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an Association of Floriculture Professionals

A Few Thoughts on How to Deal With High Heating Costs

by Claudio C. Pasian

During the last two years, growers' worries and complaints have increased as fuel prices have climbed. Some growers have even told me that they will not be able to survive if energy costs keep rising. With present energy costs, growers may have to adopt many of the energy-saving techniques that were developed during the '70s, and to some extent, forgotten during times of "bonanza."

The amount of fuel used to maintain a given temperature in the greenhouse depends on many internal and external factors. However, a "rule of thumb" indicates that for each degree Fahrenheit we reduce the greenhouse temperature, we reduce by 3 percent the cost of heating. If this rule is true, even modest reductions in greenhouse temperatures can produce substantial energy cost savings. Growers are always tempted to lower the temperatures on their thermostats.

The question is: can we reduce greenhouse temperatures and still produce high quality crops? The answer to this question is yes, no, and it depends. Very clear, right? Some crops like vincas and begonias suffer at lower temperatures, and they take too long to reach shipping size. Crops like nemesias and trailing snapdragons may actually reward lower temperatures with improved flowering. Other crops, like some osteospermum cultivars, require low temperature for flowering by a process called vernalization.

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Industry Guide to Marketing Container Plants

Editor's Note: State and related weights and measures compliance staff have discovered that some long-time floriculture container labeling and advertising practices violate or ignore consumer information requirements. The industry must come into compliance with the law, and those not in compliance could incur some substantial penalties.

This ***Industry Guide to Marketing Container Plants*** was developed by ANLA with assistance from HAHSA, PMA, SAF, and OFA, as an aid to facilitate industry compliance with the least amount of disruption and expense over current industry practices. It is your responsibility to label and sell containers that meet the compliance guidelines. OFA encourages you to read this document carefully and comply with the law.

Purpose of the Guide

This publication is intended to provide guidance to industry retailers and their suppliers on the minimum information required by law in selling "packaged products," including containerized plants. This guide summarizes the law and regulations about what types of information are required and how that information must be presented. Where possible, this guide offers specific suggestions on how businesses in the horticulture industry can meet these requirements that have been in the law for a number of years, but are just now coming to the industry's attention.

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OFA Mission Statement
To support and promote floriculture professionals through lifelong learning, career enhancement, and public awareness.

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Prognostication

Intro by Steve Carver

What will America's favorite sport be this January? No, it's not Oklahoma vs USC in the Orange Bowl, or the NFL playoffs and the SuperBowl. It's not even college basketball or the NBA (sometimes masquerading as professional wrestling). It's prognostication. Pick up the January or New Year's issue of most magazines or newspapers, and you will find a list of the top issues or technologies that the editors predict will impact their readers in the coming year. What makes this soothsaying a sport is that there are so many potential unknowns that can fly in from left field that can influence and shape an industry in ways unforeseen at the year's start. "Life" in general often more closely resembles an exercise in chaos theory than a well-choreographed dance step. The real sport in forecasting comes at the end of the year, when we have a chance to look back and see how our predictions and expectations played out.

Because for us, floriculture is not a spectator but a participatory "sport," prognostication is an essential part of business. A grower or vendor who does not consider the potential impact of outside influences or occurrences in their business planning is liable to be thrown out of the "game" long before it ends. With this in mind, we asked the editors from four of our leading trade journals to go out and check the field for us and share their thoughts and insights. Specifically, we asked Chris Beytes (***GrowerTalks***), Dave Kuack (***GMPro***), Delilah Onofrey (***Greenhouse Grower***), and Bridget White (***GPN***) to list for you a half dozen current or potential issues with which the industry will grapple this year; and we asked them to expand on at least two of them. OFA would like to thank each of them for their willingness and promptness in accepting and completing the challenge. Some of the insights that you are about to read are from the infield, i.e. issues directly related to our industry. Others are from the outfield, i.e. more peripherally related, and yet may have a profound impact. Together, they present an overview of several issues of which astute growers and other floriculture professionals will take note and follow. Bridget, Delilah, Dave, and Chris – THANKS!

GrowerTalks' View

by Chris Beytes, GrowerTalks

A daunting task, this idea of waxing poetic about issues that "will loom large this year," as Steve Carver put it to me and my fellow magazine editors. Now, I've never been one to pretend to know more about your business than you do. You know what issues are most important to you at any given moment, and they may not match up with anything I have to say. But then again, I've owned a greenhouse, so I know how tough it is out there. I try to talk to a fair number of you every week. And I sit in an ivory tower (limestone, actually) that gives me good view of the industry while you're sweating it out in the trenches, doing the real work. So maybe my vantage point can be of help to you as you plan your direction not only for the next year, but for seasons to come. Here are my three picks:

Container labeling regulations. This started out complicated, then got simple, but will probably get complicated again before everyone adopts it. I almost left it off the list … then got one call and one e-mail the morning I was writing this article, which put it back on my radar.

In a nutshell, here's the law: Retailers need to provide three pieces of information for every plant they sell – 1) what's in the pot, 2) how much the pot holds, and 3) who's responsible for producing what's in the pot. (The same information that's already on every consumer product you buy.)

"What's in the pot" can be as complicated as genus and species or as simple as the word "annual." You decide.

"How much the pot holds" will be the soil volume in English and metric. Pot companies will, no doubt, have that information available so you don't have to calculate it yourself.

"Who's responsible" can be the grower or the retailer or a middleman distributor, as long as there is a company name, city, and state listed.

These three pieces of information have to be on the pot, on a tag, or posted adjacent to where the product is being sold. If you do your best to comply with the "spirit" of the law as stated above, you shouldn't have any problems.

If you sell to any sort of major retailer, you're probably already working on complying with the law – which will help out all the smaller growers and retailers, as you larger growers will be the ones working the bugs out of the system. There'll be some questions and concerns this year, which is why it made my list; but seeing how everybody has to comply and nobody has a choice in the matter, I think we'll get through it and move on to more important topics. Like:

Shrinking margins, rising costs. Surprise, we're in the middle of another expensive heating season. Surprise, gas and diesel prices are up. Surprise, your suppliers are putting surcharges on the bottoms of their invoices. But hopefully, all of this will go away this season and you can go back to making the kind of money you made a few years ago when natural gas was $2 a decatherm and gasoline was $1.19 a gallon, right? Yeah, and a new car used to be $8,000, too. Dream on.

It's getting harder and harder for businesses – especially small ones – to absorb costs and risks. Some businesses may be one or two crises away from closing their doors for good. But it's just plain bad business to try to absorb every price increase that comes along, hoping you can make up for it someplace else. Those days are over. Especially in today's marketplace, where you can be sued when a customer trips while carrying a flat you delivered to the retailer weeks ago (a true case a South Dakota grower faced recently). Or when a customer such as Frank's declares bankruptcy.

The solution is raising prices, reducing costs, increasing volume, increasing efficiency, or some combination of the four. No doubt you've already contemplated your options. Maybe you've dabbled with a shipping surcharge or some efforts of gaining a bit of efficiency, such as installing rolling benches. But the time for contemplation and dabbling is over. It's time to get serious about every aspect of pricing, production and efficiency. I think 2005 is as good a time as any to step back and look at your business objectively. Maybe invest in an outside consultant to put some fresh eyes on the situation. Take nothing for granted. Remove from your vocabulary the words, "We've always done it that way." Because for sure, nothing else is going down in price. So why should your product?

Finding your niche. "Niche marketing:" one piece of the profit puzzle above. The industry hasn't talked much about niche marketing lately. The term is almost passé. But figuring out what makes your business unique and special is more essential than ever. Otherwise, you're left to compete on price alone … and as you know, there's always somebody willing to be a nickel cheaper than your lowest price.

One thing to realize is that "niche" doesn't mean small. You can have 100 acres and your niche is being the most efficient production and service for the mass markets. You can be under an acre and your niche is growing and retailing ultra-high-quality mixed baskets. Niche has *nothing* to do with size and *everything* to do with focus.

And that focus should permeate *everything* you do. It should be framed and displayed as your company's mission statement. It should help you formulate your daily to-do list. If you say your niche is high quality, it can't just be high-quality plants, because average-quality service will drag down high-quality plants every time. You'd better have the best people, the best Web site … and the cleanest fleet of trucks, too!

The key to remember about this niche business is that if you don't choose one, your competition will choose it for you. You'll be that average grower with the mediocre quality and the so-so service, left in the dust.

Wouldn't that look lousy on the wall of your conference room?

Ode to '05

by Dave Kuack, GMPro

You know the year ahead is going to be a good one economically when more companies were planning to have holiday year-end parties in 2004. Some companies may have held back on raises and year-end bonuses, but more were willing to give back to their employees who have suffered through some tough economic times since September 11, 2001. *USA Today* reports that a poll conducted by executive search firm Battalia Winston International found that 95 percent of companies planned to have a holiday celebration of some kind.

If there is one thing that could put a damper on all those parties, it's the concern over fluctuating fuel prices that

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Ode to '05

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affect both corporations and consumers. After hitting a peak of $55 in October, the price for a barrel of crude oil has been as stable as the fans at a Detroit Pistons-Indiana Pacers basketbrawl game. Uncertainty over availability caused by fluctuations in oil and natural gas inventories, concerns with oil-producing countries including Iraq, Russia and Nigeria, and winter weather forecasts have all contributed to unstable and unsettling prices.

But there is one steadying factor in the U.S. economy: the housing market. Even though interest rates have increased slightly, housing sales of new and previously owned homes along with consumer spending have remained bright spots of the U.S. economy. Market analysts even projected that 2004 housing sales would set new records.

USA Today reports that although economists expect short-term interest rates to rise this year, they don't expect the increase to be enough to slow down spending by U.S. companies. Businesses, which previously held the line on price increases, have become more willing to pass along those higher costs to consumers.

As the population ages, expect more changes. The *Fort Worth Star-Telegram* reports that of the 75 million people in their 40s, 50s and early 60s, 20 percent to 30 percent have or are planning to downsize. The paper reports that many of these baby boomers are empty nesters who no longer have children living at home. They are leaving the suburbs to return to revitalized city centers that offer less traffic, yardwork and home maintenance, and easier access to restaurants, shops and entertainment venues including museums, theaters and concerts.

John McIlwan of the Urban Land Institute (www.uli.org), a Washington, D.C.-based research and education organization, told the *Star-Telegram* that Americans who have traveled to Europe want to emulate the street life they have seen there. And U.S. cities are increasingly trying to accommodate them by revitalizing their downtown areas.

Leslie Marks, executive director of the National Association of Home Builders' Seniors Housing Council (www.nahb.org), expects the number of suburbanites seeking to downsize will increase for the next 15 years. She said people are seeking to do the things they weren't able to do while they were raising children. Hopefully, more gardening and the use of plants will be part of their agenda.

Since I'm writing this in December, it's time to get back to that year-end party. Hope you and your company have a great year ahead!

Thoughts

by Bridget White, GPN

When Steve Carver asked me to contribute to OFA's editors' outlook, I was busy arranging a similar feature for *GPN* and *Lawn & Garden Retailer*. After writing my contribution, I now have a new respect for those people I ambush every year for my article. It's not so easy boiling down all the industry's challenges, opportunities, and rumors into just six items. Here is my best effort, and yes, the topics are intentionally broad. I did that to try to cover as much ground as possible. Pretty sneaky, huh?

Consolidation. Some of us in the industry have been speculating about the coming of a big consolidation for a couple of years now, and this might actually be the year we see it. With the closing of Frank's and the transition of Home Depot to pay-by-scan, which will necessitate single vendor stores, these kinds of consolidation at retail could have a big impact on growers. Frank's is closing 169 stores; how will all that product be reallocated, and who will get pushed out to make space for it? What will happen to the smaller growers who were sending some product to Home Depot but were not major suppliers, and therefore, not selected as single vendors? Can we expect to see these guys contract growing for the growers that were awarded single vendor status? Pay-by-scan could certainly have ramifications beyond just how suppliers will get paid, and it could eventually lead to a shake-up in the number of growers in our industry.

Technology. I realize we are really just farmers, but our industry is about to get left behind when it comes to the technology necessary for working with the mass merchandisers. And believe it or not, I'm not talking about transplanters and sorters and such (although I could go on and on about how important and cost effective that equipment is for operations of all sizes). This time, I'm talking about a much more advanced system: UCCNet.

If you do a lot of business with Wal-Mart or Lowe's, you have probably already been contacted about attaching RFID tags to carts and using the retailer's UCCNet system to transmit shipping information. UCCNet is an Internet-based program that tracks, receives, and processes all the retailer's incoming shipments. With one scan of the RFID tag, the retailer will instantly know such things as quantity, size, price, promotional details, plan-o-gram placement, trash date, and a host of other tidbits – as much as a couple hundred bits of information.

UCCNet technology is the way of the future for large retailers. Both Lowe's and Wal-Mart have initial deadlines in 2005, and to my knowledge, not a single grower is compliant. This is going to be a huge wake-up call for our industry – going from pencil and paper

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to a very sophisticated computer program. Other industries have been working for years getting ready, and our almost-overnight shift will be one of the biggest challenges our industry will face this year.

Government regulations. Over the past few years, we have seen the government become much more active in our industry – deciding which companies can import product into the country, regulating declarations of pot size, and creating invasive species lists, just to name a few. While I have nothing against the government, I do think so much scrutiny could have a big impact on the way we do business now and in the future.

Disease frenzy. Our industry has been through two hard years on the disease front. Ralstonia and SOD have had unimaginable consequences; and if the rumors about SOD are true, it might be getting worse. With our borders increasingly open to the necessary importation of internationally produced inputs, protecting ourselves from the next big disease will be a major challenge. Looming large on this front are Q-37 reform and removing *Ralstonia solanacerarum r3b2* from the bioterrorism list.

Sorting out new varieties. Approximately 1,000 new varieties are released every year. It's too much for the growers or the consumers to keep up with. We don't need that many new varieties, and we certainly don't need that many new varieties for which detailed production information is not available. We'll have to address the problem very soon before we become oversaturated.

Raising Prices. What else needs to be said?

Checking In

by Delilah Onofrey, Greenhouse Grower

Here are the six topics I think will be big in 2005:

Retail repercussions. We can count on one hand the number of giant retailers that sell large volumes of plants – Home Depot, Wal-Mart, Lowe's, and Kmart. What happens with those retailers will have a dramatic impact on the growers who serve them. It's becoming increasingly rare for a grower to be strong with more than two of these chains. That means the two they serve call the shots by claiming high percentages of a grower's customer base. In cases where a grower's customer mix is not well diversified, more than 60 percent of the product may be going to just one of these customers.

The big news leading into 2005 is that Home Depot is implementing/requiring "pay-by-scan." While this has been tested on a limited basis with key growers, like Bonnie Plant Farms, the program will be expanded on a much larger scale this spring. With pay-by-scan, growers assume full risk for the product and do not get paid for that product until it is scanned through the cash register. While many growers have been preparing for this day by hiring merchandisers to refresh displays in the stores and increase sell-through, the retailer still had to pay for shrink (plants that were not sold). Growers need to be rewarded for this higher level of risk and investment in service by getting more for their products.

Other big headlines at the end of 2004 were Kmart merging with Sears and Franks Nursery closing for good. The Kmart merger should give growers short-term assurance, since the retailer is making money selling real estate. Hopefully, a strong new retail strategy will emerge. With Franks, it is very sad that we've lost the largest specialty retailer in lawn and garden, especially for the growers who served them for so long. The good news is we've heard independent garden centers and growers will be buying some of the former Franks locations.

Global cuttings production and distribution. Let's all pray for a Ralstonia-free year! The past two years, more than a thousand growers were quarantined for a strain of Ralstonia on USDA's Bioterrorism Select Agents & Toxins List. The target crop has been vegetatively produced geraniums, but other crops could be potential hosts. For the last few years, the major geranium producers have been working closely with the Society of American Florists (SAF), American Nursery & Landscape Association (ANLA), and USDA to develop and implement clean stock production practices to keep Ralstonia and other pathogens out. Through USDA, they've developed a certification program for offshore farms. *Greenhouse Grower* worked with SAF and ANLA to publish a special report, "Ralstonia – A Call To Action" to mobilize the industry to lobby USDA to take Ralstonia off the bioterrorism list. For the complete report, visit www.greenhousegrower.com.

Beyond Ralstonia, USDA is working with SAF and ANLA to overhaul outdated quarantine regulations and strengthen plant protection systems. Proposed changes include:

- More certification programs for offshore farms.
- A new import entry category (excluded unless approved) for plants that have not already entered the United States and those where there is reasonable indication of a pathway for an invasive pest or is an invasive plant.
- Improving data collection to determine the types of plants imported, origin, and volume.
- Incorporating all "plants for planting" into one regulation.

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Checking In

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Profitability – coping with rising costs of energy, inputs like plastic, as well as labor and insurance costs.

Collective marketing and branding.

More standardization in container sizes (or at least the description of those sizes).

Blurring of crop lines – annuals, perennials, and shrubs coming together in marketing and production programs.

From the Editor

by Cheryl Cuthbert

Happy New Year, and congratulations! You've made a wise decision to be a member of OFA in 2005, and I hope you take advantage of the information and educational opportunities that OFA has to offer in the year ahead.

Our business is to provide continuing education for all floriculture professionals, and we've just completed our 75th year of outstanding member-driven, member-responsive, and industry-focused activities.

In 2005, we are still as dedicated as ever to "making floriculture work for you." We want OFA to be your network to connect with other folks in the industry and your resource for the information you need to make your business better.

I think you'll find that there is truly something for everyone at OFA. The bimonthly ***OFA Bulletin*** contains 24 pages of very focused articles for all segments of the industry. OFA news is included to keep you informed about Association activities as well. In addition, ***Florists' Review* magazine** is available to OFA members for a reduced fee.

The **OFA Web site** (www.ofa.org) is continually updated to provide details about our educational programs, links to the industry, and contacts with your peers. **E-mail *Bulletins*** are now also used whenever possible to provide you with breaking news and reminders.

Our ***OFA Tips…* series** of publications is available at a discount to OFA members via the Ball Bookshelf, which also gives you a discount on all Ball Publishing books. The ***OFA Resource Directory*** lists all members by company name and by individual name, giving you instant access to industry leaders and peers throughout the world. The 2005 edition will reach you in early March.

Many of you are familiar with the **OFA Short Course**, which is recognized as U.S. floriculture's premier event and provides attendees with a worldwide perspective on what's happening in the industry each year. If you haven't been there yet, put July 9-12 on your calendar this year and see it for yourself.

Outreach programs held throughout the year in various locations focus on a variety of hot topics. If we haven't reached your area yet, stay tuned; there's more in the planning stages – or better yet, tell us what you'd like to see, when, and where. Remember, our job is to provide the information you need, and we need to hear from you to get that done.

Sorry to run on, but I am excited to remind you about all that OFA offers. Take advantage of your membership benefits this year, and keep letting us know how we can do better. And with that, welcome to the first *OFA Bulletin* of the year – **your** *Bulletin*.

Understanding and Managing Energy Risk

by Matthew C. Roberts

Energy prices are a primary source of risk for greenhouse production; and with increasing volatility in energy markets, the ability to manage these risks matters more than ever to your bottom line. There are a number of tools available to manage your energy price risk. A careful understanding of their relative merits will help you decide how, and when, it is best to manage your energy costs.

While various phases of greenhouse production and distribution use heating oil, natural gas, electricity, and diesel fuel, most heat is still produced using natural gas – and it is the largest single energy cost. Natural gas became popular for heating because of its large price advantage over alternative heat sources, especially in the years following the oil embargoes of 1973 and 1980. In recent years, the lower pollution emissions of burning natural gas and its relatively cheap price tag have resulted in an increasing number of natural gas-fired electricity plants being built. These plants are used only during periods of peak electricity demand – such as those caused by times of extreme summer air-conditioning or winter electric furnace use. While natural gas-fired power plants have successfully increased the electricity available during peak use, it is precisely during these periods that industrial customers, such as greenhouses, will also need natural gas. This has increased the level of price volatility in the natural gas market greatly. Swings of $1.50/MCF (thousand cubic feet) are relatively frequent as cold fronts move through the midwestern and eastern United States, increasing demand.

Adding to the price volatility is the fact that U.S. production of natural gas has failed to keep pace with the increases in demand. While U.S. production of natural gas is growing at only about 1 percent per year, U.S. demand has been growing at 2 percent to 3 percent per year. Experts expect the gap to be filled by increasing imports of liquefied natural gas and a pipeline to be built from Alaska to the lower 48 states, but these are both long-term solutions. In the short run, the only solutions for growers are to maximize the efficiency of your operation and to manage the risks of prices.

For greenhouses whose winter production is pre-sold (most wholesalers), profitability becomes an exercise in defending production margins. With pre-sold output, and relatively little production variability, total revenue is frequently known before the seedlings are planted. Using this revenue calculation, a break-even level of natural gas prices can be determined; lower prices will generate profits, higher prices mean losses. Pricing energy for output that has not been pre-sold, or for output in future years, is more difficult.

Most operators are acutely aware of what they can and cannot do to improve energy efficiency. The following suggestions offer some options on advanced risk-management tools available in the energy market. For a greenhouse operator, there are a number of alternatives for managing natural gas price risk. Futures and options on natural gas trade on the New York Mercantile Exchange (NYMEX). Natural gas marketers offer forward contracts; many also offer maximum price contracts or other more specialized purchase agreements. Each type of agreement has benefits and costs.

Forward Contracts (also known as fixed-price contracts). This is the simplest price management tool available, nearly all marketers offer forward contracts. Forward contracts are agreements to buy a quantity of gas at a fixed price over a particular interval of time in the future. For example, a greenhouse might purchase 25,000 MCF at $8/MCF in January 2006. Such a forward contract obligates the buyer to the purchase. If the purchaser needs less than 25,000 MCF, then he or she can typically sell the gas back to the marketer at the prevailing market price. Depending on the marketer, forward contracts may be purchased up to five years in the future.

Maximum Price Contracts (also known as ceiling contracts). Maximum price contracts are forward contracts in which, instead of purchasing gas at a price set at the time the contract is negotiated, the buyer pays the market price at the time of delivery or the negotiated maximum price, whichever is lower, plus a premium paid for the maximum price provision. Maximum price contracts protect growers from higher natural gas prices, while still allowing greenhouses to profit from lower natural gas prices. For example, a greenhouse might purchase a maximum price contract for January 2006 for 25,000 MCF, with a ceiling price of $8.00 and a premium of $1.25. During January 2006, the greenhouse will pay either $8.00 or the market price for gas, whichever is less. In addition, the greenhouse will pay another $1.25 for the maximum price feature. In this scenario, if the market price for natural gas is $8.00 or above, the greenhouse will pay $9.25/mcf. If the market price is $7.50/mcf, the greenhouse will pay $8.75/mcf, and if the the market price of natural gas is $6.00/mcf, the greenhouse will pay $7.25/mcf. The amount of the premium paid for maximum price contracts is directly related to the volatility of prices and the time to expiration of the contract. Because of the increases in the average level of prices as well as their volatility, high premiums frequently make maximum price contracts much less desirable in practice than in theory.

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Understanding and Managing Energy Risk

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NYMEX Natural Gas Futures

Futures contracts are agreements to receive or deliver a fixed amount of natural gas to a location at a given point in the future. They offer a number of advantages over contracting directly with a marketer, but they also suffer some disadvantages. The primary advantages of futures contracts over contracting directly with marketers are reduced counterparty risk and lower costs. The disadvantages are fixed contract sizes, basis risk, and margin requirements.

To create a contract that can be easily traded, exchanges standardize futures contracts – every buyer and seller know exactly what commodity will be exchanged at what point in time and space, and at what price. The futures contract commonly referred to as the natural gas future is actually the NYMEX Henry Hub Natural Gas future. It is a contract to buy or sell 10,000 mmBTU (million British Thermal Units; each 1 million BTU is roughly equal to 1,000 cubic feet), at a given pipeline in Henry Hub, Louisiana during the month that the futures contract expires.

The critical feature of futures markets to understand is that very few physical transactions ever occur. More than 99 percent of futures contracts purchased or sold are *offset* before they expire, i.e. holders of contracts sell the contracts before expiration – very little natural gas is physically traded. The disadvantage of standardization occurs if the amount that needs contracted is not a multiple of 10,000 mmBTU (10,000 MCF). If a user would like to hedge 15,000 MCF, they can purchase either one contract or two, but they cannot purchase 1.5 contracts; so the buyer must decide whether to underhedge or overhedge. Standardization also introduces *basis risk* into the management decision. Basis is the price differential between two different locations – the difference between natural gas prices in Henry Hub, Louisiana and at your location. While basis is typically much less variable than the outright price of natural gas, local surpluses or shortages may drive basis higher or lower; and futures contracts cannot offset those changes.

Holders of futures contracts must also post *margin* with the exchange. Margin is effectively a security deposit against losses. Currently, NYMEX requires approximately $10,000 in margin for each contract on the Exchange. Additionally, if a contract begins to experience losses, additional margin will be required. This is the most acute danger of managing risk using futures directly, that of *margin risk*, or c*ash-flow risk*. Margin or liquidity risk refers to the variability in margin that may need to be deposited with the Exchange. Even a successful hedge may require such large amounts of margin in the interim that it bankrupts the hedger, even though the underlying business transaction is profitable.

Example: In March 2004, XYZ Nurseries contracts to sell all of its poinsettia production in the fall at an attractive price. Knowing their cost of production, XYZ calculates that it will need 20,000 MCF of natural gas for heating, and the contract will be profitable as long as the natural gas can be procured for less than $7.50/MCF. The NYMEX November futures are trading at $6.95/mmBTU, so XYZ purchases two futures contracts, representing roughly 20,000 MCF, and deposits $20,000 in U.S. Treasury Bills as margin. (The use of Treasury Bills is common, as it allows the hedger to continue to accrue interest on money used for margin.) During the summer, prices fall to $5.75/mmBTU. Because of the losses (XYZ purchased at a price of $6.95, and the price has fallen to $5.75), XYZ must post an additional 2 x $1.20 x 10,000 = $24,000 in margin. Note that the fundamental business transaction, the sale of the poinsettias produced, is now $24,000 more profitable due to lower natural gas prices; but the margin needs to be deposited now, while the proceeds from the sale of poinsettias won't be received for another few months. In this scenario, the use of futures *guarantees* the profitability of the production, but unless XYZ has adequate financial reserves, or a friendly banker, they may be unable to sustain the cash-flow requirements of the hedge.

The primary advantage of a futures contract is that the 'counterparty,' the entity that guarantees performance, is the futures clearinghouse. In the United States, futures market clearinghouses are top-rated corporations whose sole purpose is to guarantee the security of the futures contracts that are held. With the clearinghouse as your counterparty, there is essentially no risk of non-performance; whereas gas marketers can, and do, exit markets, sometimes quite unceremoniously (see Enron…). For this reason, futures markets can be especially attractive for locking in prices far into the future. The NYMEX offers trading 72 months into the future.

Further, under certain conditions, there can be a cost advantage in using futures markets directly rather than contracting through a marketer. When a natural gas user contracts through a marketer, the marketer itself manages the risk through the use of futures and options. Because the amount of natural gas contracted may not be evenly divisible by the contract size, and because the marketer is assuming basis risk and the cost of the margin requirements, the price charged by the marketer will be marked up to cover these costs. Therefore, a buyer who is willing to assume these risks should have lower hedging costs.

Finally, the primary disadvantage of futures and options for hedging is complexity. In effect, both forward and futures contracts provide the ability for a firm to lock in prices on future purchases. The primary difference between the two methods is who tends to the details of putting up margin and assuming basis risk. Firms using the futures markets must themselves manage this complexity. If done properly, firms can realize savings and increased control in their risk management.

NYMEX Natural Gas Call Options

A call option gives the buyer the right, but not the obligation, to

ofa Grower

purchase an asset at a predetermined price. NYMEX natural gas call options give the purchaser the right to purchase a futures contract at a set price. Currently, the November 2005 natural gas futures contract is trading at $7.36/mmBTU. A natural gas user could purchase an $8.00 call option which gives the buyer the right, but not the obligation, to buy one November futures contract for $8.00 at any time between now and October for $0.77. These options are the futures market equivalent to a maximum price contract. They provide the buyer with a guaranteed maximum price on natural gas purchases. The advantage of purchasing a natural gas call option compared to a futures contract is that there is no margin required for the option contract, although its cost must be paid upfront.

Understand Your Choices

While there are many other risk management tools available to natural gas users, these four instruments are the basics of any risk management toolkit. And while futures and options may not be suitable for a given operation, understanding how they work and how to use them will improve your understanding of the contracts that are offered by your marketer.

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A Few Thoughts on How to Deal With High Heating Costs

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In addition to lowering temperatures, what other options do growers have? I'll discuss a few of them in this article. Before I proceed, I would like to call to your attention that I will provide information about the response of crops to low temperature as the literature has presented it through many years. Cultivar-specific responses can be different than the general response of a crop. As a consequence, growers are advised to contact the breeders for cultural information before growing large quantities of plants at temperatures lower than those described in the literature.

Compartmentalization

During winter and spring in the United States, it is very rare to enter a greenhouse and find it filled with a single crop. Most likely, greenhouse growers have a variety of crops – all with different requirements of temperature, watering, pH, etc. Creating compartments in a large greenhouse or using different separate structures to house crops with different temperature requirements represents two ways to save fuel with crops that tolerate low temperatures, and even increasing quality for crops that prefer warmer temperatures. (There are reasons other than temperature that growers should compartmentalize their production facilities, but that will be the topic for another article sometime.)

Lowering Temperature

Your snapdragons, osteospermums, cyclamens, dianthus, etc. can be grown in a separate house or section at a lower temperature. However, remember that "there is no free lunch." Temperature affects development (or the aging process of the plant); the lower the temperature, the longer it takes a plant to complete its life cycle. In other words, it will take longer for a plant to be ready for sale at lower temperatures. You have to take this into consideration when making the decision to lower greenhouse temperature: *you may be heating less for a longer time*. Lowering the growing temperature of a warm crop (e.g. vinca) will have a greater impact on timing (take longer to selling stage) than the same temperature reduction on a cool crop (e.g. petunias).

Avoid reducing temperature at critical stages of plant development such as germination, flower initiation, and floral development. For example, poinsettia bract growth is better at temperatures above 68°F. Usually, toward the end of the crop cycle, temperature reductions are positive, since they allow the grower to maintain the crop in the greenhouse for a longer time and produce hardening before it is sent out. For example, marigolds can be grown at 60°F, but can be hardened at 50°F; pansies can be grown at 55°F and hardened at 45°F. As a rule of thumb, hardening can be achieved at temperatures 10°F below normal growing temperatures for many crops. At least for a few days before selling the crop, growers can have some energy savings.

Lowering Night Temperature

Growers are tempted to lower the thermostat at night, because that is when they see the heaters work the most. The result is a larger difference of temperature between the day and night, or in other words a larger +DIF, which may result in stretching. To avoid stretched and low-quality plants, more plant growth regulators will have to be used. If you plan to reduce the greenhouse temperature, reduce BOTH day and night temperatures and try to maintain the smallest +DIF possible. Again, this will result in longer growing times.

Do Not Put Your Crops Directly on the Floor

This advice is for all floors, but especially for those that are unheated. If putting the crops on benches is not feasible (bedding plants growers usually have many flats directly on the floor), at the very least, flats should be raised 3 or 4 inches from the soil surface. Unheated floors are usually colder than the greenhouse air. It takes more energy to warm up the roots of plants that are sitting on the floor than those that are separated from it. In addition, warmer roots are less prone to diseases.

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A Few Thoughts on How to Deal With High Heating Costs

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Use Bottom Heat and/or Thermal Blankets

Bottom heat puts the heat near the plants. It keeps roots and foliage warm without heating the large volume of air in the entire greenhouse. There are different systems using this principle. Initial installation cost may be an issue for some growers. An additional benefit of this heating method is that it keeps the plants dry even when the greenhouse temperature is reduced, avoiding some diseases such as Botrytis.

Thermal blankets are one of the most effective tools of greenhouse environmental control. They can be used to reduce temperatures during the day and keep the heat inside the greenhouse at night. This tool also has a high installation cost.

Cultivar Selection and Scheduling

Although choices are somewhat limited, growers have the option of selecting shorter-cycle crops (fewer weeks from start to finish) and/or crops that grow at lower temperatures. Crops that grow faster can be sown and planted later, requiring fewer days of heating. These faster crops/cultivars will make use of the higher levels of light and possible higher temperatures later in the growing season. Scheduling can become a tool for energy cost saving.

Proper Use of Spacing

Keep the crop in a small area when the crop is small and plants can be kept pot to pot; and then progressively open and heat new areas (greenhouses or sections of a greenhouse) when the crop has to be spaced because of its growth. In this case, it is very important to make efficient use of greenhouse space. If benches have to be used, movable benches are probably the best. Also, how plants are distributed on benches is very important; staggering pots is more efficient than placing them in rows. *It is possible to put 15 percent more pots on a bench by staggering than by standard row spacing.*

Table 1. Crops that can be grown at temperatures less than 60°F.

Alstroemeria	Delphinium Dianthus	Pansy
Alyssum	Diascia	Primula
Anemone	Dill	Ranunculus
Argyranthemum	Freesia	Schizanthus
Aquilegia	Fuchsia (some cv.)	Snapdragons
Bracteantha	Gazania	Statice
Calceolaria	Iris	Torenia
Calendula	Matthiola	Tulip
Centaurea	Nemesia	Veronica
Coreopsis	Osteospermum	Viola

Preheat Irrigation Water

If greenhouse temperatures will be lowered to conserve fuel, preheating irrigation water becomes very important. Depending on the crop, low temperatures may reduce root activity and absorption of nutrients may stop. Furthermore, low temperatures may stress roots and make them more susceptible to diseases.

Grow Cool Crops

Assuming that crops that can be grown cool can also be sold profitably, switching to them should make sense. However, proper consideration of the length of the growing cycle (crop timing) and quality of the crop grown at lower temperatures should be taken into consideration before deciding. *It may not be an advantage to heat less for a longer time.* Many bedding plant growers have multiple cycles of a given crop. Growing crops colder may interfere with how many crop cycles they can obtain from a given area. These type of decisions require growers to have a good idea of the costs of production for each one of their crops. Unfortunately, not all growers have a handle on this issue.

Table 1 contains a list of crops that can be grown at cooler temperatures (below 60°F). A few of those can be grown at temperatures in the lower 50°F range. Some are "old" and well-known crops. Others have become popular more recently.

Greenhouse Weatherization

A typical greenhouse structure contains heat as efficiently as a colander contains water. Although there are many ways heat escapes a greenhouse, some escape routes can be either eliminated or substantially reduced. It is imperative for growers to seal holes in the polyethylene film and cracks in the walls. Doors and vents that do not shut properly should be repaired. Walls that are not made of translucid materials should be insulated. Metals conduct heat, so all metal parts that have contact between the greenhouse interior and exterior should be insulated. For example, metal gutters of gutter-connected greenhouses have one surface on the (warm) interior and the other surface on the (cold) exterior. Some growers insulate the interior surface of gutters with foam to reduce heat loss. One word of caution before improving insulation: growers located in climates with heavy snow falls benefit from their heat inefficiency, because snow melts fast on their greenhouse roofs. However, if snow does not melt and accumulates on the roof, the greenhouse can collapse due to snow weight.

There are good sources of information on how to weatherize greenhouses – for example, the Web site of the National Greenhouse Manufacturers Association (www.ngma.com).

Conclusions

Growers should be careful when reducing greenhouse growing temperatures to save fuel – especially night temperatures. The two most reasonable approaches are to compartmentalize and to make an effort to reduce heat losses by greenhouse weatherization. In addition, changing or adopting some of the crop management practices described here should help growers conserve energy without sacrificing crop quality.

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Industry Guide To Marketing Container Plants

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Origin of this Guide

With the dramatic increase in container plant sales, state and related weights and measures compliance staff have stepped up their scrutiny of industry marketing practices. These authorities have discovered that some long-time practices in the industry regarding labeling and advertising violate or ignore consumer information requirements. They have warned the industry that it must come into compliance. Retailers not in compliance can incur stop-sale orders and substantial fines and penalties for misleading or inadequate labeling and advertising.

The industry is responding to their warning. Labeling and signage practices in this industry affect businesses along the entire supply chain, from container and label manufacturers, to growers and plant branding firms, to the ultimate retailer. National trade associations representing businesses along the supply chain have appointed multiple task forces to research the law, identify common areas of non-compliance, and develop guidelines to assist industry businesses in conforming to the law.

Following all these recommendations addresses compliance with these regulations as they are understood, and strict compliance is strongly encouraged. Individual businesses may choose to follow or not to follow all these recommendations, with enforcement consequences varying accordingly.

These guidelines are *strictly voluntary*. They were developed as an aid to facilitate industry compliance with the least amount of disruption and expense over current industry practices. The uniform law and regulations are extensive and provide some flexibility that is beyond the scope of this publication.

The Uniform Law and Regulations

The legal foundation for the required consumer information is found in the Uniform Weights and Measures Law and the Uniform Packaging and Labeling Regulations. The National Conference on Weights and Measures (NCWM) maintains this model law and its implementing regulations.

The National Institute of Standards and Technology (NIST) provides technical assistance to the conference. NIST is also the intermediary between these weights and measures representatives and the industries affected by the uniform law and regulations. NIST acts only in an advisory capacity. Enforcement of the law and regulations rests exclusively with state, or subsidiary government, weights and measures personnel.

Fortunately for businesses, no state may enact a law or adopt regulations that are more burdensome than the uniform law adopted by the National Conference. NIST *Handbook 130* is the federal publication containing the uniform law and regulations on packaging and labeling. Copies of *Handbook 130* may be purchased from NCWM at www.ncwm.net. The *Handbook* is also available through download via the Internet from the weights and measures section of the NIST Web site: www.nist.gov.

Compliance is possible!

Keep in mind that the uniform law and regulations require information that is designed to assist the consumer, rather than the producer or retailer. They address the *minimum* amount and the format of information required. Information on signage and labels that many businesses will want to provide consumers (e.g. horticultural practices) is acceptable – provided it does not conflict with or obscure the required information.

Many industry businesses will discover that they can comply by making only minor changes in signage and labeling. These changes will result in information that consumers are already accustomed to seeing on other packaged products, e.g., references to metric measurement that have become commonplace.

Given the industry's numerous plants, container sizes, growers, and labeling practices, a single approach with all products is unlikely to work. These regulations also apply to decorative, irregularly shaped containers, and dish gardens. Retail businesses may find that unique circumstances are best met using signage, rather than individual labels to provide some required information for some plants or displays.

Summary of Regulations

The purpose of this law is to assist a consumer in *comparing similar products by using uniform and consistent price and quantity information on the product package, or in advertising and signage.* This information is not intended to help market the product. Decorative graphics and supplemental marketing information on the package cannot contradict, confuse, or obscure the information that is required for product comparison.

Labeling requirements apply only to retail sales of products to consumers. Labeling requirements do not affect

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Industry Guide to Marketing Container Plants

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sales transactions within the industry, such as those conducted using the American Standards for Nursery Stock. The retailer, through the normal course of business, may seek assistance from suppliers in providing the required information.

The required information must be accurate. In no case may the quantity of the product be less than represented. There is reasonable allowance for the average of the quantity to be slightly more than represented, but not so as to mislead or in anyway deceive the consumer in comparing similar products.

The required information must be easily accessible to the consumer. The size of labels and the typeface used to describe the information must be sufficiently large for the necessary information to be legible. The required information may be presented on labels or in signage. Labels include hanging tags, stake tags, and labels affixed to the container. The location of the required information must not entail unreasonable handling of the product, and store signage must be in proximity to the product. Plants sold with sleeves or covers need to ensure that labels are easily located and not underneath the pot cover.

In short, the easiest way for the industry to comply with the spirit of this law is to make this information easy for consumers to find, understand and use to make price and quantity comparisons.

Three Kinds of Required Information

1. The Declaration of Identity – This declaration must describe the product: in this case, a name of the plant. The identity can be the common name of the plant, such as "daisy," or it can be more specific, for example, "Shasta daisy" or the botanical name. In the case of containers having more than one type of plant, terms such as "mixed annuals" or "mixed perennials" are acceptable. The same applies to signage. (For reasons other than this law, some states require botanical names.)

2. The Declaration of Net Contents – This declaration must describe the contents in terms of weight, measure, or count. There are several methods that might be used by the industry for this declaration. For transactions within the industry, it is common practice to refer to the volume of the container. *Therefore, this guide recommends that industry businesses use the volume of the container as the method for declaring net contents.*

The model law requires that quantity declarations must be in both U.S. (inch, pound, ounces) and metric (meter, grams, liter) measure. The container quantity may be expressed as either the dimensions or volume capacity of the container. For irregular-shaped containers, the law requires that the dimensions must include top diameter, bottom diameter, and height. (Reference to top diameter only is not acceptable.)

Because the declaration must be expressed in both U.S. and metric measure, using the container's dimension would require six numbers – top and bottom diameters and depth. Using the container's volume requires only two numbers: one in U.S. and one in metric.

This guide recommends that the declaration of net contents be expressed in terms of the volume capacity of the container. Industry practice in some industry sectors already refers to container volume using liquid measure (e.g. pint, quart and gallon). Therefore, this guide recommends that industry businesses describe the container's net contents in U.S. – fluid ounces, pints, quarts and gallons – and in metric – milliliters and liters (see chart of abbreviations on page 14); for example:

6 fl oz (180 ml)

Net Contents Declaration for Market Packs. The regulations include instructions on how the declaration of net contents must be expressed for products with multiple units, such as market packs. *The net contents declaration must include the total count and both the unit cell volume and the total volume of all cells.* The following description is an example of this combination declaration:

6 cell x 2 fl oz [60ml]
Total 12 fl oz [360 ml]

Market packs are sometimes combined into larger packages for sale, e.g., a "flat" that contains four packs. If the four packs can be separated and sold separately, then the net contents declaration on labeling or signage would refer to the count and volumes of units in each pack, not the flat. In this example, each pack would require a label/tag or, in place of individual tags, signage. For these declaration purposes, signage would refer to the individual market packs and pack count per flat with pricing by the flat.

3. The Declaration of Responsibility – The declaration of responsibility provides the consumer with the location of the vendor, distributor, or retailer of a product. If the product is offered to the consumer by any business other than the grower of the plant, at any place other than on the premises where grown, there must be a "declaration of responsibility." The purpose of this declaration of responsibility is to assist the consumer in comparing similar products. (For example, identical plants produced by the same grower and offered at different prices.) This declaration is not a guarantee or warranty of plant health. It is a declaration of responsibility for plant identity and the accuracy of the net contents declaration.

This responsible business may be the grower, the distributor (e.g. plant brand/marketer), or the retailer. The declaration must include the responsible business name, city, state, and ZIP code. Web sites are only considered supplemental information and do not suffice on their own at this time. The declaration may state the principal place of business in lieu of the actual place where the product was grown, distributed, or offered for sale.

This declaration is not required for retailers that grow all their own container plant material on the actual premises where those plants are offered for sale to consumers. *Retail growers are required to have a declaration of responsibility for all material grown off-premises.* Retailers with a mix of "home grown" and "brought-in" containers must have this declaration for purchased containers.

Retailers offering products grown by other businesses must determine how to handle this declaration. Some retailers may choose to declare themselves responsible; others may want or permit the names of growers or distributors on labels and signage. Regulations specify that when a product is sold by someone other than the manufacturer, the declaration of responsibility will qualify that relationship with a phrase such as "grown by" or "distributed by."

The following are sample declarations of responsibility:

For production by retailer off premises:
"Grown by: ABC Garden Center
Washington, DC 20005"

For production by others:
"Grown for: ABC Garden Center
Washington DC 20005" **OR**
"Grown by: ABC Growers
Anytown, MD 20105"

Presentation of the Three Kinds of Required Information

The required information may appear on either signage **or** container labels. Retailers can decide which method (sign or label) is preferred and that method may vary among separate plant displays in the same store. *The declaration of identity and net contents must appear together, on either signage or labeling as described below.* The location of the declaration of responsibility is more flexible.

The declaration of identity and the declaration of net contents must be in close proximity; for example, on the same side of a double-sided label or sign. The declaration of net contents must be located in the bottom 30 percent of the label/sign. The declaration of responsibility may accompany the other two declarations, or may appear elsewhere on the product or signage. Product advertising that includes any pricing must also provide the declaration of net contents of products offered at that price.

Supplemental Declarations of Quantity – The required net contents declaration may be supplemented by additional information. The supplemental information must be visually separate from the required information and cannot be incomplete or presented in a fashion to confuse the consumer regarding the required information. For example, terms like "large" quart would not be allowed (a quart is a quart). Using a term such as "10-inch basket" is incomplete. Terms such "10-inch outside diameter" is an improvement, but is technically incomplete because it lacks reference to the bottom diameter and container depth.

Label Variations

The law provides for different requirements for different types of labels.

Standard Label – This is a label typically found on a consumer package. It often includes graphics, branding, promotional information, and directions for product use. This label may cover the entire container. With so much information, it is possible for the required declarations to be missed or hard to find. For this reason, the regulations have details regarding how the declarations must appear on this kind of label.

These details include provision for a "principal display panel" (PDP) that is, essentially, the "front" of the package. This "front" consists of one whole side of a square container, or the "span of view" of a cylindrical container. The PDP must contain the declaration of identity and the declaration of net contents. The format of information on the PDP portion of a standard label must be graphically presented to suggest that it contains the most important information.

Hanging tags and stake tags, with any graphics (e.g., plant photo) or supplemental information (e.g., horticultural) would be considered a standard label according to these regulations.

Spot Label – This is a plain label that covers only a small portion of the surface of the PDP, for example a typical "sticky" label on a plant pot. The spot label must exist apart from any other package information. It must have a border in order to stand out visually. A spot label that contains all three declarations is sufficient to meet the labeling law, but it must at least indicate the identity and net contents (with the responsibility declaration elsewhere, or not required when sold by the grower). The spot label may also contain a barcode, provided that the identity and net contents are legible, with the net contents at the bottom of the label.

Either standard labels with the required format, or spot labels with their required format on plant containers are acceptable. See samples of these labels at the end of this article on page 15/16. *Reminder: Signage can be used instead of individual container labels.*

Stickers – There is no prohibition against using stickers on the PDP of standard labels in order to fulfill the required information, i.e., plant identity or net contents, provided the location and format of the sticker complies with all other requirements.

Container Embossing – Required declarations may be embossed on a container as long as both the net contents and identity declaration are included. If there is any other information included on the container in a contrasting color, then the embossed information needs to be presented in a contrasting color to the container as well.

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Requirements for Information Presentation

Abbreviations:

U.S. Measure	
fluid ounces = fl oz	
pint = pt	pints = pt
quart = qt	quarts = qt
gallon = gal	gallons = gal

Metric Measure
milliliter = mL or ml
milliliters = mL or ml
liter = L or l
liters = L or l

Largest whole unit:

In general, volume shall be expressed in terms of the largest whole unit, with any remainder expressed as a common or decimal fraction.

Acceptable	Not Acceptable
3 quarts	.75 gallon or 6 pints
1.25 gal	160 fl oz
1.5 liters	1500 mL

Rounding: Regulations recommend that in order to avoid overstating contents, all rounding be done as rounding down, not rounding up. The number of significant digits retained must be such that accuracy is neither sacrificed nor exaggerated. In most instances in this industry's containers, quantities stated to no finer than two decimal places (.00's) is sufficient (examples: 1.29 gal, 3.4 fl oz).

Type or print formats: A declaration may appear on one or more lines of type. Both upper and lower case letters are acceptable. Typeface must be at least 1/16" in size. Free space: There must be the equivalent of at least one line of type free of information both above and below the net contents declaration, and a width the equivalent of two letters (i.e., the letter "N") left and right of the declaration.

Timetable for Implementation of these Regulations

The Uniform Law and regulations have been in place for a number of years and immediate enforcement of compliance is a possibility. Typically, when an industry becomes aware of its non-compliance and its businesses evidence good faith effort to comply quickly, there is a "grace period." This grace period involves first-time warnings and a reasonable period for current inventories of non-complying labels to be exhausted.

Most enforcement officials will be less lenient about signage that is incorrect, and they may expect the retailer to use signage with correct information to offset container labels that are not in compliance. Similarly, because advertising generally has shorter lead-time than label ordering, officials will also be less lenient about incomplete or inaccurate advertising.

Based on the law's long-time existence, and given traditional enforcement practices, this guide recommends that the industry do the following:

- Immediately modify or augment current signage to provide the necessary declarations in the required formats.
- Immediately ensure that any future placement of advertising with any pricing includes the necessary declarations of identity and net contents, in compliance with these regulations.
- Make the necessary adjustments to container labeling in the next ordering cycle.

Implementation Recommendations for Various Types of Businesses

Container manufacturers – Container manufacturers will want to provide the volume capacity information in both U.S. and metric measure to all of their container customers as soon as possible. It is recommended that the volume be expressed in terms of ounces/pints/quarts/ gallons (U.S.) and milliliters/ liters (metric). When applicable and appropriate, fractions of these quantities should include up to two digits right of the decimal (.00's) and/or rounding as described above.

Label manufacturers – Label manufacturers will become a primary source for information on how plant labels and related signage can be modified to fully comply with this labeling law and regulations.

Production growers – Production growers that are under contract to provide labels and/or signage will need to know what the labeling law requires regarding standard and spot labels that they may be providing under contract with their retail customers.

Traceability – Also, though a distinct issue from the labeling regulations, for plant pest and quarantine purposes, growers may wish to consider whether their labeling scheme allows for easy identification of product based on grower and place of production. Traceability and easy identification through final consumer sale can minimize potential losses resulting from regulatory holds or destruction orders.

Distributors – Distributors need to understand the law in order to respond both up and down channel. They may need to communicate with growers and manufacturers regarding labeling and product descriptions and specifications. They may also need to communicate with retail customers regarding labeling needs.

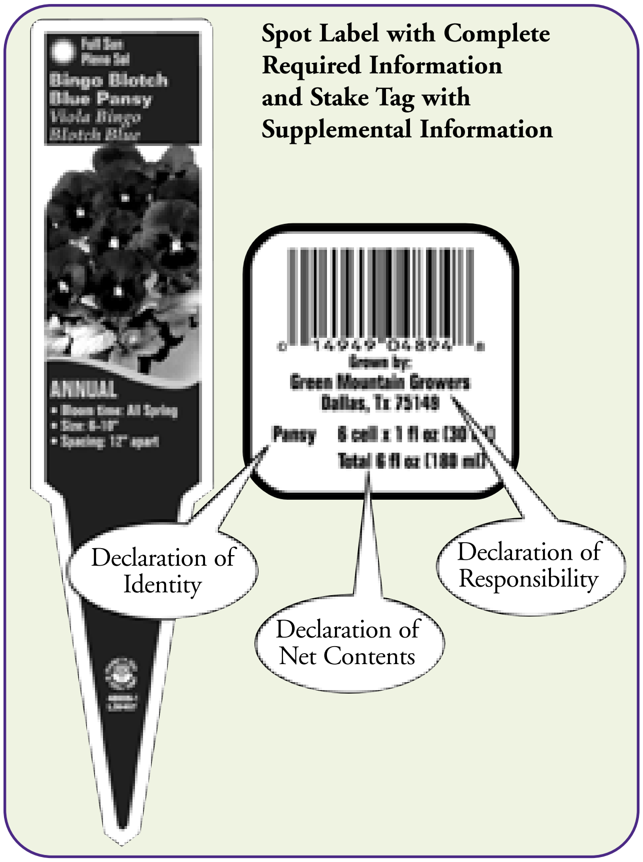
Plant branding and marketing firms – These firms need to understand this law to determine its effect on current labeling, signage and promotion material relating to their branded plants.

Retailers – Retailers need to understand the three kinds of required information and then decide how and where they want that information to appear (i.e. on signage or on labels). The choice of the party listed for the declaration of responsibility is an individual business decision. Decisions regarding the responsibility declaration may be affected by both marketing and cost considerations. For example, "private brand" or "house brand" material could carry the retailer's name in the declaration and be identified by terms such as "Grown for _____." Other plants may have a responsibility declaration attributed to a grower, distributor or plant marketer.

For further information:

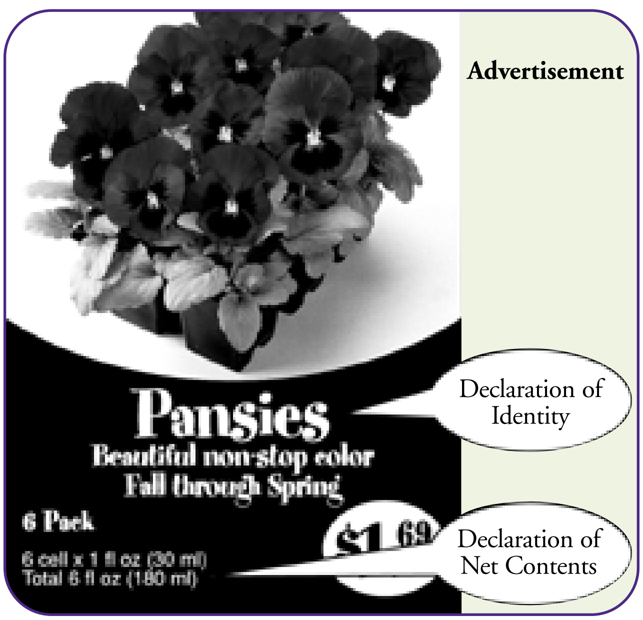
All businesses are encouraged to consult the NIST *Handbook 130* for more details. Members of the industry trade associations endorsing this guide may contact their associations for further information. Other industry businesses should contact their label suppliers or the National Institute of Standards and Technology at www.nist.gov or NIST Weights and Measures Division, Gaithersburg, MD 20899.

The following samples illustrate the different ways the packaging law and regulations can be met through labels and signage:

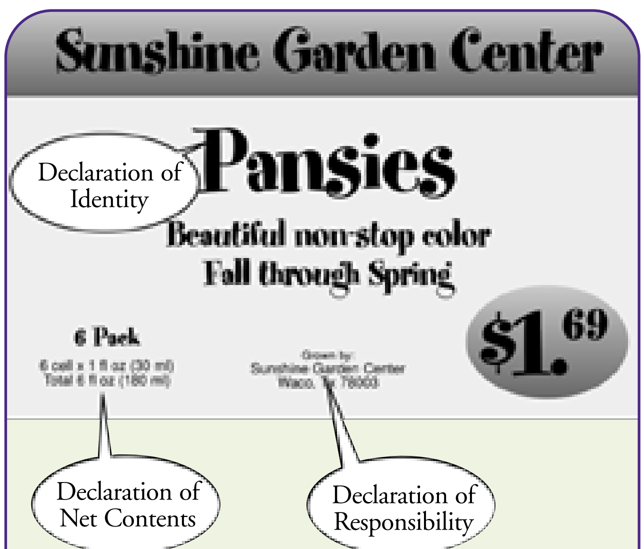


Spot Label with Complete Required Information and Stake Tag with Supplemental Information

Annual Stake Tag (No Spot Label) With Complete Required Information



Advertisement



Sign Containing All Required Information

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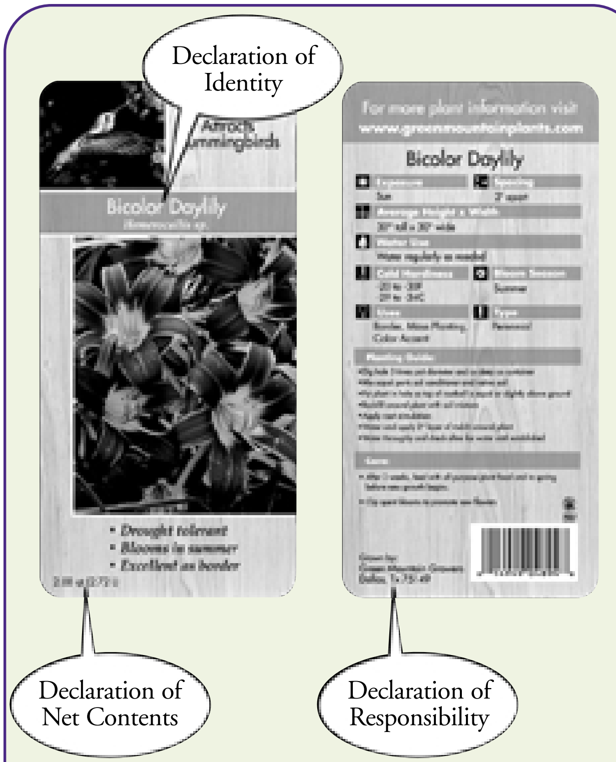
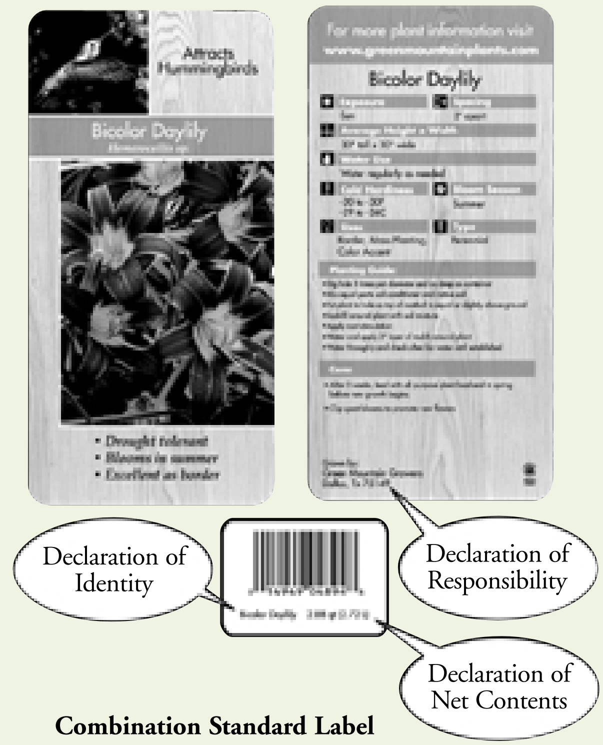


Standard Label (No Spot Label) for Use With Specific Pot Size With Complete Required Information



Combination Standard Label and Spot Label (for use with multiple-sized containers)

American Nursery & Landscape Association

This document was prepared by ANLA with the assistance of SAF, NAHSA, PMA and OFA. Label images produced by Horticultural Marketing and Printing.

DISCLAIMER: The producers of this guide have worked to ensure that all information is accurate as of the publication date. The information is provided with the understanding that the publisher and the contributors are not engaged in rendering legal advice. Additional guidance can be obtained by contacting NIST directly.

2004 OSU/OFA Poinsettia Cultivar Evaluation

by Steve Carver, Monica Kmetz-Gonzalez, Claudio C. Pasian

Tables 1 and 2 (pages 18 and 19) present the results of the 2004 OSU/OFA Consumer Poinsettia Evaluation. In this issue of the *OFA Bulletin*, we are providing you with a summary of the results in tabular form and allowing you to draw your own observations. In the next issue, we will share our observations. We will also present results of the grower evaluations and a summary of the cultural conditions under which the poinsettias were produced. Here are some quick points to help understand the parameters of the consumer portion of the evaluation.

We asked each of the suppliers for their newest cultivars, i.e. nothing that has been in the trade for more than two years. Each supplier was allowed to include two older cultivars for comparative purposes.

The plants were grown at four locations around Ohio: AJ Rahn Greenhouses in Cincinnati; Barco Sons Inc. in Medina; Bostdorff Greenhouse Acres in Bowling Green; and Dill's Greenhouse in Columbus. One plant of each cultivar was shipped to the Department of Horticulture and Crop Science at The Ohio State University and placed in the Howlett Hall greenhouse.

From December 4 through December 6, the horticulture student society (PAX) held its annual poinsettia sale in the Howlett Hall headhouse. We "borrowed" these poinsettia buyers to evaluate the new cultivars. We asked them to rate the cultivars in two ways. First, we asked them to rate each cultivar (four plants of each cultivar grouped together) on a 1 to 5 scale, with "1" = hate the cultivar and "5" = love it. This rating scheme allows for positive and negative feelings for each cultivar. Results are given in Table 1 (see page 18). Second, we asked participants to tell – of the 51 cultivars that we had, which were their three favorites. That is, which three (maximum) they would buy on an impulse if they found them while shopping. This rating scheme allowed for only positive feelings to be expressed and resulted in a different ordering of favorites, see Table 2 (page 19).

What inferences do you draw from the two tables? We'll compare notes in the next issue.

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2004 OSU/OFA Poinsettia Cultivar Evaluation

continued from page 17

Table 1. Poinsettia cultivars listed by ratings (1 - 5 scale, 5 = "Excellent")

Cultivar		Breeder	Group	Average Rating	StDev	Rated by Females	Rated by Males	Rated by 18 - 25 yr-olds	Rated by 26 - 45 yr-olds	Rated by 46 - 65 yr-olds	Rated by > 65 yr-olds	Total Preferences	Preferred by Females	Preferred by Males	Preferred by 18 - 25 yr-olds	Preferred by 26 - 45 yr-olds	Preferred by 46 - 65 yr-olds	Preferred by > 65 yr-olds
	Sample Size			284		206	77	34	78	126	30							
1	Visions of Grandeur (975)	Ecke Ranch	Novelty - pink	4.1	1.07	4.2	3.7	4.2	4.0	4.1	4.1	82	67	15	15	21	35	7
2	Christmas Spirit	Selecta	Red	4.1	0.86	4.0	4.2	3.9	4.0	4.1	4.4	22	16	6	2	9	7	3
3	Gala Red	Oglevee	Red	4.0	0.85	3.9	4.1	3.8	3.9	4.1	4.2	19	13	6	2	7	8	2
4	New Sonora Red	Fischer	Red	3.9	0.93	3.9	4.1	3.6	3.8	3.9	4.5	41	26	15	3	10	21	4
5	Independence Red (1056)	Ecke Ranch	Red	3.9	0.89	3.9	3.9	3.8	3.7	3.9	4.4	17	11	6	2	6	8	0
6	Sonora White Glitter	Fischer	Novelty - jingle	3.9	1.17	3.9	4.0	3.7	3.9	4.0	3.7	78	59	19	10	21	37	3
7	Festival Red	Oglevee	Red	3.8	0.89	3.8	3.9	3.6	3.6	4.0	4.4	15	8	7	2	1	8	4
8	Christmas Poem	Selecta	Red	3.8	0.92	3.8	3.9	3.6	3.7	3.9	4.0	11	4	7	1	1	6	2
9	Olympus	Fischer	Red	3.8	0.85	3.8	3.8	3.6	3.7	3.8	4.2	6	4	2	0	1	3	2
10	Premium Red	Dummen	Red	3.8	0.95	3.7	3.9	4.1	3.8	3.6	4.0	14	9	5	3	7	3	0
11	Early Orion	Fischer	Red	3.7	0.90	3.6	3.9	3.3	3.5	3.7	4.3	9	8	1	0	2	6	1
12	Silent Night	Selecta	Red	3.7	0.87	3.7	3.8	3.7	3.5	3.7	4.1	7	3	4	2	2	0	2
13	Prestige Red	Ecke Ranch	Red	3.7	0.85	3.7	3.7	3.4	3.5	3.8	4.1	3	2	1	1	1	1	0
14	979	Ecke Ranch	Red	3.7	0.89	3.6	3.8	3.9	3.5	3.7	4.0	8	6	2	2	4	1	1
15	Christmas Feelings Pink	Selecta	Pink	3.7	1.03	3.7	3.6	3.9	3.6	3.6	3.9	20	17	3	2	9	4	2
16	Happy Christmas	Selecta	Red	3.7	0.95	3.7	3.7	3.4	3.5	3.7	4.1	16	13	3	1	4	9	2
17	Christmas Bells	Selecta	Red	3.6	0.92	3.6	3.7	3.3	3.3	3.8	4.1	15	12	3	0	1	11	1
18	Christmas Feelings	Selecta	Red	3.6	0.78	3.6	3.6	3.6	3.4	3.7	4.0	2	2	0	0	1	1	0
19	Festival White	Oglevee	White	3.6	1.12	3.7	3.5	3.8	3.5	3.5	3.9	21	14	7	3	7	10	0
20	Primero Pink (71-02)	Ecke Ranch	Pink	3.6	1.08	3.7	3.3	3.9	3.4	3.6	3.8	22	19	3	2	6	9	3
21	Merlot	Dummen	Red	3.6	1.09	3.5	3.6	3.7	3.5	3.5	3.7	23	17	6	2	7	11	1
22	Christmas Star	Selecta	Red	3.5	0.87	3.5	3.5	3.4	3.5	3.5	3.8	4	3	1	1	1	2	0
23	Winter Rose Early Red	Ecke Ranch	Novelty - red	3.5	1.27	3.6	3.4	3.7	3.4	3.5	3.6	43	34	9	9	7	25	1
24	Early Joy Pink	Oglevee	Pink	3.5	0.99	3.6	3.2	3.7	3.4	3.4	3.8	13	11	2	2	3	4	4
25	Pink Elf	Fischer	Pink	3.5	0.98	3.6	3.2	3.5	3.4	3.5	3.6	8	6	2	0	4	3	1
26	Autumn Red	Ecke Ranch	Red	3.5	0.86	3.4	3.6	3.4	3.5	3.4	3.8	5	2	3	2	3	0	0
27	Euro Glory	Dummen	Red	3.5	0.84	3.4	3.6	3.4	3.3	3.5	3.8	3	2	1	2	1	0	0
28	Shimmer Pink	Ecke Ranch	Pink	3.5	1.08	3.6	3.2	3.4	3.3	3.6	3.5	18	17	1	1	5	6	2
29	Primero (V-119)	Ecke Ranch	Red	3.5	0.97	3.5	3.5	3.4	3.4	3.4	3.7	9	6	3	1	4	4	0
30	Cortez Electric Fire	Fischer	Red - orangish	3.4	1.15	3.3	3.8	3.3	3.1	3.6	3.8	16	6	10	2	4	8	1
31	Kris Krinkle (66-02)	Ecke Ranch	Red - novelty	3.4	1.16	3.4	3.5	2.9	3.4	3.4	4.2	17	13	4	2	5	3	5
32	Mars	Fischer	Red	3.4	0.85	3.4	3.5	3.4	3.2	3.4	3.9	6	4	2	0	2	3	1
33	Merry Christmas	Selecta	Novelty - "pepmt"	3.4	1.12	3.5	3.2	3.6	3.3	3.4	3.4	9	7	2	1	3	5	0
34	Enduring Pink	Ecke Ranch	Pink	3.4	0.97	3.4	3.2	3.7	3.4	3.3	3.5	7	7	0	0	3	2	2
35	Davinci	Fischer	Novelty - "pepmt"	3.4	1.12	3.5	3.1	3.4	3.3	3.4	3.3	11	9	2	4	3	3	0
36	Premium Picasso	Dummen	Novelty - "pepmt"	3.3	1.11	3.4	3.2	3.8	3.4	3.2	3.1	10	8	2	3	4	2	1
37	Holly Berry	Fischer	Marble	3.3	1.17	3.3	3.2	3.2	3.2	3.3	3.6	8	5	3	0	2	3	2
38	Winterfest Red	Oglevee	Red	3.3	0.91	3.3	3.4	3.2	3.2	3.3	3.7	3	2	1	1	0	1	1
39	Christmas Feelings Jingle	Selecta	Novelty - jingle	3.3	1.05	3.3	3.3	2.8	3.1	3.4	3.6	9	6	3	1	1	7	0
40	Infinity	Dummen	Red	3.3	0.81	3.2	3.3	3.3	3.2	3.2	3.5	2	2	0	0	1	1	0
41	Christmas Feelings Vanilla	Selecta	White	3.2	1.03	3.2	3.2	3.4	3.0	3.2	3.3	5	4	1	2	0	2	1
42	Mirage	Dummen	Pink	3.1	0.99	3.1	3.0	3.1	2.8	3.2	3.2	4	4	0	1	2	1	0
43	Christmas Feelings Marble	Selecta	Marble	3.1	1.15	3.1	3.2	3.4	3.0	3.0	3.2	6	3	3	1	4	0	0
44	Premium Lipstick Pink	Dummen	Pink	3.1	1.20	3.1	3.0	3.4	3.0	3.0	3.2	9	6	3	2	2	4	1
45	Santa Junior (51-02)	Ecke Ranch	Red	3.0	1.23	2.9	3.3	2.7	2.9	3.0	3.3	11	4	7	1	4	5	1
46	Cinnamon Star	Fischer	Novelty - "pepmt"	2.9	1.20	2.9	3.0	3.1	2.8	3.0	3.0	10	7	3	1	4	5	0
47	Advantgarde	Dummen	Novelty	2.8	1.22	2.8	2.8	2.6	2.5	2.8	3.2	10	10	0	2	2	5	0
48	Limelight	Dummen	Novelty	2.7	1.35	2.6	2.9	2.5	2.5	2.8	3.0	16	12	4	2	4	9	0
49	Elegance Hot Pink	Dummen	Near Red	2.7	0.91	2.7	2.7	2.7	2.6	2.7	3.1	1	1	0	0	1	0	0
50	Twister	Dummen	Novelty - red	2.7	1.27	2.7	2.7	2.6	2.7	2.6	2.9	6	3	3	0	2	4	0
51	Carousel Pink	Fischer	Novelty - pink	2.5	1.27	2.6	2.4	2.6	2.4	2.6	2.7	7	6	1	0	4	2	1
	Average			3.4	1.02	3.4	3.4	3.4	3.3	3.5	3.7							

Table 2. Poinsettia cultivars listed by preferences (list 3 favorites)			
Cultivar		**Group**	**Total Preferences**
1	Visions of Grandeur (975)	Novelty - pink	82
6	Sonora White Glitter	Novelty - jingle	78
23	Winter Rose Early Red	Novelty - red	43
4	New Sonora Red	Red	41
21	Merlot	Red	23
2	Christmas Spirit	Red	22
20	Primero Pink (71-02)	Pink	22
19	Festival White	White	21
15	Christmas Feelings Pink	Pink	20
3	Gala Red	Red	19
28	Shimmer Pink	Pink	18
5	Independence Red (1056)	Red	17
31	Kris Krinkle (66-02)	Red - novelty	17
16	Happy Christmas	Red	16
30	Cortez Electric Fire	Red - orangish	16
48	Limelight	Novelty	16
7	Festival Red	Red	15
17	Christmas Bells	Red	15
10	Premium Red	Red	14
24	Early Joy Pink	Pink	13
8	Christmas Poem	Red	11
35	Davinci	Novelty - "pepmt"	11
45	Santa Junior (51-02)	Red	11
36	Premium Picasso	Novelty - "pepmt"	10
46	Cinnamon Star	Novelty - "pepmt"	10
47	Advantgarde	Novelty	10
11	Early Orion	Red	9
29	Primero (V-119)	Red	9
33	Merry Christmas	Novelty - "pepmt"	9
39	Christmas Feelings Jingle	Novelty - jingle	9
44	Premium Lipstick Pink	Pink	9
14	979	Red	8
25	Pink Elf	Pink	8
37	Holly Berry	Marble	8
12	Silent Night	Red	7
34	Enduring Pink	Pink	7
51	Carousel Pink	Novelty - pink	7
9	Olympus	Red	6
32	Mars	Red	6
43	Christmas Feelings Marble	Marble	6
50	Twister	Novelty - red	6
26	Autumn Red	Red	5
41	Christmas Feelings Vanilla	White	5
22	Christmas Star	Red	4
42	Mirage	Pink	4
13	Prestige Red	Red	3
27	Euro Glory	Red	3
38	Winterfest Red	Red	3
18	Christmas Feelings	Red	2
40	Infinity	Red	2
49	Elegance Hot Pink	Near Red	1

A Report on the AgJOBS Legislation

by Craig J. Regelbrugge

In the late 1990s, ANLA – with the help of green industry partners such as OFA – seized a major new leadership role in the quest for historic labor and immigration reform legislation. Why? Labor is the single greatest operating cost for most green industry businesses; the availability of labor is a constraint to business expansion; and the existing labor force is significantly comprised of improperly documented workers, putting businesses from coast to coast at grave risk of enforcement-related disruptions. While green industry businesses vary in the scope of need for labor, all are affected and the immigrant workforce gets more important every day.

History

With more than 50 percent of the labor force feared to be illegal in agriculture and the green industry, reform efforts began in the mid-1990s in response to hostile legislation that sought to treat employers like mob bosses and drug kingpins. Early efforts focused on reforming the 50-year-old H-2A temporary and seasonal guest worker program. H-2A allows employers to bring in foreign workers for seasonal jobs. The existing program is bureaucratic and expensive, and so only provides two percent of the agricultural (including nursery and greenhouse) labor force.

H-2A reform efforts met political gridlock, as most Democrats joined with anti-immigrant Republicans to kill a series of bills over four years. ***Lesson number one: An issue like immigration reform can only be resolved by finding the political center, then building broad support among both parties.***

In the late 1990s, employer and worker advocates began to seek common ground. In 1999, ANLA and partner associations mobilized to lead the reform effort. In 2000, ANLA formed the Agriculture Coalition for Immigration Reform (ACIR), to work hand in hand with the National Council of Agricultural Employers and other groups interested in legislative relief. At the end of that year, a compromise came within moments of being enacted; but it was brought down by the objections of a single powerful senator.

A two-part policy approach emerged from these efforts. The components are: 1) guest worker reforms intended to create a workable "safety net" when too few domestic workers are available; and 2) a limited, earned legalization opportunity to allow businesses to retain experienced workers, and to facilitate an orderly transition over several years to greater reliance on seasonal guest workers. Called "earned adjustment," this approach allows experienced workers a chance to earn the right to permanent residency through significant future work in agriculture and law-abiding behavior. After several years of intense negotiation among employer and worker advocates, the bipartisan fruits of these efforts – the AgJOBS bills (S.1645 and H.R.3142) – were introduced on September 23, 2003.

Current Status

Since introduction, AgJOBS has seen growing bipartisan support in both the U.S. Senate and House of Representatives. In the Senate, "strange bedfellows" champions Larry Craig (R-ID and Ted Kennedy (D-MA) were joined by 61 other co-sponsors, including a majority of Senate Republicans. In the House, champions Chris Cannon (R-UT), Howard Berman (D-CA), and more than 120 other Republicans and Democrats co-sponsored the bill. AgJOBS attracted unprecedented organizational and media endorsements. Major daily newspapers from coast to coast – including the *Wall Street Journal*, *New York Times*, *Washington Post*, and *Los Angeles Times*, endorsed the effort. So did traditional adversaries including the U.S. Chamber of Commerce and the AFL-CIO, joined by an array of agricultural associations, Hispanic and immigration advocacy groups, and religious organizations including the U.S. Conference of Catholic Bishops, the nation's 12 largest Jewish organizations, and the Methodist, Lutheran and Episcopal churches.

However, AgJOBS faces a core of hardened opposition among anti-immigrant conservatives. Groups like the Federation for American Immigration Reform (FAIR) have exploited the fears and anxieties of many Americans in an environment shaped by post-September 11 security concerns and daily news of job losses. These groups are fear-mongers who offer no realistic solution. ***Lesson number two: Anti-immigrant groups are eating the business community's lunch when it comes to media and public perceptions. The business community must unite and pursue a more aggressive outreach and education strategy.***

Make no mistake: FAIR and spin-off groups like Numbers USA and the Center for Immigration Studies oppose any type of structured legalization program, and they also oppose expansion of guest worker programs. They claim that there is plenty of labor in America if employers would simply pay more. They use the "amnesty" label like a bumper sticker to block any and all rational solutions. Webster's defines "amnesty" as a broad, unconditional pardon. Neither AgJOBS nor President Bush's outlined reforms offer unconditional forgiveness. Rather, they only provide opportunities that come with responsibility.

The anti's were enraged by President Bush's announcement of immigration reform principles on January 7, 2004. Bush's principles would allow the illegal workforce already here to be granted renewable temporary worker status. FAIR and conservative media, especially radio talk show hosts, took advantage of election-year politics to force a White House retreat from the issue. With White House opposition to an immigration debate in 2004, all initiatives – including AgJOBS – were stopped in their tracks.

ofa Legislative Update

Outlook

Many immigration experts see AgJOBS as a way to break the ice for the broader debate, which may take several years. Shortly after the presidential election, at the invitation of Sen. Craig, ANLA facilitated bringing a group of agriculture leaders together in Idaho. At the meeting, Craig affirmed his unwavering commitment and discussed plans to bring AgJOBS to a Senate vote early in 2005.

The hope is to move early and swiftly. The support is huge, but the issue is controversial. Still, remember lesson one. While Republicans gained a bit in both houses, it takes at least 60 votes in the Senate to overcome political blocking maneuvers. Unified Democrats alone can kill a partisan effort.

Agricultural unity is important. Some current H-2A users, their labor providers, and their associations prefer a narrow, partisan H-2A reform package. Again, according to lesson one, such a package probably cannot be enacted. Still, it is always easier to kill legislation than to pass legislation, so these interests may try to play a "spoiler" role – as they did to a degree in 2004. ***Lesson number three: Agricultural industry unity is important; and if we can't get it, then the forces for positive change must overcome those opposing it.***

Then there is the White House. We are lucky to have a president who understands the border and believes in a proactive solution. Meanwhile, pressure is building to tighten enforcement. A battle is underway for the soul of the Republican Party. On one side are economic and "compassionate" conservatives who understand the economic and social harm that will come from "enforcement only" approaches. They see legislation like AgJOBS as sensible and necessary. On the other side are strict ideological "law and order" conservatives whose enforcement-only "solutions" would be devastating for employers everywhere. It is hard to predict who will gain the upper hand, but the stakes are incredible and now is no time to be on the sidelines. One terrorist attack could create unstoppable pressure to impose mandatory pre-employment verification of a worker's employment eligibility. If such a system were imposed without broader reforms, it would cause havoc for employers.

How Can You Help?

For good reasons, the labor and immigration reform issue has captured the green industry's attention. It is also among the toughest issues for Congress to tackle, and not for the faint of heart. ANLA has seized a leadership role and is grateful for the support of partners like OFA. The challenges must be solved proactively. Once in the reactive mode, there is too little time to build consensus and support for practical solutions.

Lesson number four: The crisis won't solve itself. You can help by making a direct financial contribution to the war chest funding the effort – the ANLA Beacon Fund. Set up a meeting with your representative in Congress or their staff early in 2005. ANLA and OFA can provide background and talking points. Write an editorial for your local paper telling a positive story. Again, we can help with ideas. Just do something!

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Garden Center Promotion and Marketing Ideas

by Cheryl Cuthbert

Are you a creative marketer? Is your garden center known for its unusual sales or other events? What special events do you use to draw customers in the door?

In these days of intense competition for consumers' attention, time, and money, it is extremely important to be efficient and on-target with your marketing efforts. But, it can be a real challenge to get creative and come up with new ideas – much less something that works well.

Among OFA's garden center members, we know there are many creative minds out there – and we've asked a few folks to share how they make unique things happen at their businesses. As you review your own marketing plans for the upcoming year, here are some additional thoughts that might give you some new ideas.

Julia Janiak
Goldner Walsh Nursery Inc
Pontiac, Michigan

The Goldner Walsh Nursery is 51 years old, its building dates back to 1890, and its previous identity as the Pearce Floral Company makes it the longest-standing business in the city of Pontiac, and one of the oldest businesses in the county.

Janiak has some basic advice for how to think about marketing yourself: define who you are, identify and use what your location says about you, and listen to your staff's interests and abilities.

First and foremost, capitalize on who you are and what you're known for in your market. Then… be that. If you stop and listen to your customers, this may not be what you as the owner or manager first expect. Take the Goldner Walsh building for example; it's a very unique structure with a European feel. When she first came to the nursery, Janiak was worried about how old the building was and its seeming disrepair. However, her customers kept telling her that the "old soul" of the building was the very reason they came in the door. Janiak has encountered many folks who explore the nursery when they're having a personal crisis. Countless times, the staff has asked to help customers and the reply is "no, just being here helps me today."

Janiak is no longer complaining about the "old building" she has to deal with; Goldner Walsh now markets itself as an "Oasis in the City." This is based completely on what her customers are telling her – not what Julia is doing to "beat out" the competition nearby.

Second, use your location wisely. For example, there is a 352-year-old burr oak in front of the Goldner Walsh store. When it was slated to be cut down for road construction, 7,000+ local residents and a lot of press efforts saved the tree. Today, Janiak gives tours of the nursery to local historical groups, ending the visit in front of the store and of course, the historic burr oak.

Third, Janiak utilizes her staff wisely – capitalizing on their speaking talents for in-store presentations, their design skills for unique displays, and their ideas for new promotions based on their personal and customer feedback.

Nancy Baker
Baker's Acres Inc
Alexandria, Ohio

Baker's Acres is located east of Columbus, Ohio, which is the state capitol. This garden center is a popular destination location, and Nancy and her husband Chris are known for their unique style. According to Nancy, here are the Baker's four most popular and successful promotions – in her words:

"The Not Quite All Night Extravaganza." This takes place annually on the Friday before Mother's Day. Everything in the plant department is 10 percent off from 8 p.m. to midnight. We string lights everywhere, and people even bring their own flashlights. A local gardening group serves homemade food and drinks, and live music is provided. In the past, members of Chris' band have played, but this year we hired Dave Powers (a well-known local pianist, keyboardist, and vocalist).

It all started about 10 years ago. Since I was up most of the night anyway, getting ready for the big Saturday, I thought why not just make an event out of it? We opened up at 7 a.m. with a mulch sale and free donuts until 9 a.m. Then, we stayed open all night with different specials every hour. It was a hit from the beginning. We had a 30-minute wait in line at 5 a.m. just to buy mulch at 10 percent off. About four years ago, we decided to make it just 8 p.m. to midnight because we got old and can't stay up. We have more cars in our lot (and overflow into the yards around us) for those four hours than at any other time all year. It's a very pleasant party-like atmosphere.

"Shop With a Friend." On Tuesdays (our slowest day), we offer 10 percent off for you and three friends. You must report to the front desk first to receive your very gaudy 'Friends' badges. This identifies you as part of the program. At checkout, we take a picture and post it on the 'Friends Board.' This has greatly boosted sales on Tuesdays.

"Garden Party." We have many display beds that require tending, often when we don't have the time to do it. So we have a garden party involving 12 customers who come to clean, prune, and replant the beds. They receive a gift (gloves, tee shirt, etc.), $20 in Baker Bucks, and I feed them a nice meal in our home. There is always a waiting list.

"Food for Plants." In April and May, we barely have time to eat, let alone bake. If someone brings us a pie, a cake, or three dozen cookies, they get $10 in Baker Bucks. The baked goods must be homemade, and the customer must sign up so we don't get more than what we can eat on one day (although we've never turned away a rule breaker). We eat like kings, and we don't gain any weight because we're running around like chickens at that time of year. This is very popular with the staff as well as the customers.

All of these promotions were my ideas, not that they probably haven't been done before somewhere. They are all advertised in our catalog and only in the catalog, because we couldn't handle any more people, especially at the Extravaganza. Our catalog is probably our biggest promotion tool. We list all of our plants, advertise the special events, and include a lot of funny quotes and articles. This helps set the tone for the whole season. We have a mailing list of about 6,000.

Tom Brandewie
Dill's Greenhouse
Groveport, Ohio

Dill's Greenhouse is also a retail facility, and it is located southeast of Columbus, Ohio, with great visibility and easy access to a major highway leading in and out of the city. Here, Brandewie provides information about a few of Dill's promotion efforts – and an important observation about seeing what other businesses are doing, and then doing what works best for you.

"As you know, the greenhouse business is very seasonal; and like everyone else we rely on what is done in those precious three months in the spring to carry the load for the rest of the year. We had been considering doing something 'different' during the fall season for several years. We had done the open house thing and found that it had run its course for us.

"At that point, four years ago, we started asking salespeople who travel in wide areas what they had seen. One person told us to check out Burger Farm and Garden Center in Cincinnati. We went to see what they did in the fall, and our eyes were awakened to the possibilities. Of course, we tried to do a lot of what Burger did in our first year (2002), and quickly we realized we had to do what was the right fit for us. Burger completely shut down their normal operations in the fall; but, we found that the increased foot traffic in fall meant more retail sales: trees, shrubs, mums, hard goods, etc. Our growth in three years in the month of October is 300 percent (100 percent in our garden center alone).

"The special events that we offer for one price are: a 3-acre corn maze, a 35-minute tractor-pulled hayride, a 2,000-square-foot straw maze (located inside a greenhouse), a 25-foot x 25-foot sandbox, and an inflatable funhouse maze. We also try to have the local FFA chapter bring animals every weekend.

"For six weekends, usually starting the last weekend in September, the programs that we offer are:

- weekdays by appointment only – we can guarantee two hours of fun to school groups, daycares, etc.
- Flashlight Friday Nights – For general admission, families can cook hot dogs and s'mores by bonfire. Our place feels completely different at night.
- Saturday and Sunday – For general admission, a family can stay all day.

"I do a lot of local advertising in local newspapers and PTO newsletters, and I try to target homes in our area. Also we are located right along a heavily traveled freeway, and that is advertising in itself. Positive word-of-mouth is starting to spread as well.

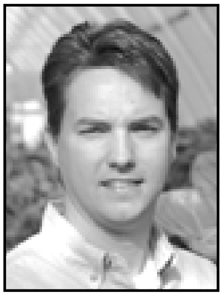
"I am constantly trying and looking for new things that add to the "experience" of fall at Dill's, and we're hopefully becoming more profitable. This year, the Flashlight Friday Nights were successful; but I also tried a craft show the last two weekends and was not successful. The events may change, but one thing I want people to do when they visit us is: I want them to take lots of pictures and remember the "experience" they had at Dill's Greenhouse."

Summary

Finding the right ways to market to garden center customers can be a challenge. These are just a few suggestions to spur your thoughts as you work on your marketing plan for 2005.

How do you know what would work best for you? Think "outside the box." Be willing to experiment. Risk a few laughs. Look at what other garden centers are doing. Ask your staff. Ask your customers what they would like to do. Expect much trial and error; but remember, any idea could become your next successful promotion.

How PGRs Work



by Todd Cavins

Plant growth regulators (PGRs) are used by most of us on a regular basis. But, have you ever wondered how they really work? For the most part, they help to prevent plant stretch. But, what is making that happen? What is the mode of action?

When choosing insecticides, the mode of action is often examined to determine a product's efficacy and to aid in pest resistance. So, if one knows something about the mode of action of PGRs, then that may also aid in understanding, choosing, and using these products more effectively.

There are many things to consider when applying PGRs, including species/cultivar, crop development stage, foliar spray/drench/sprench, and environmental situations. However, this article will focus on what is happening in the plant cell – the mode of action when a PGR is applied to the plant.

Ethylene PGRs

A popular PGR on the market is Florel, which is an ethylene-producing agent. Ethylene (Figure 1) does help retard plant growth in many species, but its mode of action is quite different from the "anti-gibberellins" which will be discussed later. Ethylene is a gaseous plant hormone that is often referred to as the death hormone. While this is true in many situations, we can use ethylene to our advantage.

When plant cells are exposed to the appropriate amount of ethylene, physical changes start to occur. Cell structures called microtubules (tiny rope-like structures), which play a role in cell wall development, start to change where they attach to the cell walls. Generally, microtubules are attached to the cell wall sides much like the metal hoops around a wooden barrel. However, when they are exposed to ethylene, a transformation occurs and the top and bottom cell walls become anchored to each other with these tiny ropes. As the cell takes up more water, it needs to stretch; the ropes anchoring the top and bottom together only allow this stretching to occur laterally. The lateral stretching (growth) versus vertical stretching helps to retard plant height.

Additionally, the toxic effect of ethylene limits the cell division in the growing tip. The limited cell division causes apical (top of plant) dominance to be broken. Breaking apical dominance allows the plant to direct its energy to lateral growth. This is why some chemical pinching effects can be observed. Many growers have used ethylene as a chemical pinching agent in such crops as geraniums, petunias, and perennials.

Anti-gibberellin PGRs

Anti-gibberellin PGRs work differently than ethylene by stopping the production of gibberellic acid (GA). There are more than 120 GAs known to exist in plants. Fortunately, only a few are thought to contribute to plant stretch – and chiefly GA_1. Plants make (biosynthesize) GA_1 from a carbohydrate called pyruvate (Figure 2). Pyruvate is formed when plants consume (break down) sugars for energy. Pyruvate then undergoes a series of transformations with the aide of enzymes (chemicals that promote chemical reactions) to form GA_{12}-aldehyde (a precursor to GA_1) that then can form GA_1 or other GAs responsible for stem elongation. Anti-gibberellin PGRs interfere with this transformation. But, it is the location of the interference that causes these PGRs to behave differently.

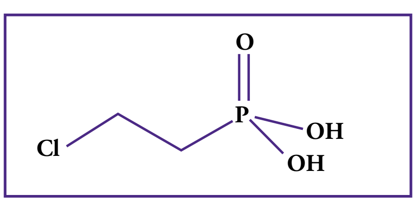


Figure 1. This is the chemical structure of ethephon, the active ingredient in Florel that is absorbed by the plant and converted into ethylene.

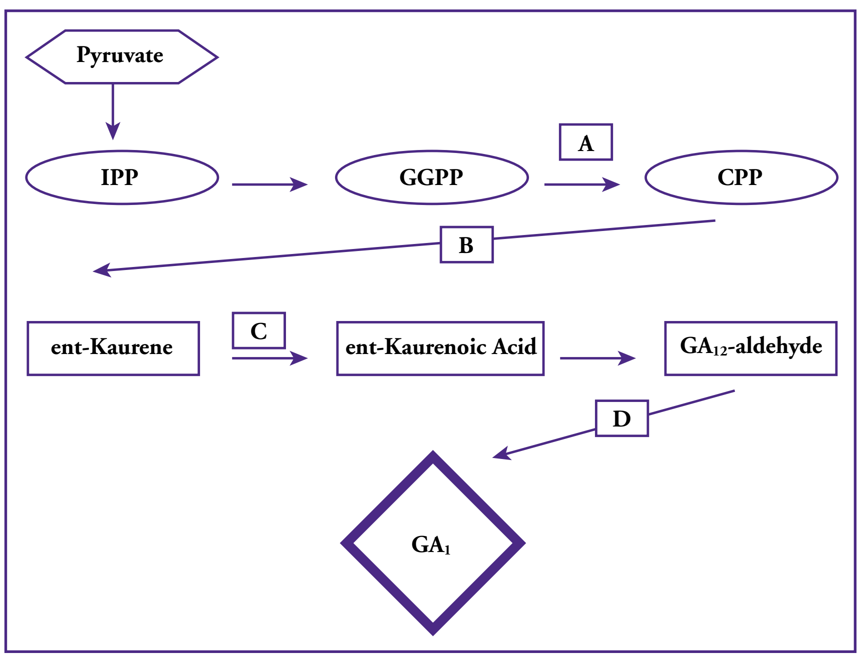


Figure 2. The formation of GA1, the major contributor to plant stretch, from the carbohydrate pyruvate.

ofa Grower

Cycocel (chlormequat) is an anti-gibberellin known as an -onium or quaternary ammonium PGR (Figure 3). Chlormequat blocks the GA biosynthesis pathway prior to formation of ent-kaurene. It is known to block the pathway in two locations. Chlormequat tightly binds to the enzymes CPP synthase (Figure 2, A) and ent-kaurene synthase (Figure 2, B) and does not allow them to react. Therefore, GA production is stopped early in the biosynthetic pathway. It would be the equivalent of wrapping keys with duct tape. With the duct tape wrapped around the key, it would not fit into the keyhole to open the door.

The next category of anti-gibberellin PGRs is the nitrogen-containing heterocycles, which can be divided again into the pyrimidine and triazoles groups. The pyrimidines include A-Rest (ancymidol, Figure 4) and Topflor (flurprimidol, Figure 5). Note how their physical appearance is similar. Consequently, they also tend to perform similar in regard to rates and the crops on which they are active.

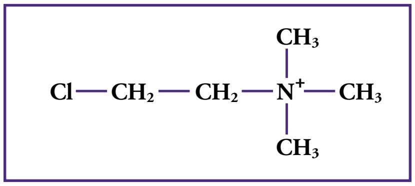


Figure 3. The chemical structure of chlormequat, the active ingredient in Cycocel.

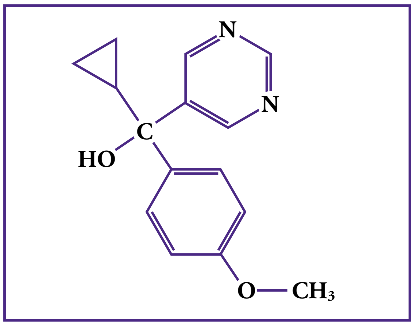


Figure 4. The chemical structure of ancymidol, the active ingredient in A-Rest.

The pyrimidines are chemically similar in shape to the enzymes (monooxygenases) that convert ent-kaurene to ent-kaurenoic acid (Figure 2, C). Being similar in shape, ancymidol and flurprimidol interfere with the enzyme function. Referring back to keys, it would be the same as attempting to use an uncut key to unlock the door. The uncut key would fit in the keyhole; but without the proper notches cut out, it would not turn and unlock it.

Triazoles such as paclobutrazol (Bonzi and Piccolo) and uniconazole (Sumagic) function similar to the pyrimidines by interfering with monooxygenases (Figure 2, C). However, these chemicals are slightly different in their chemical structure (Figures 6 and 7). The slight difference of having an extra N (nitrogen) in one of the ring structures and the Cl (chlorine) attached to the other ring classifies and causes them to act slightly differently. The triazoles are among the strongest of the PGRs available.

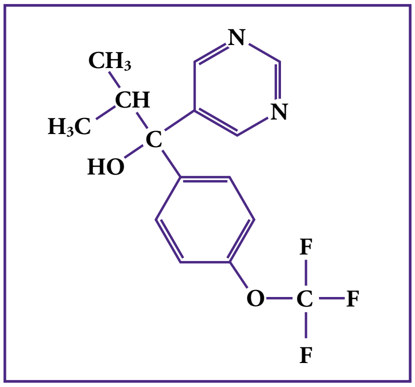


Figure 5. The chemical structure of flurprimidol, the active ingredient in Topflor.

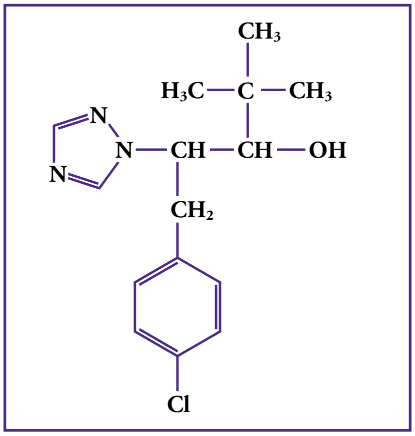


Figure 6. The chemical structure of paclobutrazol, the active ingredient in Bonzi and Piccolo.

Another group of gibberellin inhibitors are “structural mimics of 2-oxoglutaric acid.” Though the name is frightening, this group of PGRs contains the U.S. floriculture industry’s most popular PGR – daminozide [B-Nine and Dazide Enhanced (pending registration)]. Daminozide is thought to compete with a chemical that is necessary to form the enzyme responsible for changing GA_{12} –aldehyde (a precursor that is not responsible for stem elongation) to GA_1, which is the GA that principally causes stem elongation (Figure 2, D). This interference occurs very late in the GA biosynthetic pathway.

Using the key example again, it would be the equivalent of losing a key. However, just as you may find your keys a week or two later, plants have the ability to overcome these chemicals relatively soon. Generally, structural mimics are short-lived, and some species of plants can synthesize GA_1 from other pathways to overcome the

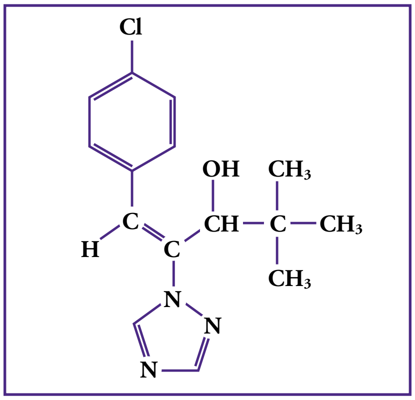


Figure 7. The chemical structure of uniconazole, the active ingredient in Sumagic.

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How PGRs Work

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PGR. Also, these structural mimics at times can increase GA concentrations in plants. A common observation of researchers who develop recommendations and labels of structural mimic PGRs is that at certain rates, an **increase** in plant height is observed.

While it is probably not essential to memorize the GA biosynthesis pathway and mode of action of PGRs, it may help solve a few problems. From time to time, certain PGRs will not work well on certain crops. Knowing which PGRs have similar modes of action may save time (and a crop) when choosing an alternative product. Also, understanding that PGRs are active in different locations of the GA biosynthesis pathway may provide insight about why tank mixes can have synergistic effects.

Disclaimer

**The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by the Oklahoma Agriculture Experiment Station or OFA – an Association of Floriculture Professionals, nor discriminates against similar products or services not mentioned. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage and examine a current product label before applying any chemical.*

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Insect Growth Regulators: Are They Compatible With Biological Control Agents?

by Raymond A. Cloyd

Biological control or the use of natural enemies such as parasitoids, predatory mites, predatory bugs, and/or beneficial nematodes is an alternative strategy to manage greenhouse pests. In fact, many greenhouse operations across the United States have and continue to implement successful biological control programs. However, the sole use of biological control may not always be sufficient to control plant-feeding insect or mite populations in greenhouses.

As a result, research has investigated the possibility of using so-called "biorational" insecticides or miticides in conjunction with biological control agents (=natural enemies) to determine if there is compatibility when both management strategies are implemented together. Those insecticides and miticides that are classified as "biorational" include insect growth regulators, soaps and oils, feeding inhibitors, and microbials. For the sake of brevity, this article will focus on the compatibility of insect growth regulators with natural enemies.

Insect growth regulators (or IGRs) are used to kill the young (=immature) stages of plant-feeding insects including mealybugs, scales, and whiteflies. Insect growth regulators are typically placed into three general categories: juvenile hormone mimics or analogs, ecdysone antagonists, and chitin synthesis inhibitors.

Juvenile hormone mimics or analogs inhibit development and cause insects to remain in a young stage – preventing insects from completing their life cycle. Examples of insect growth regulators with this mode of action include fenoxycarb (Preclude), kinoprene (Enstar II), and pyriproxyfen (Distance). **Ecdysone antagonists** disrupt the molting process of insects by inhibiting metabolism of the molting hormone ecdysone. Insect growth regulators with this mode of action include azadirachtin (Azatin/Ornazin), cyromazine (Citation), and tebufenozide (Confirm). **Chitin synthesis inhibitors** interfere with enzymes during the molting process that stimulate the synthesis and formation of chitin, an essential component of an insect's exoskeleton. As a result, insects fail to reach adulthood because they die in the young stage, or they mature into sterile adult females. Insect growth regulators having this mode of activity include buprofezin (Talus), diflubenzuron (Adept), etoxazole (TetraSan), and novaluron (Pedestal).

First of all, there is the obvious question that if a given insecticide or miticide such as an insect growth regulator kills a particular target pest or pests, then why would it not kill a natural enemy? Another important question – what is meant by "compatibility?" Well, "biorational" insecticides such as insect growth regulators are considered to be more selective to natural enemies and potentially more compatible than most conventional insecticides, because insect growth regulators are active on hormone or enzyme systems, not the nervous system. In fact, several commercially available insect growth regulators state that their products are not disruptive to beneficial insects and mites.

However, research conducted with insect growth regulators using parasitoids and predators tells a different story. Studies conducted worldwide have shown that insect growth regulators may in fact be harmful to certain natural enemies. Although an insect growth regulator may not be directly toxic to a particular natural enemy, there may be indirect effects such as delayed development of the host and natural enemy inside, delayed adult emergence, and/or decreased natural enemy survivorship. In general, the harmful effects of insect growth regulators (or any other "biorational" insecticide/miticide) may be due to direct contact, host elimination, residual activity, or sublethal effects:

Direct Contact. Directed sprays of insect growth regulators may kill natural enemies; or in the case of parasitoids, they are killed while in developing hosts.

Host Elimination. Insect growth regulators may kill hosts, which may lead to natural enemies dying or leaving because they are unable to locate additional hosts.

Residual Activity. Although spray applications of insect growth regulators may not directly kill natural enemies, any residues may have repellent activity – thus influencing the ability of parasitoids or predators to locate a food source. For example, residues of both kinoprene (Enstar II) and pyriproxyfen (Distance) are highly repellent to whitefly parasitoids more than one day after drying.

Sub-lethal Effects. Insect growth regulators may not directly kill a natural enemy, but may affect reproduction such as sterilizing females – reducing the ability of females to lay eggs or impacting the ratio of females vs. males. Additionally, foraging behavior may be modified, thus influencing the ability of a parasitoid or predator to find a host. Also, those parasitoids that host feed, such as the greenhouse whitefly parasitoid *Encarsia formosa*, may inadvertently consume residues on hosts after a spray application. Residues on a potential host may make them unacceptable to a parasitoid or predator.

Differences in natural enemy susceptibility to insect growth regulators may be due to a number of factors including 1) whether the natural enemy is a parasitoid or predator, 2) species of natural enemy, 3) life stage (i.e. egg, larva, pupa, and adult) sensitivity, 4) developmental stage of host, 5) rate of application, 6) timing of application, and 7) type or mode of action of insect growth regulator used. These differences are too complex to discuss in detail in this article, primarily due to the interactions that may occur among the factors mentioned here and the variability in natural enemy sensitivity. Another factor to consider, which makes the "picture" even more complex, is that the harmful effects from insect growth regulators may not be associated with the active ingredient but the inert ingredients such as carriers or solvents.

Many of the insect growth regulators that have been evaluated for both their direct and indirect effects on natural enemies should be very familiar to greenhouse producers. These include pyriproxyfen (Distance), tebufenozide (Confirm), azadirachtin (Azatin/Ornazin), diflubenzuron (Adept), buprofezin (Talus), and kinoprene (Enstar II). Here are some examples, based on studies, on the compatibility of these insect growth regulators with various natural enemies.

Pyriproxyfen (Distance)

Pyriproxyfen, in laboratory studies, is non-toxic or harmless to the larval and adult stages of the green lacewing (*Chrysoperla carnea*) and predatory bugs (*Orius* spp.), with no harmful effects on adult female oviposition and egg viability. Pyriproxyfen is also harmless to the predatory bug *Orius laevigatus* via ingestion and residual contact. Although harmless to certain predatory insects, pyriproxyfen is toxic to immature parasitoids developing inside silverleaf whitefly, *Bemisia argentifolii* nymphs. Natural enemy species may influence compatibility as demonstrated with pyriproxyfen, which appears to be harmless to *Encarsia pergandiella*, but is highly toxic to *Encarsia formosa*.

Tebufenozide (Confirm)

In laboratory studies, tebufenazide is harmless to the green lacewing, *Chrysoperla carnea*. This insect growth regulator, which is primarily used against caterpillar larvae, does not affect adult green lacewing female reproduction.

Azadirachtin (Azatin/Ornazin)

Azadirachtin applications have a negative effect on green lacewing (*Chrysoperla carnea*) females by inhibiting oviposition. In a large-scale laboratory study, applications of azadirachtin were not toxic to the egg and adult stages of the predatory mites *Phytoseiulus persimilis* and *Amblyseius cucumeris* when exposed to treated bean leaves. Studies have also demonstrated that the number of eggs laid by the aphid predator *Aphidoletes aphidimyza* are not negatively affected by azadirachtin.

Diflubenzuron (Adept)

Diflubenzuron, which is a chitin synthesis inhibitor, has minimal impact on natural enemies when applied either directly or indirectly under laboratory conditions. However, the life stage (egg, larva, pupa, and adult) treated influences the effects of chitin synthesis inhibitors. For example, diflubenzuron is harmful to the early larval stages of green lacewing (*Chrysoperla carnea*), while later larval stages are not harmed. Young larvae of the mealybug destroyer *Cryptolaemus montrouzieri*, when treated with diflubenzuron, fail to develop into adults; while diflubenzuron has minimal impact on the citrus mealybug parasitoid *Leptomastix dactylopii*.

Buprofezin (Talus)

Buprofezin, which is another chitin synthesis inhibitor, is toxic to the larval stage of predatory ladybird beetles;

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while it is less toxic to adult ladybird beetles – although it may have a sterilizing effect on some species. Buprofezin is less harmful to other predators, as demonstrated in a laboratory study where applications of buprofezin did not negatively affect the development (nymph to adult) of the predatory bug *Orius tristicolor*. In general, buprofezin is less toxic to parasitoids. For example, buprofezin does not affect oviposition of the two whitefly parasitoids, *Eretmocerus* sp. and *Encarsia luteola*, when the young or adults are exposed to residues. Additionally, buprofezin has no effect on the foraging behavior of adult *Eretmocerus* sp.

Kinoprene (Enstar II)

In studies conducted with kinoprene, this insect growth regulator is consistently harmful to certain natural enemies – especially parasitoids. As mentioned previously, the application rate of an insect growth regulator may influence natural enemy susceptibility. For example, kinoprene reduces adult emergence of the leafminer parasitoid *Opius dimidiatus* and the aphid parasitoid *Aphidius nigripes* at all rates tested. Applications of kinoprene can inhibit adult emergence when applied to hosts containing the larval and pupal stages of certain parasitoids. Kinoprene is extremely toxic to the aphid parasitoid *Aphidius colemanii* when exposed to directed sprays and one-day-old residues. Furthermore, kinoprene-treated poinsettia leaves are harmful to the silverleaf whitefly parasitoid *Eretmocerus eremicus* up to 96 hours after treatment. Although harmful to parasitoids, kinoprene is less harmful to certain predators and different life stages. For example, sprays of kinoprene do not negatively affect ladybird beetle eggs.

A Reminder

It is important to note that many studies are conducted under laboratory conditions, which represents a "worse-case scenario;" and if there are no harmful effects under these conditions, then it is likely that the insect growth regulators will not be harmful when used in the greenhouse.

UI's Focus

A major part of our research effort at the University of Illinois is to assess the compatibility of commercially available insecticides, miticides, and fungicides with natural enemies. For example, we have conducted several studies to test the direct and indirect effects of "biorational" pesticides including insect growth regulators on the natural enemies of fungus gnats and mealybugs. In our research, we found that foliar and drench applications of the insect growth regulators novaluron (Pedestal) and pyriproxyfen (Distance) were not directly or indirectly harmful to the soil-predatory mite *Hypoaspis miles* (actually *Stratiolaelaps scimitus*). We have also demonstrated that azadirachtin (Ornazin) is safe to use with the citrus mealybug parasitoid *Leptomastix dactylopii*. Pyriproxyfen (Distance) was found to be slightly toxic, while both direct and indirect applications of kinoprene (Enstar II) were extremely toxic to this parasitoid.

In this article, I have focused on the impact of insect growth regulators on natural enemies – some of which are commercially available for use in greenhouses. It is evident that there is variability in the compatibility of natural enemies to insect growth regulators based on the type of insect growth regulator, whether the natural enemy is a parasitoid or predator, and the stage of development. Insect growth regulators are effective insecticides for controlling many different types of greenhouse pests and are generally less harmful to natural enemies than conventional insecticides, which suggest that they are more likely to be compatible with natural enemies.

However, it is important to know which insect growth regulators, or any "biorational" insecticide for that matter, are compatible or not compatible with natural enemies to avoid disrupting successful biological control programs. Greenhouse producers who are interested in learning more about the direct and indirect effects of insect growth regulators on natural enemies should consult the publication *Koppert Biological Systems Side Effects Guide* at the Web site – http://www.koppert.nl.

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Confessions of a Foliage Supplier

by Bruce Jacobson

Editor's Note: This is the basic content of a presentation made by Bruce Jacobson at the 2004 OFA Short Course. For highlights of the 2005 OFA Short Course or to order a CD-ROM of the 2004 educational sessions, visit the OFA Web site at www.ofa.org.

Knowing The Right Questions to Ask your Foliage Grower

In any kind of endeavor, knowing the right questions to ask and when to ask them is part of the key to the success of the project. The who's, the why's, the where's, and the how's help you navigate the course of your undertaking;, whether it's business or personal.

This is very true in the foliage industry. For example, if a grower tells you he or she is using a particular type of potting medium because it's good, you should not stop there. What makes it good? How good is it compared to another type of media? Who else is using this potting medium? How much money are you saving in the long run? These are just a few of the questions you need to ask your grower/supplier.

Asking the right questions could make a big difference in the quality of plants that you are getting, and in the long run, have an effect on your bottom line.

Here are some of the questions to consider asking your foliage supplier/grower:

- Ask for the grower's geographic location – there is a big difference between, for example, orchids grown in Hawaii and orchids grown in Michigan. The location dictates the quality of materials you will be getting. Tropical plants grown in a natural tropical environment exhibit their real vibrant qualities: robust structure and vibrant colorations.
- Ask what kind of facility in which the plants are grown. Are they grown in a shade, double poly, or fan-cooled facility? Different plants require different growing environments.
- What kind of potting mix do they use? Do they use local soil, or do they import it? Some greenhouses either use Canadian or German potting medium, although a lot of growers swear that Canadian mix makes a big difference.
- Ask what type of heating/cooling and irrigation systems are used. Do they use a boiler or a steamer for heating? For irrigation, do they utilize drip, overhead, or ebb and flow irrigation?
- What kind of fertilizer do they use, and how is it applied? Do they utilize top feeding, hand feeding, and is fertilizer applied weekly or constantly?
- Are plants grown from cuttings or tissue culture? Plants grown from cuttings, especially from good cultivars, show consistent qualities and generally retain the best features of the mother plant; while plants grown from tissue culture are generally prized for their disease-resistance characteristics.
- How does the foliage grower address diseases, pests, and other plant problems?
- Ask for plant specs. Are they full head or full head with runners? Are plants measured from the top of the pot (or pot lip) to the highest or longest tip, or are they measured from the bottom of the pot? Measuring from the bottom of the pot gives the grower *extra* inches in plant height and length for vines but *less* for you, the consumer. Try to remember this.

Bear in mind that the answers to these questions may vary depending on the plant type and geographic location of the greenhouse.

"Mom and Pop" producers, – are they a dying breed? And "Big Daddy" producers – are they a bane or a boon?

Over the past few years, small producers – or the "Mom and Pop" growers – in Florida have been slowly disappearing. The cold winter freezes and the recent "conga line" of hurricanes that hit the state are but two of the factors that have contributed to their decline. Over development of former agricultural lands turning into mass housing developments hasn't helped either. Another contributing factor is competition; small growers just cannot compete with the "Big Daddy" producers. They either close down or end up being bought out by the bigger producers.

You may ask: Why buy from smaller greenhouses? The answer is plain and simple. Most small greenhouses produce very high quality plant materials because of the personal attention they provide, aside from the fact that they treat you like family. Prices may be a little higher, but not always; and you get exactly what you pay for.

Some big producers for the mass market may offer quality plants at a lower price, but the level of service is affected. Sometimes, a buyer is just treated as an "account." There is less interpersonal relationship between the vendee and the vendor. Here, quantity does not equate with quality.

To sum it up, your relationship with your foliage grower greatly affects the quality of material that you get. As the saying goes, "buyers beware!"

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How to Develop Sales Promotions

John Stanley

Price reduction campaigns can work in certain locations and economic climates, but if you fail to plan carefully for such campaigns, you may find you have cultivated a price-motivated shopper who only comes for discounts. Supermarkets have taken the lead in specific price promotions, and the lessons learned from positive promotions in that retail sector can be readily adapted to other retail industries.

Consider Everyday Low-Price (ELP) Promotions

ELP promotions are common in supermarkets and home improvement stores. Here the company promotes its business as the cheapest in town on the products it supplies. To develop this concept as a strategy, you must look at all your competition on a regular basis and compare your prices with theirs. To develop ELP promotions, you will need to be a major player in the marketplace because you will have to buy in bulk to ensure you can maintain such promotions.

Consider Using Bulk Purchase Discount (BPD)

BPD is another useful way of increasing the average sale per customer. One of the most successful sales promotions is the "four for three" promotion on products. Try using the strategy during one month to increase sales, or on weekdays during one specific month to increase sales on quieter days. This can be successful because it increases your average sale per customer and ensures the initial purchase items are at full gross profit.

Develop a Variable Day Price (VDP) Policy

For VDP, you make a business decision to vary the price on specific days of the week. You usually take your quietest day of the week and use reduced prices on that day to increase your customer traffic. Some companies call these days "Pensioners Day" or "Ladies Day."

Position Sales Promotions to Increase Total Sales

The objective of a sale is to increase your customer traffic and as a result increase your cash flow. To achieve this, many businesses place sales at the front of the store. Others place a "taster" of the sale at the front of the store and then place the major sale bin at the rear of the store. This will encourage the consumers to walk through the store and hopefully pick up more product on impulse as they pass.

Be Aware of the Value of Price Banding

Price banding is the band of prices in which a product will sell. For example, if the maximum perceived value is $30 and the minimum is $25, then this leaves a price band between $25 and $30 for flexible pricing. A retailer in a depressed area or in a lower economic group area may select a price nearer the $25, giving him/her the flexibility to increase prices in the future. A retailer in a more affluent area or higher economic group area may price the product near the $30 and achieve the same volume of sales.

Ensure Promotional Sales Work for You

In more difficult trading climates, the tendency has been to reduce prices and to have sales to increase turnover. The result of continued sales may be increased turnover, but can this increase in turnover justify the reduction in gross profit percentage?

Table 1, prepared by Results Corp, Queensland, Australia, is a useful guide when reducing prices. You may find that the turnover increase you achieve may not justify having an overall price reduction.

Management Memo

Is it better to increase the rate of gross profit rather than sales? You may be able to achieve an extra 1 percent gross margin without losing sales. How? By pricing according to what the market determines. Rather than sell at $9.95, go well past the $10 price barrier and sell at $11.99. In other words, once past the price barrier, it is better to move near to the next one, which is $15, rather than stay too close to the previous price barrier. Pricing below the next barrier gives the consumer the impression you are inexpensive, while pricing just above a price barrier gives the impression of being expensive (*The Principles of Successful Retailing*, Peter M. Latchford. The Business Library. 1990. Page 195).

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Table 1. If your present margin is:

	20%	25%	30%	35%	40%	45%	50%	55%	60%
And you reduce your price by:	To produce the same profit, your sales volume must increase by:								
2%	11%	9%	7%	6%	5%	5%	4%	$%	3%
4%	25%	19%	15%	13%	11%	10%	9%	8%	7%
6%	43%	32%	25%	21%	18%	15%	14%	12%	11%
8%	67%	47%	36%	30%	25%	22%	19%	17%	15%
10%	100%	67%	50%	40%	33%	29%	25%	22%	20%
12%	150%	92%	67%	52%	43%	36%	32%	28%	25%
14%	233%	127%	88%	67%	54%	45%	39%	34%	30%
16%	400%	178%	114%	84%	67%	55%	47%	41%	36%
18%	900%	257%	160%	106%	82%	67%	56%	49%	43%
20%	–	400%	200%	133%	100%	80%	67%	57%	50%
25%	–	–	500%	250%	167%	125%	100%	83%	71%
30%	–	–	–	600%	300%	200%	150%	120%	100%

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2005 OFA Short Course Schedule Updates

We're always making improvements, and some important dates and timelines have been updated to further enhance your experience this year. The OFA Board of Directors recently voted to adjust the ending date of the 2005 OFA Short Course from Wednesday, July 13 to Tuesday, July 12. The educational sessions previously offered on Wednesday will now be available on Saturday afternoon, July 9.

The **trade show hours** will be Sunday, July 10 – 9 a.m. to 5:30 p.m.; Monday, July 11 – 9 a.m. to 5:30 p.m.; and Tuesday, July 12 – 9 a.m. to 2 p.m. The **keynote and OFA awards presentation** will now be held on Saturday evening, July 9. The **OFA Short Course reception** will once again be held on Sunday evening, immediately following the close of the trade show.

2004 OFA Short Course CDs Still Available

A majority of the educational sessions at the 2004 OFA Short Course were audio recorded, and a conference CD-ROM package of the presentations is available. The CD-ROM includes the live recordings and any available PowerPoint slides and/or handouts from the presenters. The complete CD-ROM package is $229 + shipping for OFA members.

All recorded sessions are also available on audio CD. OFA members pay $12 + shipping per 90-minute session on audio CD. For an order form, visit www.ofa.org, www.digitellinc.com, or call Digitell Inc. toll-free at 1-800-679-3646.

Calling all DuPage Horticultural School Graduates

A reunion of all graduates of the DuPage Horticultural School, formerly located on Ball Seed Company's property in West Chicago, Illinois, will be held as part of Ball's Centennial Celebration this year. The event, scheduled for July 28, 2005, is open to any graduate from any year during the history of the DuPage Horticultural School. If you are a graduate of the school, contact Joan Mazat at phone: 630-588-3485 or e-mail: jmazat@ballseed.com.

Fred C Gloeckner Foundation Announces Grant Proposal Deadline

Harrison, New York – April 1, 2005 is the deadline for submission of grant proposals for research and educational projects in floriculture and related fields – such as plant pathology, plant breeding, agricultural economics, agricultural engineering, entomology, and plant physiology related to floriculture – at universities, colleges, and federal research institutions in the United States. Since 1961, the Foundation has distributed $4.95 million to institutions nationwide. Grant application forms and guidelines are available from the Fred C. Gloeckner Foundation – phone: 914-698-2300; www.gloecknerfoundation.org.

MAAHS Annual Meeting and Employer Seminar to be Held March 1

The Mid-American Ag and Hort Services (MAAHS) fourth annual meeting/employer seminar will be held on March 1 in Wilmington, Ohio. All members of sponsor members and other employers are invited to attend. Dr. Bernie Erven of Erven HR Services, LLC will discuss the "Role of an HR Manager in Ag and Hort Businesses." Registration is due by February 22. For more details, contact Jennifer Hungerford at 614-246-8289; e-mail maahs@ofbf.org; or visit www.midamservices.org and click on "Events."

MAAHS is a consortium of associations, organizations and employers organized to meet the educational, regulatory compliance assistance, and labor recruiting needs of agricultural and other employers in Indiana, Kentucky, and Ohio. Sponsor members include: Ohio Farm Bureau, Indiana Farm Bureau, Ohio Nursery and Landscape Association, OFA – an Association of Floriculture Professionals, Ohio Fruit Growers Society, Ohio Vegetable and Potato Growers Association, Nursery Growers of Lake County Ohio, Ohio Landscapers Association, Fruit Growers Marketing Association, Red Gold, and Kentucky Farm Bureau.

OFA Member Benefits

- OFA members receive a 20 percent **discount on all *OFA Tips*... books**, now distributed exclusively through Ball Publishing. Members also get a 20 percent discount on all Ball Publishing titles. Visit www.ofa.org or www.ballbookshelf.com for more information. Proof of membership will be required for the member discounts. Each OFA member's ID number is listed on his or her *OFA Bulletin* label. *Tips on Operating a Profitable Greenhouse* will be released in mid-March.
- The ***APPI Savings Solution Program*** identifies and implements options that reduce the costs of a company's energy, utility, and telecommunications services. You choose which services best suit the needs of your business. These services include electricity, natural gas, water, recycling, waste removal, freight, credit card processing, and voice and data communications. For OFA members who use APPI, there are no up-front, hourly, or retainer fees. APPI, an independent utility consulting firm, is compensated only when it delivers savings and/or refunds. To get started, APPI will perform a free audit of your company's energy, utility, and telecommunications bills. For more information, call 800-520-6685, e-mail: info@appienergy.com, or contact OFA.
- Ohio-based members of OFA can participate in the **OFA worker's compensation group rating program**. Cost control and claims management are the keys to enabling OFA members to save significant premium dollars through this program, which is administered by Compensation Consultants Inc. (CCI). For more information or a no-cost, no-obligation quote, contact Cathy Bennett at CCI – phone: 800-837-3200, ext. 7106, e-mail: cathy.bennett@ccitpa.com, or online at www.cciworkerscomp.com.

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OFA Event Calendar

February 18-20	**OFA Board & Committee Meetings** – Columbus, OH
April 5	**Wedding Workshop Outreach Program** – Dreisbach Wholesale Florists Inc, Louisville, KY
April 6	**Wedding Workshop Outreach Program** – Dreisbach Wholesale Florists Inc, Lexington, KY
April 7	**Wedding Workshop Outreach Program** – Dreisbach Wholesale Florists Inc, Cincinnati, OH
July 9-12	**OFA Short Course** – Columbus, OH

Look for OFA Staff at Industry Events

OFA staff members will be representing the Association at several industry conferences and other meetings in the next few months. The schedule includes the Mid-Am Horticultural Trade Show (Illinois); TPIE (Florida); CENTS (Ohio); ANLA (Kentucky); SAF's Congressional Action Days (Washington, DC); and Pack Trials (California).

OFA Board of Directors – October 2004 Action Items

- 2005 OFA Short Course schedule updates approved.
- OFA committee chairs should submit names of potential committee members to the Board of Directors at each meeting.
- 2004 OFA/OFAS year-to-date financials reviewed and approved.
- OFA Reserve Fund policy and capitalization policy adopted as presented by the finance committee.
- 2005 OFA/OFAS proposed budgets approved.

Remember to circulate the *OFA Bulletin* among your staff members. This information is designed to be valuable for all areas of your business.

www.ofa.org

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