

Veranda™ O fungicide third new product launch of 2009

How do our growers feel about an environmentally-friendly fungicide that is easy on beneficials, carries a 4-hour REI, will soon be labeled for use on vegetable transplants, controls a wide-spectrum of diseases and comes in an easy-to-use wettable dispersible granule (WDG)?

Thus far, they feel real good about the product, Veranda O, a new ornamental fungicide from OHP.

Veranda O, designated a bio-pesticide by U.S. EPA, offers control of ornamental diseases such as alternaria blight, anthracnose, botrytis, fusarium, powdery mildew, and rhizoctonia root and crown rot.

With a unique mode of action (MOA #19), Veranda O offers preventative and curative action, long-term residual control, and locally systemic activity.

Containing the active ingredient polyxin, Veranda O has no toxicity to land mammals, insects, or birds, and degrades rapidly in the environment (2-3 days).

Currently, Veranda O is labeled for use in greenhouses, lath and shade houses, interiorscapes, and field and container nurseries. Soon, Veranda O will be labeled for use on cucurbits, fruiting vegetables, pome fruits, and strawberries grown under cover.

Veranda O is packaged in one-pound containers with four to a case.

State registration updates, labels, and MSDS are available at www.ohp.com. For availability information, contact your local distributor.

** Veranda is a trademark of Arysta LifeScience North America LLC.*

OHP moves Short Course booth

Summer is upon us and with it comes the many trade shows in the horticulture industry.

OHP devoted time and resources this spring to maximizing the trade show experience for both OHP and visitors to our booth. We think you'll be pleased with the results.

One big change is location – we have moved into a larger (20' x 20') space at the OFA Short Course in Columbus, OH. Our new booth number is #1129, just around the corner from our old space, #1421.

We invite all our friends to pay us a visit during the Short Course, or any of the national and regional trade shows this summer and fall.



Artist's rendition of new OHP booth design

Here's a list of the major trade shows we are attending along with the dates and our booth number:

- SE Greenhouse Conference, Greenville, SC, June 18-20, Booth #4020
- OFA Short Course, Columbus, OH, July 12-14, Booth #1129
- Far West Show, Portland, OR, Aug. 20-22, Booths #8041, #8043
- FNATS – The Landscape Show, Orlando, FL, Oct. 1-3, Booth #609

Despite many challenges, OHP still bullish on the future

Turn on the radio or TV or pick up a copy of the newspaper and you are inundated with nothing but bad news about the state of our economy.

Our horticulture business is not immune to the economic downturn. USDA statistics say we're in a slightly declining market.

Whatever the numbers say, we get around enough to know that times are tough for many of our grower customers.

At OHP, we're doing what we can to help in a number of ways:

- Bringing new and economical products to the market – for instance, the latest OHP product introductions Kontos™, Shuttle™ O, and Veranda O, are all eco-

nomically priced;

- Continuing to bring new and unique products to the market, including some with long-term activity, thereby reducing the need to spray;
- Continuing to support universities and individuals who test the many products that make life easier for the grower;
- Providing the best technical support in the horticulture industry, thereby offering a free service to growers that they would normally pay for.

We will continue to provide these services to our grower customers with the knowledge that our industry will overcome this bump in the road.

We have no doubt that we will end up stronger as an industry in the very near future. And OHP will continue to help growers survive and thrive.

** Kontos is a trademark of Bayer Corp. Shuttle is a trademark of Arysta LifeScience North America LLC.*

In this issue:

- Dr. Lindquist examines summer pests
- The OHP family of miticides
- Kontos debuts successfully
- No spam, it's a message from OHP!
- Mum, poinsettia woes
- PGR use in summer season

Here's what to look for this summer season

Dr. Richard Lindquist, senior technical manager

Waking up to another 6 inches of snow and temperatures in the 30's in late April makes it difficult for me to think of warm weather pest problems.

However, the TV still works so I know that warm weather has arrived in many places and those of you in the greenhouse and nursery business know what that means.

Summer is usually the time of more intense insect and mite pest pressure, simply because temperatures are warmer and many major pests develop faster – or in some cases, just develop, which they do not do outdoors in a northern winter.

Mites and insects are “cold-blooded” animals that are affected by temperatures. Feeding, reproduction, development time and survival are mostly dependent on temperature, but moisture, humidity, plant health, nitrogen level, and soil/potting mix contribute as well.

Following are a few examples of greenhouse and nursery insect and mite pests that do best when temperatures warm.

Two-spotted spider mites

Two-spotted spider mites are warm season mites, doing best when temperature are higher. It takes about 28 days to develop from egg to adult at a cool temperature range of 50° - 68°F, but only about 8 days at a warmer temperature range of 77° - 95°F. You can easily see that more spider mite generations in a given amount of time will occur at high rather than low temperatures.

Fortunately (or not, depending on your point of view), plant injury caused by two-spotted spider mites appears quickly on most plants and can be detected using a good scouting and monitoring program. Applications of effective miticides can then be made to stop the infestation's spread.

Western flower thrips

Western flower thrips, or WFT, generally cause more problems on greenhouse-grown plants, but can also affect plants grown outdoors. WFT are warm - but not too hot - weather pests. The ideal temperature for development and reproduction is about 80°F. WFT development takes place between about 50 to 90°F. Thrips can survive temperatures lower than 50°F, but there is no development. Above about 95°F development again stops. With a warm temperature range of 65-95°F the egg to adult cycle is about 10 to 14 days. At cooler temperature ranges the egg to adult cycle extends to as long as 30 to 40 days.

Growers have reported thrips infestations that seemed to appear overnight. Unless you believe in spontaneous generation, this seems unlikely. The probable causes for these “overnight” infestations are: 1. Movement into the crop from adjacent areas; 2. Favorable environmental conditions allowing the thrips – which were already there at low numbers – to increase rapidly. Have I mentioned having a good scouting and monitoring program?

Leafminers

Leafminers develop from egg to adult in 14 days at 95°F to 64 days at 59°F. Other species have different lower and upper limits for development, but development trends are similar – warmer temperatures result in faster development. Leafminers generally do best when plants are high in nitrogen. Primary *Liriomyza* leafminer injury is from the larvae feeding within leaves, making a narrow winding trail, or mine. Both greenhouse and outdoor crops can be infested. Adult leafminer flies

puncture leaves for feeding and egg-laying, and the small white spots will indicate leafminer activity. Leafminers have a very wide host plant range.

Whiteflies

Bemisia whiteflies are warm weather pests, with temperatures making a big difference in development times – 16 days at 86°F to 31 days at 68°F. A whitefly infestation will reduce a plants' value, and high numbers can reduce plant growth or vegetable yields. *Bemisia* whiteflies can cause leaf spotting, white stem and bract deformation on poinsettia. Honeydew from whiteflies makes leaves and fruits sticky and is a substrate for black sooty fungus. Whiteflies can transmit many plant viruses affecting vegetable and ornamental plants.



Dr. Richard Lindquist

Aphids

Common aphids on ornamental crops are the green peach aphid (*Myzus persicae*) and melon/cotton aphid (*Aphis gossypii*), but numerous other species can be found on herbaceous and woody plants. Both melon aphids and green peach aphids will infest large numbers of host plants. Although many aphids generally do better at warmer temperatures, the best temperatures for development vary with the species. For example the chrysanthemum aphid develops best at 68°F, the green peach aphid at 73°F, and the melon aphid at temperatures above 75°F. When temperatures are above 86°F and the relative humidity is above 85 percent green peach aphid longevity and reproduction is reduced – conditions that are likely to slow (or stop) reproduction of just about anything!

Managing summer pests

Weekly scouting of crops and the use of sticky traps for pests attracted to them are the most practical methods for detecting insects and mites and keeping tabs on how the management program is going.

The bottom line here is that insect and mite generations are generally shorter at warm temperatures than at cool temperatures, and your management program needs to be adjusted accordingly.

Foliar sprays will need to be applied more often when it's warm. However, on crops where it is known that a certain insect or mite will probably appear, it is acceptable to apply pesticides preventatively – especially systemic products as drenches or granules, which need time to move up into the plants.

On outdoor crops, scouting and monitoring should be done as well, and there are methods to assist the process involving so-called plant phenology charts. Just as development of insects and mites depends on temperature, so does plant development. Clever and observant folks have long associated appearance of pests with development stages of certain plants. Other clever folks have put this information into charts that help with decision-making. Phenology charts are only accurate over a limited area – maybe a state or part of a state – so growers need to use information for their area. Again, this information will help if foliar spray applications are going to be used for control. If the goal is to use a preventative management program with soil-applied systemic products, applications need to be made before the appearance of the pest – sometimes well before – to minimize plant injury.

Product Updates

OHP miticide portfolio offers something for all growers

As summer heats up, it's a sure bet that mite populations will heat up as well. If that scenario fits you, OHP can help.

We have the industry's leading stable of miticides and it's a certainty that we can help in your mite wars.

OHP offers the following miticides and miticides/insecticides:

- Floramite® SC miticide
- Judo™ insecticide/miticide
- Kontos™ insecticide/miticide
- Pylon® miticide/insecticide
- Shuttle™ O miticide
- Triact® 70 insecticide/miticide

Here's a short summary for each product:

Floramite – The industry standard for



Floramite



Judo



Kontos



Pylon



Shuttle O



Triact 70

two-spotted spider mite control; effective, economical, long-term control of all life stages;

Judo – Provides control of immature stages of two-spotted spider mites and many others including spruce spider mites and rust mites, and the tarsonemid mites (cyclamen and broad mites);

Kontos – Systemic control (up and down in the plant's xylem and phloem) of low levels of mites when applied as a drench; vegetable transplants on label;

Pylon – Broad-spectrum control of two-spotted spider mites, broad and cycla-

men mites, and others; Also labeled for use on vegetable transplants;

Shuttle O – Provides effective control of all life stages of early-season mites plus two-spotted spider mites; Reduced Risk pesticide;

Triact 70 – Horticultural oil that can be used alone or in a tank mix to provide a physical reduction of mite populations. Labels and MSDS for all OHP miticides are available at www.ohp.com

** Floramite is a registered trademark of Chemtura Corp. Judo is a trademark of OHP, Inc. Pylon is a registered trademark of BASF Corp. Triact is a registered trademark of Certis USA LLC.*

Kontos™ quickly becomes part of many pest control rotations

It didn't take long for Kontos, OHP's new systemic insecticide/miticide, to become part of many growers' arsenal of insect and mite control weapons.

Growers love the fact that Kontos offers an alternative chemistry for control of hard-to-control sucking pests such as aphids, leafhoppers, mealybugs, and whiteflies.

As a secondary benefit, Kontos gives some control of low-level mite infestations when applied as a drench.

With its active ingredient spirotetramat, Kontos can be used as a spray or drench and is both xylem and phloem active, which means the active ingredient moves upward and downward in treated plants.

When applied as a drench, Kontos provides long-term control (30 days when drenched) of troublesome sucking insects.

"With many neonicotinoid products being used by growers, Kontos is a natural rotational partner," notes Dr. Richard Lindquist, OHP senior technical manager. "Kontos represents a unique mode of action (MOA #23) and a logical alternative for growers."

Products in the neonicotinoid class (MOA #4A) include Marathon®, Safari®, Flagship®, and TriStar®.

Kontos is a lipid biosynthesis inhibitor and is active primarily through ingestion, notes Lindquist.

Kontos is labeled for use on vegetable transplants and for use through irrigation systems. The product is soft on many beneficial insects and mites.

Kontos, a suspension concentrate (SC) formulation, is packaged in 250 mL bottles, six to a case. Labels and MSDS are available at www.ohp.com

** Marathon is a registered trademark of OHP, Inc. Safari is a registered trademark of Valent USA Corp. Flagship is a registered trademark of Syngenta. TriStar is a registered trademark of Nippon Soda Company LTD.*

IN MEMORIAM

OHP lost a family member in January, 2009.

Norman Goehring of Clovis, CA, former western regional sales manager, passed away surrounded by his loving family. He leaves wife Debra and daughters Ariel and Caitlyn.

Norman was with OHP from 1992-2002 and was an integral part of the early success of the company.

He will always be fondly remembered for his laugh, sense of humor, and professionalism.

Farewell good friend. You will live on in our memories.

Product Updates

Turn to OHP for solutions to mum, poinsettia woes

Mums and poinsettias are always a challenge for ornamental growers.

If it's not the weather, it's the lack of roots, or the bugs, or the foliar disease. Or the plants are too tall, too short, or not full. Sound familiar?

While there are no silver bullets to cure all woes, there are solutions from OHP that can help make your life easier.

Insects

Poinsettias – thrips and whiteflies are often issues on poinsettias and mums along with fungus gnat larvae and mites. Aphids can be problematic on mums.

OHP products labeled for thrips — Azatin®, Decathlon®, Discus™, Marathon®, Naturalis®, Pedestal®, and Pylon®.

Azatin or Pedestal and Decathlon make a great tank mix for thrips control. Pylon has been effective in a thrips rotation.

OHP products labeled for whiteflies – All those listed for thrips control plus Adept®, Dimilin®, Judo, Kontos and Triact®.

Use Marathon as a drench for long term whitefly control early in the crop cycle. Judo is color safe and can be used late in the crop as can the Azatin/Decathlon tank mix.

OHP product labeled for aphids – Azatin, Decathlon, Discus, Kontos, Marathon, Naturalis, and Triact.

Imidacloprid, the active ingredient in both Discus and Marathon, is still unparalleled in controlling aphids. Kontos has also performed well.

OHP products labeled for fungus gnats – Adept, Azatin, Decathlon (adults), Discus, Marathon, Naturalis (adults), and Pylon.

OHP products labeled for mites -- Floramite, Judo, Kontos, Pylon, Shuttle O, and Triact.



Mums (top) and poinsettias can present problems for even the most experienced grower.

Diseases

Many diseases can be problematic on both mums and poinsettias including pythium, phytophthora, rhizoctonia, fusarium, and others.

OHP solutions for pythium, phytophthora, rhizoctonia, fusarium:

Pythium — Aliette®, FenStop™, Terrazole®

Phytophthora — Aliette, FenStop, Compass® O (aerial), Terrazole

Rhizoctonia — Compass O, OHP Chipco® 26019 N/G or OHP 26® GT-O, Terraclor®, Terraguard®, and Veranda™ O

Fusarium — OHP 6672™, OHP Chipco 26019 N/G or OHP 26 GT-O, Terraguard, and Veranda O

Plant Growth Regulation

On garden mums, B-Nine® has long been the plant growth regulator (PGR) of choice. B-Nine, applied roughly three weeks after pinch, will create a stockier plant.

On poinsettias, the B-Nine and Cycocel® tank mix is quite often used until the beginning of short days in the North (consult label for Southern dates). After that point, Cycocel is used by itself until the Nov. 1 cut-off date (varies with geographic location).

Paczo® can be used with success on poinsettias in several different ways as a spray or drench.

Paczo applied early as a spray to new lateral breaks works effectively to control growth. As a low dose drench early in the poinsettia crop, Paczo can be very effective at controlling height without reducing bract size.

HP has recently published two brochures — Mum Solutions and Poinsettia Solutions — which address these issues and more. Call 800-356-4647 for information.

No it's not spam! It's an important message from OHP!

Recently, you may have received e-mail messages from OHP announcing new product introductions, label changes, or new literature resources.

Unfortunately, some of the spam filters in most e-mail systems may block you from receiving this valuable information from OHP.

We realize that in this age of internet clutter, automatic spam filtering functions are a necessity. However, some of those filters may prevent you from receiving our pertinent messages.

We are sending these messages as a service to provide you with our most current information. If you no longer want to receive these e-mails,

you can unsubscribe at the bottom of any e-mail message from OHP.

If you are not receiving OHP broadcast e-mail messages and would like to be included, just follow these simple steps:

Add info@ohpmarketing.com to your safe provider or address book. Either maneuver should ensure delivery.

If you're not getting our e-mail messages and would like to sign up, please go to www.ohpmarketing.info/lists/ and enter your contact information. You can always call 800-356-4647 for more information.

New "Thrips Cocktail" available on OHP web site

Thrips continue to be among the toughest pests to battle in the greenhouse industry. It's been like that for years.

That's why Dr. Richard Lindquist, OHP senior technical manager, developed the first "Thrips Cocktail" back in his Ohio State University days.

He continues to update yearly and the latest 2009 version features upwards of 20 products labeled for thrips control along with control strategies.

It is available on our website at www.ohp.com. That's good news for those of you battling the troublesome pest.

PGR News

Summer PGR use requires adjustments

By Dave Barcel, OHP senior technical manager

The switch from spring crops to summer crops can be a challenge for growers because of increased day length and day/night temperatures.

Plants grown during long days and in warm temperatures with a robust fertility program will exhibit the following: good growth and more good growth. Warm summer evenings will generally add to stem elongation on most plants.

PGRs (plant growth regulators) can play a key role in reducing unwanted stretch and can help carry-over crop inventory if the weather slows sales down for a period of time.

A good example would be late spring production of violas or pansies. As the weather warms up, violas can stretch and get

rather loose in growth.

You may find the normal rate of 2-3 PPM Paczol® (paclobutrazol) sprayed is not enough to control stretch and you may need to increase the rate to 3-5 PPM or higher depending on conditions.

Using one-half the normal PGR rates on crops is a good tool for holding plants over for a short period of time. You could use this technique during slow sales periods or excess inventory.

A tip to remember — if your crop is mostly leaves (few stems exposed) then PGRs like B-Nine® or Cycocel® are best. Both are absorbed thoroughly through leaves.

If the crop has smaller leaves and good stem exposure, then Paczol should be considered. Paczol is not leaf absorbed; it is absorbed through stems and roots.

If your crop is a real challenge to control, using Paczol as a drench is a very effective tool. Paczol spray-to-drench rates are a 10 to 1 factor – i.e. a 10 PPM Paczol spray is roughly the same as a 1 PPM Paczol drench.

While you're growing your summer crops, you may want to begin planning out your fall crops such as mums and poinsettias.

Mums and poinsettias respond well to B-Nine or Cycocel applications. A late season drench application of Paczol is a proven method to control late season stretch (early November, depending on your climate) of poinsettia crops.

These and other methods can help you manage plant growth and produce a great crop. For more information, visit our website at www.ohp.com.

OHP showcase PGR effects at California Pack Trials

OHP was once again privileged to participate in this year's Pack Trials March 28-April 4 in California.

We were fortunate enough to have two demonstrations exhibiting the effects on our growth regulators – B-Nine®, Cycocel®, and Paczol®.

We also did trial work on an OHP experimental compound (OHP 211-9) to evaluate for lateral branch development.

We were at American Takii in Salinas, CA, in the north; and GroLink in Oxnard, CA, in the south.

At Takii, we measured PGR response on many of their fine varieties including the Delphinium Aurora Series, Dianthus Telstar Series, Linaria Fantasy Series, Larkspur Cannes Series, Campanula Takion Series, and others.

At GroLink, we demonstrated PGR effects on 13 crops including their proprietary species of dahlia, coleus, lantana, ipomoea, cuphea, and others.

OHP Senior Technical Manager and PGR specialist Dave Barcel coordinated efforts at both locations.

"We had successful demonstrations at both locations," says Barcel. "We plan to participate next year with bigger and more varied trials."

**B-Nine and Paczol are registered trademarks of Chemtura Corp. Cycocel is a registered trademark of BASF Corp.*



At left, the OHP PGR demo area at GroLink in Oxnard, CA. Right, the demo area at American Takii in Salinas, CA

New literature now available

It's getting close to summer and that means we have finished updating our literature in preparation for summer trade shows.

Several pieces have been updated including our Chemical Class Chart, Quick Reference Product Guide, OHP Disease Solutions, OHP Insect Solutions, OHP Mum Solutions, OHP Poinsettia Solutions, and OHP PGR Solutions.

The literature will be available at all the upcoming summer shows or you can download them off our website.

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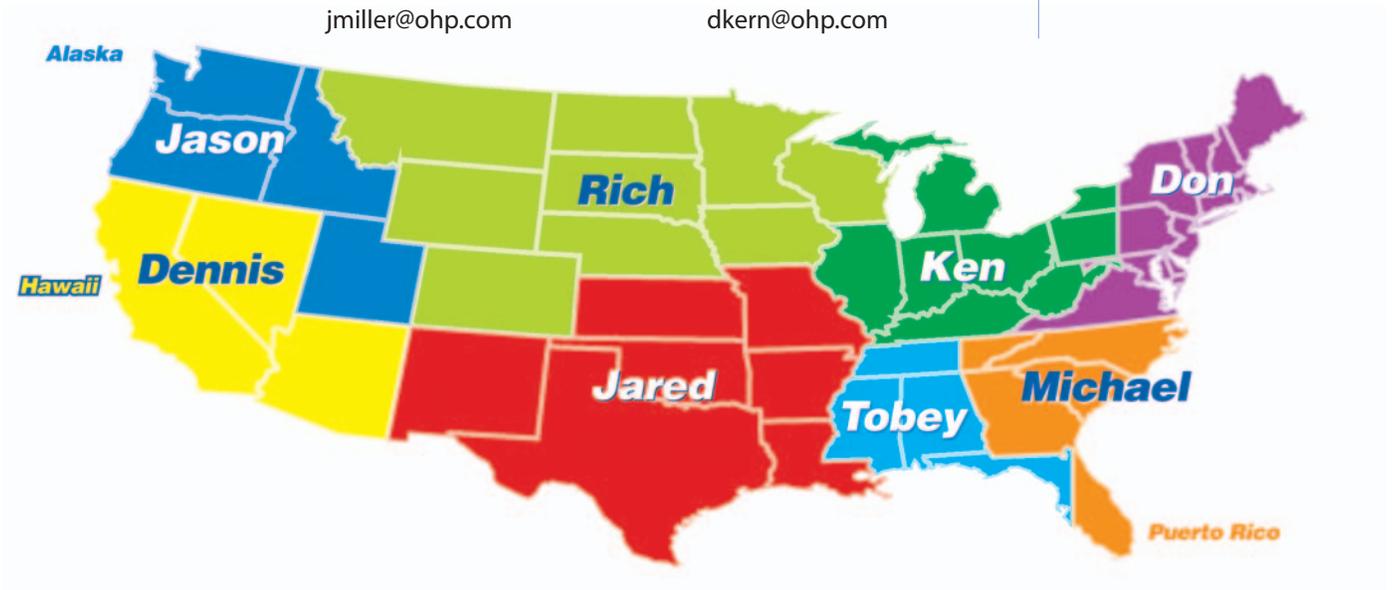
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