A strong cold front dropped down across the peninsula on January 21st and 22nd plunging temperatures into the mid to upper 20's for several hours in many locations severely impacting crops with the worst freeze seen in the last 10 years. With the exception of the some areas (Homestead, east Naples, some of the east coast production areas), growers in most locations are reporting nearly complete loss of sensitive crops like corn, beans, cucumbers and squash which were not covered and widespread damage to other crops.

The amount and distribution of crop damage reported is amazingly variable. In general, older crops seemed to fare worse than younger plantings and severity of crop injury was inconsistent from field to field and even within fields reflecting variations in microclimate. In a number of places growers and scouts report older fields of tomato and pepper were finished off by the cold and in others very little crop damage is apparent. Some frost damage was reported in some areas of Homestead.

**FAWN Weather Summary**

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Growers prepared for the cold and wind by raising water tables and covered plants for protection and harvested heavily in advance of the freeze. Preparations for spring planting continue throughout the area and some growers delayed planting in anticipation of the weather. Crops coming to market before the freeze included beans, cucumbers, eggplants, okra, peppers, squash, sweet corn, tomatoes, watermelon, and specialty crops including basil. Growers tried to harvest in advance of the freeze and salvage some crops afterwards but supplies of some of the hardest hit items are beginning to dry up.

The short-term forecast from the National Weather Service in Miami calls for major changes coming this weekend. A cold front will continue its march southward and move across South Florida today. A narrow band of clouds and showers are currently associated with this front and will affect all of South Florida. The front will move the southeast coast by afternoon on Friday and a much colder air mass will filter down the peninsula behind the front.

The models have been more consistent from run to run in showing mid 30s for Glades and Hendry counties and there still remains some uncertainty about how close to freezing it might get. Therefore, a freeze outlook will continue for this area but a freeze watch may need to be issued in the next 12 to 24 hours. The only thing certain is this is not as cold of an air mass as last week and temperatures will only approach the freezing mark for this small area (Hendry, Glades and north). Across the remainder of South Florida, minimums for Saturday morning will be in the upper 30s remainder of interior portions and lower to mid 40s along both coasts.

The surface ridge that will build behind this front will shift east into the Atlantic by early Sunday which will begin to modify the temperatures. As this happens, the gradient will slacken and it looks like a good possibility for radiational cooling for Saturday night. However, with the position of the high, wind just above the surface will veer to the east and temperatures are expected to be slightly warmer than Friday night.

Following moderating temperatures Sunday to Monday...temps will tumble again Tuesday to Wednesday. Models continue to show an impressive trough moving se from the Upper Midwest and amplifying while moving towards the east coast by Tuesday. This will drive an even stronger cold front across the area late Monday into Tuesday. Showers and possible thunderstorms are expected with the front. GFS model continues to show lows bottoming out in the 40s again all the way to both coasts...with 30s interior along with a possible freeze in normally colder interior locations.

The high behind this front though will be of polar origin...so it’s definitely one to watch closely. Ensemble data is not in but yesterday’s showed a decent shot at reaching freezing...especially being 5 days out in time. A freeze outlook may be needed later today or tonight if the cold trend continues. For additional information, visit the National Weather Service in Miami website at http://www.srh.noaa.gov/mfl/newpage/index.html

Insects – pressure has mostly dropped off following last weeks freeze.

Leafminers

Growers and scouts around Southwest Florida leafminer indicate that leafminer pressure is fairly low compared to past years but are watching for increased activity as new growth emerges from damaged plants.

Reports from the Glades indicate that leafminer activity has dropped off with the cold.

Respondents around Palm Beach and the East Coast indicate that leafminer pressure is low in squash, tomato and eggplant.

Reports from Homestead indicate that leafminers are still causing problems.
A number of growers across South Florida report good results with Coragen which has virtually eliminated leaf miner pressure on many farms. They also note improved populations of beneficials settling in on farms where broad spectrum sprays have been reduced.

**Whiteflies**

Respondents around Palm Beach report that whitefly numbers are low.

Around SW Florida, whitefly pressure is variable, in some places scouts report finding fairly high numbers of 5 - 6 per plant and report that even on the coldest morning last week they were still finding up to 5 per plant and they were all alive. In places where numbers had dropped off they are starting to pick up again following the cold, some older fields are developing nymphs.

Respondents in Homestead indicate that whitefly populations are pretty high in tomatoes and squash.

Note – it would be a mistake to think that whiteflies were killed by the cold – they are laying low and will most likely hone in on remaining green crops as temperatures increase.

**Recommendations**

**A. Crop Hygiene** - Field hygiene should be a high priority and should be included as an integral part of the overall strategy for managing whitefly populations, TYLCV incidence, and insecticide resistance.

- Disrupt the virus-whitefly cycle in winter by creating a break in time and/or space between fall and spring crops, especially tomato.
- Destroy the crop quickly and thoroughly, killing whiteflies and preventing re-growth.
- Promptly and efficiently destroy all vegetable crops within 5 days of final harvest to decrease whitefly numbers and sources of plant begomoviruses like TYLCV.
- Use a contact desiccant (“burn down”) herbicide in conjunction with a heavy application of oil (not less than 3 % emulsion) and a non-ionic adjuvant to destroy crop plants and to kill whiteflies quickly.
- Time burn down sprays to avoid crop destruction during windy periods, especially when prevailing winds are blowing whiteflies toward adjacent plantings.
- Destroy crops block by block as harvest is completed rather than waiting and destroying the entire field at one time.

**B. Other Cultural Control Practices** - Reduce overall whitefly populations, regardless of biotype, and avoid introducing whiteflies and TYLCV into crops by strictly adhering to correct cultural practices.

- Plant whitefly and virus-free transplants.
- Do not plant new crops near or adjacent to old, infested crops.
- Use determinant varieties of grape tomatoes to avoid extended crop season.
- Use TYLCV resistant tomato cultivars where possible and appropriate, especially during historically critical periods of virus pressure. Whitefly control must continue even with use of TYLCV resistant cultivars because these cultivars can carry the virus.
- Use ultraviolet light reflective (aluminum) mulch on plantings that growers find are historically most commonly infested with whiteflies and infected with TYLCV.
- Apply an effective insecticide to kill whitefly adults prior to cultural manipulations such as pruning, tying, etc.
- Rogue tomato plants with symptoms of TYLCV at least until second tie. Plants should be treated for whitefly adults prior to roguing and, if nymphs are present, should be removed from the field, preferably in plastic bags, and disposed of as far from production fields as possible.
• Manage weeds within crops to minimize interference with spraying and to eliminate alternative whitefly and virus host plants.
• Dispose of cull tomatoes as far from production fields as possible. If deposited in pastures, fruit should be spread instead of dumped in a large pile to encourage consumption by cattle. The fields should then be monitored for germination of tomato seedlings, which should be controlled by mowing or with herbicides if present.
• Destroy old crops within 5 days after harvest, destroy whitefly infested abandoned crops, and control volunteer plants with a desiccant herbicide and oil.

C. Insecticidal Control Practices.
• Delay resistance to neonicotinoid and other insecticides by using a proper whitefly insecticide program. Follow the label!
• Use neonicotinoids in the field only during the first six weeks of the crop, thus leaving a neonicotinoid-free period at the end of the crop.
• As control of whitefly nymphs diminishes following soil drenches of the neonicotinoid insecticide or after more than six weeks following transplanting, use rotations of insecticides of other chemical classes including insecticides effective against biotype Q. Consult the Cooperative Extension Service for the latest recommendations.
• Use selective rather than broad-spectrum control products where possible to conserve natural enemies and enhance biological control.
• Do not apply insecticides on weeds on field perimeters. These could kill whitefly natural enemies and, thus, interfere with biological control, as well as select for biotype Q, if present, which is more resistant to many insecticides than biotype B.
• Soil applications of neonicotinoid insecticides for whitefly control.
• For best control, use a neonicotinoid as a soil drench at transplanting, preferably in the transplant water.
• Soil applications of neonicotinoids through the drip irrigation system are inefficient and not recommended.
• Do not use split applications of soil drenches of neonicotinoid insecticides (i.e. do not apply at transplanting and then again later).
• Foliar applications of neonicotinoid insecticides for whitefly control.
• Foliar applications, if used instead of or in addition to soil drenches at transplanting, should be restricted to the first 6 weeks after transplanting. Do not exceed the maximum active ingredient per season according to the label.
• Follow scouting recommendations when using a foliar neonicotinoid insecticide program. Rotate to non-neonicotinoid insecticide classes after the first 6 weeks and do not use any neonicotinoid class insecticides for the remaining cropping period.

Aphids

Reports from around Palm Beach indicate that aphids building in eggplant and pepper.

Around the Glades and other parts of south Florida, aphid numbers have been increasing on remaining crops including celery and Chinese cabbage since the freeze.

Growers and scouts around SW Florida report increases in melon and green peach aphids on a variety of crops including cole crops, eggplant, pepper potato and squash.

Worms

Around Southwest Florida, worms have been fairly quiet except for the Devil's Garden area where some growers indicate they just won't quit. Scouts are finding southern and beet armyworm and report some issues with fruitworm on tomato. In other crops scouts have noted a slight increase in diamond back moth in cabbage.
and other cole crops, and note that they are finding armyworm egg masses in both tomatoes and peppers since the freeze.

Reports from Palm Beach indicate that worm pressure is mostly low with some egg masses being found.

**Broad mites**

Around Southwest Florida, broadmites continue to be active in pepper and eggplant.

Reports from Palm Beach County indicate that broad mites are common on pepper and eggplant.

**Spider mites**

Growers in scouts across south Florida report some problems with spider mites in eggplant, tomato, pepper.

Around Plant City scouts report seeing an increase in two-spot mites and the start of cyclamine mites building in strawberries.

**Pepper weevils**

Around Southwest Florida, scouts report pepper weevils remain fairly low.

Respondent in the Palm Beach area report that pepper weevil numbers are low and growers are treating aggressively were they are present.

**Thrips**

Growers and scouts in Palm Beach County report finding some western flower thrips in pepper and eggplant but note the majority of thrips they are finding are Florida flower thrips.

Elsewhere only Florida flower thrips have been reported and remain at very low levels over all.

**Stinkbug**

Growers and scouts around Southwest Florida report some problems with stinkbugs in scattered locations.

**Diseases**

**Late Blight**

Late blight continues to spread around southwest Florida showing up in places which had managed to stay clean over the last couple of weeks. There is some speculation that between poor markets and the freeze damage, the situation may deteriorate. Blight is present in both tomatoes and potatoes and respondents report finding it on some recently planted young tomato.

Growers and scouts in Palm Beach report that late blight is now present in scattered locations around Palm Beach.

Late blight is caused by the fungus *Phytophthora infestans*, which is a pathogen of potato and tomato.
The disease thrives under cool and wet conditions. Temperatures between 50 and 80 F combined with moist conditions such as rain, fog, heavy dews, or relative humidity above 90 percent are conducive for disease development. Night temperatures in the mid-fifties with daytime temperatures from the mid-fifties to mid-seventies are ideal for this disease.

Since the disease can spread so rapidly, growers should scout their fields thoroughly each day, especially when cool and wet conditions conducive to disease development prevails.

Late blight symptoms on leaves appear as irregularly shaped brown to purplish lesions with indefinite border lesions that can span veins. The lesions may be seen any time of day, on any stage of plant growth and on leaves of any age. Velvety, white fungal growth may appear on the lower surface of affected leaflets early in the morning before leaves dry and/or in the lower canopy.

On stems, purplish lesions may be found any where on the stem. Cottony, white growth of fungus on stems with lesions can often be seen early in the morning and/or in the lower canopy. Stems with lesions are brittle and break easily. Lesions are confined to epidermis and cortex. Leaf rolling and wilting is often associated with stem lesions and purpling of leaflets may occur in some varieties.

Currently, fungicides are the most effective means of controlling late blight and will remain the primary tool until cultivars with resistance to this disease become available. Fungicides slow the rate at which the disease develops in the field by creating a protective barrier on the foliage. Just applying a chemical, however, does not necessarily equate with effective disease control. Relative effectiveness of a product, coverage, and timing must be factored into the equation for maximum benefit.

Numerous fungicide products are registered for late blight control. Protectants, as the name implies, protect foliage from infection by spores. Protectant chemicals must be well distributed over the leaf surface and must be applied before spores land on leaves. They are ineffective against established infections.

Systemic products become distributed locally within plant tissues and protect foliage from infection by spores. They may kill some established infections and may suppress production of new spores. Even a short break in spray schedules, despite what is said regarding some of the newer fungicides, can result in a dramatic increase in blight.

In trials conducted by Pam Roberts at SWFREC in Immokalee, the old standard Bravo performed well in providing control as did Curzate, Presidio and Revus Top. In past years, some growers have reported good results with a program of phosphonic acids in combination with Sonata.

In Florida, it has been observed that seldom does a widespread late blight epidemic occur on tomatoes in the Manatee-Ruskin area unless the disease was present in the Immokalee area and/or Dade County. Since late blight has been confirmed on tomato in Immokalee growers in other areas are advised to adhere to a preventative spray program.

Fusarium Crown Rot

Around Immokalee, fusarium crown rot and some fusarium race 3 is starting to show up and growers can probably expect to see more after water levels were pumped up for cold protection last week and probably again this week.

Reports from Palm Beach indicate that fusarium is bad in number of places and report that it seems worse in drip fields.
**Phytophthora**

Growers and scouts around Palm Beach continue to experience problems with *Phytophthora* primarily in fields with a history of the disease.

Around Southwest Florida, *Phytophthora capsii* is present in peppers at low levels, probably due largely to flooding fields for freeze protection.

**TYLCV**

On the East Coast, tomato yellow leaf curl virus continues to increase in occurrence and severity.

Reports from Homestead note growers are beginning to see some TYLCV on tomatoes but incidence remains pretty low.

Around Southwest Florida TYLCV incidence remains very low with a few hotspots reaching 5-10% infection rate.

**Bacterial leaf spot**

Around Southwest Florida, bacterial spot has slowed down but is still present in older tomato and respondents report finding new lesions in younger pepper.

Respondents on the East Coast report bacterial spot incidence is stable with a few new infections around.

Strawberry producers are reporting increased problems with bacteria to watering during freeze.

Around the Glades, bacterial leaf spot is causing some issues on escarole.

**Sclerotinia**

Reports from around Southwest Florida indicate that sclerotinia seems to have slowed in most places, with infections present on tomato and pepper, and more in pepper.

Around the Glades, there is some sclerotinia showing up on lettuce.

**Around Palm Beach report sclerotinia is still around in pepper and eggplant.**

*Topsin M has given good results on sclerotinia.* EPA has extended the expiration date of the Section 18 use of Topsin M WSB on fruiting vegetables in Florida from December 31, 2008 to April 24, 2009. Label must be in applicators possession at the time of application. Call if you need a copy of the Section 18 label.

**Downy Mildew**

**Around Palm Beach County, downy mildew continues to be a problem on squash.**

Growers and scouts around Southwest Florida report that downy mildew still hurting cucumbers, and is present in many squash fields but not near as bad as in cucumber.

Respondents from Homestead report increasing problems with down mildew on cucurbits.

**Around the Glades and around South Florida downy mildew has increased on cruciferous crops.**
Across South Florida, downy mildew on basil is still an important disease and growers should be on a very strict, preventative spray program if they want to control it. The phosphites are effective when applied early, and these should be alternated in a program with azoxystrobin (Amistar or Quadris) to provide the desired control. Spray intervals should be no more than 7-days, with 2 times per week preferable. Once plants are infected, it is very difficult to control. Research is being conducted on additional chemistries with IR-4 and soil applications for early disease control are also being researched.

A variety trial is being initiated to examine varieties and basil types for potential resistance. We will try to keep you posted as results are accumulated. Also, work is being initiated with IR-4 for the registration of additional fungicides for both greenhouse and field use, along with research on fungicide seed treatments. This disease is highly suspected as being seed-borne, which has resulted in its rapid spread over great distances.

Since its original observation in Florida in 2007, it has now been observed in NJ, NY, NC, MO and Canada. For the organic market, preventing any form of leaf wetness is your best management hope. Since this is a new disease for many, if you have questions on managing this disease, call Dr. Richard Raid at 561-993-1564.

Powdery Mildew

Growers and scouts in all areas of South Florida are having significant problems with powdery mildew on squash and other cucurbits that survived the freeze.

Botrytis

Respondents around south Florida continue some problems with botrytis. Gray mold is a fairly common problem in tomato and can also attack beans, eggplants, pepper, and potato as well as many ornamentals.

Around Plant City respondents report botrytis is on the rise in strawberry. After all the water applied for freeze protection growers need to watch and spray for Botrytis. Although climatologists indicate that La Nina is in place and botrytis models say chances are low and there is not much need to spray for it, experienced scouts and growers report that with all that water already applied and rain coming up in the next couple of days and possibility of more freeze water being needed over the next few days, botrytis is something to be concerned about.

Target Spot

Around Immokalee, target spot is still around at low levels on older tomatoes working on the lower inner foliage and up inside the canopy.

Target spot is also present at low levels around Palm Beach County.

Target spot is frequently misdiagnosed as in its early stages as leaf lesions are difficult to recognize and may be mistaken for bacterial spot

The name derives from the bull’s eye appearance that is often displayed in lesions caused by the disease. Since concentric rings are not always visible and not all lesions with concentric rings are target spot, it is recommended that a laboratory diagnosis be obtained to ensure that a correct diagnosis is made.

On tomato leaves and stems, the disease first appears as small necrotic lesions with light brown centers and dark margins. Some varieties display a pronounced yellow halo around these leaf spots. Individual lesions often coalesce and cause a general blighting of leaves.
Target spot is controlled primarily by applications of protectant fungicides. It should be noted that tank-mix sprays of copper fungicides and maneb do not provide acceptable levels of target spot control. Recommended fungicides include various chlorothalolin formulations (Bravo, Echo, Bravo Ultrex, Bravo Weather Stik and Ridomil Gold/Bravo).

Early Blight

A few reports of Alternaria on tomato are starting to come in from several locations around south Florida.

Gummy Stem Blight

Around Southwest Florida, gummy stem is causing some problems on young watermelon

In Florida, gummy stem blight is a serious disease that occurs annually on watermelons. Infection and symptoms may occur on all plant parts and at any stage of development from seedlings to maturity.

Symptoms appear as light to dark brown circular spots on leaves or as brown to black, lesions on stems. Wilting, followed by death of young plants may occur. Stem lesions enlarge and slowly girdle the main stem resulting in a red-brown-black canker that cracks and may exude a red to amber gummy substance. Vine wilting is usually a late symptom. Use of a hand lens will reveal small, clear white (when young) to black (when old), pycnidia embedded in older diseased tissue.

Because other plant disorders can cause exudation of a gummy substance, “gummy-ness” should not be relied upon for diagnosis of gummy stem blight. Anthracnose and inadequate liming can both cause stem lesions and gumming.

Gummy stem blight typically progresses from the central stem of the plant to growing tips. Leaf spots are variable in shape, red-brown in color and initial infections are generally seen on leaf margins and veinal areas.

The fungus (Didymella bryoniae) produces two spore stages, a sexually produced spore (ascospore) and an asexually produced spore (pycnidiospore). The ascospore is windborne and serves as a primary source of inoculum. The pycnidiospore functions in secondary spread of the disease. Pycnidiospores are released in a gummy substance that makes them adaptable for spread by splashing water.

Growers often comment on this disease occurring “overnight.” What they are actually seeing are the results of secondary spread, which is more difficult to control than primary spread simply because of increased spore numbers with increased diseased tissue.

Temperatures and moisture conditions are often ideal for development during watermelon season in Florida. Gummy stem blight is most severe in wet years since moisture is necessary for spore germination. After a spore germinates on a susceptible host, the fungus penetrates the plant tissue and symptoms can appear in 7 to 12 days.

Gummy stem blight can be successfully managed using a combination of control strategies. Control of primary sources of inoculum is important. Growers should purchase clean seed and avoid transplants that have gummy stem blight or other diseases.

Multiple applications of fungicides are necessary to control gummy stem blight. It is important to begin a fungicide program prior to the first sign of gummy stem blight. In south Florida, the spray program should be initiated soon after emergence or transplanting. In other areas of the state, fungicide spray programs can be
initiated when the vines begin to “run.” When vines are small, band applications of fungicide over the crown area are effective and help reduce application costs.

In recent years, strains resistant to the strobilurin fungicides have been detected throughout the Southeast, so it is important that growers practice resistance management and avoid repeated applications of these materials. New materials such as Pristine (BASF) a mixture of boscalid and pyraclostrobin has shown good efficacy against resistant strains of the disease.

Mosaic

Mosaic virus is present on squash around South Florida.

White Rust

Some problems with white rust on mustard have been reported from Palm Beach County.

News You Can Use

Operation Cleansweep

The Florida Department of Agriculture and Consumer Services and the Florida Department of Environmental Protection are again joining forces to collect and safely dispose of cancelled, suspended or unusable commercial pesticides for the 9th annual Operation Cleansweep.

Operation Cleansweep is a convenient, cost-effective public-private partnership to dispose of unwanted or outdated pesticides, providing free collection and disposal for Florida’s pesticide consumers.

To participate in Operation Cleansweep, commercial pesticide applicators can call FDACS at (877) 851-5285 or download the sign up form at www.flaes.org/pdf/Flyer2006.pdf. For more information, visit DEP’s website at www.dep.state.fl.us/waste/categories/cleansweep-pesticides.

2009 Florida Certified Pile Burner Courses

The Florida Division of Forestry and University of Florida IFAS are cooperating to offer Certified Pile Burners Courses in 2009. This course will show you how to burn piles legally, safely and efficiently. Most importantly, it could save a life by decreasing risks associated with smoke on roadways. If you burn piles regularly, don't put off registering for this training. **When the weather is dry, certified pile burners will receive priority for authorization to burn.** Also, certified pile burners are allowed to burn up to two hours longer per day and get multiple day authorizations. Don't wait. The number of trainings offered and attendance at each training is LIMITED. The cost of the course is $50 per person and includes all course materials, test and lunch.

February 24, 2009; Highlands County Extension Office in Sebring, FL

See [http://www.fl-dof.com/calendar/cal_pdf/pile_burner_sebring_Feb2009.pdf](http://www.fl-dof.com/calendar/cal_pdf/pile_burner_sebring_Feb2009.pdf) for details and registration form. Please share this information with your clients, constituents, neighbors or others that may be interested.

Florida's Certified Pile Burner Course is a service of:
Florida Division of Forestry
University of Florida - IFAS, School of Forest Resources and Conservation University of Florida - IFAS,
Cooperative Extension Service
It may seem that this class is not for vegetable growers but in conversations that I have had with the Department of Forestry – this is why citrus growers can burn when vegetable growers are denied permits. Having this certification is no guarantee but will cause the Department to look more favorably on allowing you to burn especially in dry times. – GM

**Farm Labor Contractor Compliance**

US DOL Wage and Hour Officials are reportedly instituting compliance inspections targeting citrus and vegetable operations across South Florida. It would be well advised to review your level of preparedness in advance of a possible inspection.

**Its’ Hot But Don't Blame Global Warming**

Some Florida cities are getting hotter, but the evolution has more to do with bulldozers and pavement than global warming.

Morton D. Winsberg fell in love with Florida more than 50 years ago, but the Illinois-born geographer never quite got used to the dog days of summer. In recent years, the Florida State University professor emeritus and author of a book called “Florida Weather” began wondering: Is global climate change making Florida’s hot season longer and hotter? With help from geography students and researchers at FSU’s Population Center and Florida Climate Center, Winsberg and co-author Melanie Simmons gathered and analyzed temperature data from 57 Florida weather stations going back six decades.

Their research showed that the hot season in Florida has gotten a lot hotter — and longer — in some places, but not at all in others. The change, however, is unrelated to global warming, the increase in the average temperature of the earth’s atmosphere. Rather, they found, it’s a function of the lesser-known phenomenon of local warming. The analysis “shows that weather can be very local,” says Winsberg, “and also that weather can be a function of population growth.”

Winsberg found the most notable climate changes along the state’s southeastern coast, where development and wetlands drainage have been heaviest. In most areas he analyzed, the heat is getting more intense. Of the 57 weather stations, 49 saw an increase in the number of days with an average temperature of 80 degrees. When it came to the length of the hot season, the biggest increase was in Hialeah, with a 72-day increase, followed by Miami, with a 45-day increase.

Neither the intensity of the heat nor the increasing number of hotter days was related to water temperatures in the Atlantic and Gulf, a fact that surprised Winsberg. The heat trends also weren’t consistent across the state. In fact, some areas, notably in the northeast part of the state, saw a shorter hot season and a decrease in the number of dog days.

That evidence leads Winsberg and FSU meteorologists to blame the hot spots on local land-use changes that accentuate the urban “heat-island” effect — the pools of heat that large, dense concentrations of people produce in their local climates. Cutting down trees, draining wetlands and pouring concrete all make a place hotter, as anyone who’s walked across an asphalt parking lot on a summer day knows, Winsberg says. **(Another reason to preserve agricultural lands! – GM)**

by Cynthia Barnett, Florida Trend online, 1/30/09

**EU pesticide law condemned by chemists**

Scientists, farmers, governments and the agrochemicals industry have united in their condemnation of a new EU law to control the use of pesticides. Critics have slammed the law as emotionally rather than scientifically
motivated, after the legislation was passed by the European Parliament on 13 January without any scientific assessment of its potential impact on agriculture and food production. The legislation changes the safety criteria that pesticide formulations must satisfy to be approved for use - leading to speculation that up to 15 per cent of currently available pesticides could be banned outright, with potentially serious affects on agriculture and food production. Under the new rules, scientific risk assessments which take account of exposure levels and control measures will be replaced by hazard-based cut-off criteria. Supporters claim that the new, hazard-based approach will protect the public from harmful effects of exposure to chemical pesticides and their residues. But Julian Little, public & government affairs manager for Bayer CropScience and chair of communications for the UK Crop Protection Association, explains why this approach is fundamentally flawed: 'Pesticides are by their nature biologically active, and therefore if you go out looking for hazards associated with them, chances are you'll find one.' By ignoring such things as safe working practices and even the dosage involved, the new rules will disregard products which have been proven safe over years of use and by 'a regulatory system which is second to none in the world', he claims.

The lack of an official impact assessment has worried the governments of several member states, including the UK, Spain, Ireland and Hungary. The UK government's pesticide safety directorate's latest report puts forward three possible scenarios based on a range of interpretations of the hazard-based cut-off criteria, all leading to significant yield losses in a range of food crops, with 'no meaningful benefits to public health protection beyond those already provided by the existing risk assessment arrangements'. The lack of an EU impact assessment was criticized by Hilary Benn, the secretary of state for environment, food and rural affairs, at the Oxford Farmers' Conference in December. 'Closing your eyes and crossing your fingers is not a good way to take decisions. We need [analysis] based on evidence and a clear understanding of the impact,' he said.

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The legislation also lacks any meaningful description of the criteria under which products will be banned, particularly regarding endocrine disruptors (compounds which interfere with the body's hormone signaling system), say scientists. Paul Leonard, an entomologist at BASF crop protection, explains that there is currently no agreed definition of what constitutes harmful endocrine disruption. Thanks to extensive lobbying, the legislation now recognizes this and stipulates that firm scientific criteria on the meaning of endocrine disruption are required within four years.

However, the Parliament insisted on an interim definition based on substances classified as category three carcinogenic and toxic to reproduction (C3+R3). 'By definition, these are the products that have the most tentative association with endocrine disruption, but the scare campaigns have associated them with gross endocrine effects on the human population,' says Leonard. 'At a certain stage in an in vitro study, at very high concentration, some effects were observed, and that's why they're category three. The link between that and human reproduction has never been made, and if it had been [the products] would be banned already. There is no logic behind the use of C3+R3, and it is ridiculous that we have European legislation based on a total lack of scientific rationale.'

There will undoubtedly be some impact on producers of pesticides across Europe, but given the lack of clarity in the legislation, the ultimate effects are impossible to quantify. It will take nearly two years for the legislation to become law, and initially will only affect products as they are introduced or come up for renewal of approval, which takes place every 10 years.

It has been suggested that removing old products from the market will lead to increased innovation from agribusiness, bringing in new products with different modes of action. This, says John Lucas, head of plant pathology and microbiology at Rothamsted Research, is easier said than done. He points out that for septoria, the principal fungal disease in wheat, only two new modes of action have been discovered in the last 20 years and one of those, the strobilurins, became useless within three years due to resistance. 'We're really dependant on [triazole-type fungicides] which first came onto the market 25 years ago. Triazoles make a major contribution to increased yields and increased quality - they'd be very difficult to replace quickly if we lost them. - Phillip Broadwith, Chemistry World, 23 January 2009
Pesticide Potpourri – Registrations and Label Changes

**Topsin Section 18** - Clay Owens at UPI reports that that EPA has extended the expiration date of the Section 18 use of Topsin M WSB on fruiting vegetables in Florida from December 31, 2008 to April 24, 2009. Label must be in applicators possession at the time of application. Call if you need a copy of the Section 18 label.

**Requiem** – Dennis Long of AgraQuest reports that EPA granted a Sec. 3 food crop registration for Requiem on December 15, 2008 and the Florida Dept of Ag. Granted registration for use within Florida on January 8, 2009. Requiem (formally QRD400/416) has been tested extensively in FL over the past several years. University research has shown that Requiem has good activity on whitefly adults, eggs & immature stages. This whitefly activity has been further demonstrated by reduced incidence of watermelon vine decline on watermelons and TYLCV on tomatoes in University trials. Large-scale grower demos have shown good results for control of western flower thrips on peppers in counties where spinosad resistance to WFT populations have been documented.

**Oberon** – Mike Edenfield of Bayer CropScience reports that there is a new supplemental label for Oberon. The EPA has approved a reduction in Pre Harvest Interval from 7 days to 1 day in tomato. The reduction in PHI will allow late-season applications of Oberon for residual Whitefly, Broad Mite, and Two-Spotted Spidermite control in tomato.

**Position Available**

Nichino America, Inc. (NAI) with headquarters located in Wilmington, DE. is currently looking for a technical sales representative for the Northeast. Please see description below:

Job Title:  Technical Sales Representative  
Location:  Florida East Coast

Essential Duties and Responsibilities:

- Citrus and vegetable background preferred with ability to cross over into other markets. A working knowledge of crop protection products is desirable.
- Promotes the use of NAI’s products with distributors, dealers, and growers. Makes face-to-face, phone and e-mail calls and contact throughout assigned territory to meet with all applicable NAI customers.
- Prepares timely reports of customer contacts and business transactions and keeps accurate expense accounts.
- Develops and maintains key customer account plans and records for sales potential and scheduled sales calls, key contacts and business profile
- Attends trade shows, key account meetings, local trade association meetings and sales meetings
- Implement and fully execute all sales promotions and programs developed with marketing to gain new users and retain loyal users
- Provides ongoing feedback and marketing intelligence to assist in developing effective annual marketing plans and their implementation in the marketplace.
- Works with commodity groups, key influencers, PCA’s, Crop Consultants, and University Extension Specialist in the territory, and assists Marketing, Product Development and Regulatory to facilitate and identify new uses and needs for NAI products.
- Collects, analyzes, and communicates market, crop and competitive information, including local competitive pricing and promotional programs.
- Works with NAI Customer Service Representative to keep customer account activities up to date and ensure customer satisfaction.
- Develops recommendations for improving the company’s position and sales in the assigned sales territory.

Submit Resume to:
Paul Hudson
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5759 Sandy Pointe Dr.
Sarasota, Fl. 34233
phudson.nichino.net

Farm Land for Lease

Farm Land for lease in LaBelle area – contact Greg Jones at 863-675-0545

Agriculture land available for a long term lease of 8-10 years. This 320 acre property is located in Martin County on Hwy 609 and 3 miles north of Hwy 710 (The Beeline Hwy). It is within the Troop Indiantown Water District (TIWD) which provides for irrigation water and free-flowing drainage. This land is free of wetlands and cleared for farming. Contact Miguel Perales: 561-718-4635.

Up Coming Meetings

Manatee County

February 10, 2009  WPS – Train the Trainer Workshop
Manatee County Extension Service
Palmetto, Florida
Contact Crystal A. Snodgrass at 941-722-4524

Southwest Florida

February 17 -18, 2009  Pesticide License Review Class and Testing
Core, Private – February 17
Row Crop, Tree Crop, Aquatic – February 18
Hendry County Extension Office
LaBelle, Florida
Contact 863-674-4092

Websites

Watermelon Diseases – UF/IFAS site with photos, description and recommended controls for a wide array of watermelon disease problems – set your browser to [http://watermelons.ifas.ufl.edu/diseases/diseases.htm](http://watermelons.ifas.ufl.edu/diseases/diseases.htm)

Florida’s Lost tourist Attractions - Once upon a time, before the giant mouse ate Orlando and Interstate Highways were built to cattle chute the tourists directly into International Drive, there was another Florida. It was somewhere between Henry Ford's mass production of the Model-T, which made automobile touring a commonplace, and Walt Disney's mass production of the tourist experience, which made the road trip a mere way to get there, instead of the there itself. It was the age of the roadside attraction. Check it out at http://lostparks.com/

Quotable Quotes

Tact is the ability to describe others as they see themselves. - Abraham Lincoln

How far you go in life depends on you being tender with the young, compassionate with the aged, sympathetic with the striving and tolerant of the weak and the strong. Because someday in life you will have been all of these. - George Washington Carver

The trick is in what one emphasizes. We either make ourselves miserable, or we make ourselves happy. The amount of work is the same. - Carlos Castaneda

When I was a boy of fourteen, my father was so ignorant I could hardly stand to have the old man around. But when I got to be twenty-one, I was astonished at how much the old man had learned in seven years. - Mark Twain

Opportunity is missed by most because it is dressed in overalls and looks like work. - Thomas Alva Edison

On the Lighter Side

Norwegian Math Test

A Norwegian fella wants a job, but the foreman won't hire him until he passes a little math test.

Here is your first question, the foreman said. 'Without using numbers, represent the number 9.'

'Without numbers?' The Norwegian says, 'Dat's easy.' and proceeds to draw three trees.

'What's this?' the boss asks.

'Vot! you got no brain? Tree and tree and tree make nine,' says the Norwegian.

'Fair enough,' says the boss. 'Here's your second question. Use the same rules, but this time the number is 99.'

The Norwegian stares into space for a while, then picks up the picture that he has just drawn and makes a smudge on each tree. 'Dar ya go.'

The boss scratches his head and says, 'How on earth do you get that to represent 99?'

'Each of da trees is dirty now. So, it's dirty tree, and dirty tree, and dirty tree. Dat is 99.'

The boss is getting worried that he's going to actually have to hire this Norwegian, so he says, 'All right, last question.

Same rules again, but represent the number 100.'
The Norwegian fella stares into space some more, then he picks up the picture again and makes a little mark at the base of each tree and says, 'Dar ya go. Von hundred.'

The boss looks at the attempt. 'You must be nuts if you think that represents a hundred!'

The Norwegian leans forward and points to the marks at the base of each tree and says, 'A little dog come along and pooped by each tree. So now you got dirty tree and a turd, dirty tree and a turd, and dirty tree and a turd, vich makes von hundred.'

'So, ven do I start?

Hillbilly

After living in the remote wilderness of Kentucky all his life, an old hillbilly decided it was time to visit the big city.

In one of the stores he picks up a mirror and looks in it. Not ever having seen one before, he remarked at the image staring back at him, 'How about that! Here's a picture of my daddy.'

He bought the mirror thinking it was a picture of his daddy, but on the way home he remembered his wife didn't like his father, so he hung it in the barn, and every morning before leaving for the fields, he would go there and look at it.

His wife began to get suspicious of these many trips to the barn.

One day after her husband left, she searched the barn and found the mirror.

As she looked into the glass, she fumed, 'So that's the ugly witch he's runnin' around with.

Budding Politician

A young cowboy from Texas goes off to college at Arkansas, but half way through the semester, he has foolishly squandered all his money. He calls home.

'Dad,' he says, 'You won't believe what modern education is developing! They actually have a program here in Little Rock that will teach our dog, Ol' Blue how to talk!'

'That's amazing,' his Dad says 'How do I get Ol' Blue in that program?'

'Just send him down here with $1,000' the young cowboy says. 'I'll get him in the course.'

So, his father sends the dog and $1,000.

About two thirds through the semester, the money again runs out. The boy calls home.

'So how's Ol' Blue doing, son,' his father asks.

'Awesome, Dad, he's talking up a storm,' he says, 'but you just won't believe this - they've had such good results they have started to teach the animals how to read!'

'Read!' says his father, 'no kidding! How do we get Blue in that program?'
'Just send $2,500, I'll get him in the class.'

The money promptly arrives.

But our hero has a problem. At the end of the year, his father will find out the dog can neither talk, nor read. So he shoots the dog.

When he arrives home at the end of the year, his father is all excited. 'Where's Ol' Blue? I just can't wait to see him read something and talk!'

'Dad,' the boy says, 'I have some bad news. Yesterday morning, just before we left to drive home, Ol' Blue was in the dorm room, kicked back in the bed, reading the Wall Street Journal, like he usually does. Then he turned to me and asked, 'So, is your daddy still messing' around with that little redhead who lives in town?''

The father exclaimed, 'I hope you shot that dog before he talks to your Mother!'

'I sure did, Dad!'

'That's my boy!'

The kid went on to be a successful lawyer and congressman

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