YOU WILL NEED 1 x comfortable chair 1 x bag of pretzels (contents approximately 24 pretzels) 1 x television receiving equipment, tuned to the sporting event of your choice Up to 3 dogs - cats or other pets are NOT RECOMMENDED and could be DANGEROUS

STEP 1. OPENING THE BAG
This is a relatively simple procedure, but care needs to be taken nonetheless, so follow the steps carefully.

1. Take hold of the TOP of the bag at EITHER SIDE between FOREFINGER AND THUMB, taking care not to slash your wrists open on the surprisingly sharp plastic edges.

2. Draw the edges of the bag apart with a smooth firm motion.

3. If you SHOULD LOSE YOUR GRIP on the bag, take extreme care not to smack yourself in the face with your flailing hand as this can result in OBVIOUS BRUISING. Instead, you are advised to throw yourself into the safe haven of the COMFORTABLE CHAIR until the hand-danger is passed. On NO ACCOUNT throw yourself into the safe haven of THE FLOOR, THE TELEVISION, THE DOGS, THE WINDOW, THE OVEN, THE LIGHTFITTINGS or THE ROTATING BLADES OF A NEARBY HELICOPTER as severe injury and embarrassment may result. If you have an open bag of pretzels before you, you may now proceed to step 2. Otherwise, simply repeat step 1 until full openness is achieved.

STEP 2. REMOVING PRETZEL FROM BAG

1. Set the bag upon your lap, making sure it is reasonably stable.

2. GENTLY insert one hand into the bag. IT MAY BE NECESSARY TO WITHDRAW EYES FROM TELEVISION IN ORDER TO ACCOMPLISH THIS SAFELY. You may prefer to wait until a commercial break or other interval in the action. You should also ensure that you are not over-excited by the sporting events in progress before attempting this manoeuvre.

3. CLOSE YOUR FINGER AND THUMB over a single pretzel. DO NOT attempt to select MULTIPLE PRETZELS. Not only is this an extremely advanced manoeuvre and highly risky in itself, but it will unnecessarily complicate step 3 and will almost certainly lead to brain injury, death and further embarrassment. If you FAIL to secure a pretzel, open the finger and thumb, then close again in a different position - although STILL WITHIN THE BAG - until a pretzel is secured.
4. WITHDRAW HAND FROM BAG taking care not to break pretzel, drop pretzel, lacerate hand on edges of bag, grind pretzel into own eye, smack head on door jamb, press thigh against red-hot coals, or drive meat skewers through fleshy parts of upper arm. With the pretzel now secured in the hand, the operation is nearly complete. However, you cannot afford to let your guard down.

STEP 3. TRANSPORTING PRETZEL TO MOUTH

1. Delicate hand-eye co-ordination is required. KEEPING YOUR EYES FIXED ON THE PRETZEL, first WITHDRAW your hand. Should the pretzel DROP at this point, you will have to repeat step 2.

2. RAISE PRETZEL TOWARDS face - avoiding eyes, ears, nostrils, hotline to Moscow and Nuclear Button in the process.

3. OPEN MOUTH - this step is vital and EASILY FORGOTTEN IN THE HEAT OF THE MOMENT

4. PLACE PRETZEL JUST INSIDE MOUTH. Do not attempt to force pretzel in. Pretzel should fit easily inside, and need not be entirely encased in mouth orifice. If pretzel does not fit easily, check that mouth is open and that pretzel is in mouth, rather than ear. A small mirror may be helpful.

5. RELEASE PRETZEL AND WITHDRAW FINGERS FROM MOUTH. Failure to perform this easily-overlooked step can lead to crippling injuries. If you are in any doubt, consult mirror once more. Pretzel will probably be just visible inside mouth and FINGERS SHOULD BE WELL CLEAR before step 4 commences.

You are nearly ready to enjoy your pretzel - however the last step is by far the most dangerous, and EXTREME CARE should be taken. Inexperienced eaters of pretzels may care to practice without pretzels in order to have confidence in steps 1 to 3 before proceeding to the pretzel “fire fight” which is step 4.

STEP 4. EATING THE PRETZEL
1. Begin to move jaws up and down in a rhythmic fashion. AT LEAST 20 ITERATIONS ARE RECOMMENDED. "MR SALTY" CANNOT BE HELD RESPONSIBLE FOR INJURY, WOUNDING, DEATH, INTERNATIONAL INCIDENTS OR WARFARE RESULTING FROM FAILURE TO FOLLOW THIS DIRECTIVE.

2. As pretzel structure begins to break down, guide resulting substance to rear of mouth. DO NOT ATTEMPT TO BREATHE - BUT DO NOT LINGER AT THIS POINT EITHER. All your concentration must now be brought to bear on guiding the pretzel safely down the oesophagus, without inhaling and without passing out due to lack of oxygen.

3. As pretzel remnants reach back of throat, swallow quickly THEN RE-COMMENCE BREATHING. Congratulations - you may now repeat from step 1, until bag is empty or belly is full.

TROUBLESHOOTING GUIDE

1. PRETZELS TASTE "PLASTICKY" - You are eating the bag.

2. PRETZELS TASTE "FURRY" AND DOGS ARE YELPING - You are eating the dogs.

3. PRETZELS TASTE REVOLTING - This is normal

4. FINGERS CANNOT GRASP PRETZEL - Bag is closed or is empty.

5. PRETZELS ARE ALL OVER FLOOR. Bag is upside down, or has been opened with undue force. Deploy dogs and request fresh bag.

6. PRETZELS CANNOT BE SEEN - Light is off or eyes are closed.

7. PRETZELS ARE TASTELESS AND EYES ARE FULL OF GRIT - You have placed pretzel in eye instead of mouth

8. PRETZELS ARE TASTELESS AND I AM DEAF - You have placed pretzel in ear instead of mouth
9. I AM LYING ON THE FLOOR AND DOGS ARE STARING AT ME - You have attempted to breathe while chewing and/or have failed to chew pretzel thoroughly.

18.0. Biosecurity USDA WEB site

USDA has a biosecurity Web site to increase consumer awareness on biosecurity and USDA’s response. The site includes news releases, fact sheets and other informational materials on USDA biosecurity activities and food safety. To access the Web site, go to:

19.0. Tomato Greenhouse Workshop, Mississippi March 2002

The 12th annual Greenhouse Tomato Short Course will be held March 14 & 15 in Jackson, Mississippi, at the Mississippi Agriculture & Forestry Museum, Sparkman Auditorium.

This Short Course is an intensive 2-day training & tour for growers and prospective growers of greenhouse tomatoes. Experts in each field are brought in to present their materials at the grower's level so that the information is readily applied to the greenhouse business.

Last year, the Greenhouse Tomato Short Course attracted growers from 22 states and 4 countries. If you are a grower, or work with growers, please consider this program as a training opportunity.

Registration is $85 in advance, or $100 at the door. This includes 2 buffet lunches and 2 evening meals, so growers, speakers, and exhibitors will have more time to visit together in a casual setting.

Complete details, including agenda, map, hotel list, and registration form, are on the web at http://www.msstate.edu/dept/cmrec/GHSC.htm.