

WHITMIRE MICRO-GEN
PRESCRIPTION TREATMENT®

Blanton Whitmire
Inducted into Hall of Fame

Whitmire Micro-Gen
Product Catalog Available



PT Quarterly

VOLUME 24 • NUMBER 1 • JANUARY 2005



A couple of mites
hitch a ride with an
opilionid. Read more
about "daddy longlegs"
inside. Photo by
Dr. Steven Sims

INSIDE: Integration of Residential Pest Management



WHITMIRE MICRO-GEN
Prescription Treatment

Making pest management more profitable.

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New Advance™ Termite Bait System Preferred User Program

In 2005, Whitmire Micro-Gen will enroll current Advance termite users into a new loyalty program called the Advance Termite Preferred User Program. By enrolling, PMPs will receive the following:

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- FREE Advance Termite Newsletter published with technical updates, sales and marketing tips, and other valuable information
- Label and MSDS updates
- Plus . . . PMPs who enroll early will receive a homeowner marketing kit with valuable new sales and marketing tools. This kit is available on a first come, first serve basis. So, the early PMP catches the kit!

**To register, call 800-777-8570
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Prescription Treatment® Quarterly

is published by Whitmire Micro-Gen Research Laboratories, Inc.

Whitmire Micro-Gen is one of the leading manufacturers and suppliers of general insect control products to the professional pest management industry in the United States. Whitmire Micro-Gen specializes in the manufacture of aerosols and baits for insect control and develops unique and environmentally friendly fly control equipment.

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JUST A NOTE ...

Julie Pruitt is the new editor of *Quarterly* magazine. Julie has more than ten years experience in communications and an avid interest in insects.

Blanton Whitmire Inducted Into Hall of Fame

Whitmire joins the exclusive Hall of Fame. By Trish Grove

The Hall of Fame, founded in 1997 by *Pest Control* magazine, honors pioneers, innovators and leaders who have made major contributions to the success and betterment of the pest management industry. This award is bestowed upon an elite few. Inductees are chosen by their peers through a six-month voluntary nomination process. The final selection is made by an anonymous committee of knowledgeable industry representatives. There is also one inductee appointed posthumously by the magazine's staff.

Names of the Hall of Fame inductees are permanently displayed on a plaque in their honor at Purdue University's Smith Hall in West Lafayette, Ind.

In a formal dinner held at the Royal Hawaiian Hotel in Honolulu during PestWorld 2004, honorees received an engraved award and recognition by their peers. Congratulations to this year's winners:

- Dr. Phil Spear, National Pest Control Association
- Malcolm Stack, Bell Laboratories
- Blanton Whitmire, Whitmire Research Laboratories, Inc.
- Dr. Paul Muller, J.R. Geigy AG

Of course, Whitmire Micro-Gen takes great pride in the induction of Blanton Whitmire, a member of the founding Whitmire family and our past president. Blanton was honored for two outstanding industry contributions: the Whitmire Crack & Crevice® system and the Institute of Technology (WIT/Symposium). The Crack & Crevice technique was the forerunner of today's Integrated Pest Management (IPM), targeting treatment to pests and their harborages. The Institute of Technology has become a benchmark for training workshops throughout the industry and dramatically changed the way in which professionals exchange information.

Blanton Whitmire has touched many lives. How fortunate we are to have worked with him. If you knew Blanton, you not only respected but loved him. It's as simple as that. ❧

Trish Grove is Manager of Communications at Whitmire Micro-Gen.



Blanton Whitmire is inducted into the Hall of Fame in Hawaii.

The following excerpts are taken from some of the nomination letters sent on Blanton's behalf.

"If you could take a photograph of character and decency you would have a picture of Blanton Whitmire. This wonderfully unpretentious man has done more for the structural pest control industry than any one person..." – **Jeff Tucker, Entomology Associates**

"Blanton was the pioneer of the Crack & Crevice method of pest control, a champion of Integrated Pest Management and the forerunner of aerosol technology, but most important of all he was a hero to his employees. He was well loved and well respected by all...a humble, gentle man with a big heart." – **Trish Grove, Whitmire Micro-Gen**

"Under Blanton's leadership Whitmire has become synonymous with creativity, innovation, efficacy and quality." – **Don Reiersen, University of California, Riverside**

"No one worked for Blanton, we worked with him." – **Dave Naffziger, Whitmire Micro-Gen**

"Blanton helped change the image of modern pest control." – **Stew Clark, Senoret Chemical Company**

"I can't think of anyone more deserving of this honor than Blanton Whitmire." – **Austin Frishman, Specialist in Structural Pest Control**

"Clearly, Blanton's foresight and leadership have dramatically changed the way in which we train and extend information in the pest control community." – **Dr. Michael Rust, University of California, Riverside**

"Blanton is a true environmentalist who pioneered the concept of applying insecticides into cracks and crevices in homes and businesses. He is a forward thinker...who managed from behind the scenes." – **Gary Curl, Specialty Products**

"Blanton took our industry to a new level of expertise." – **Bob Belmont, Massey Services, Inc.**

Integrating Residential Pest Management

Use a variety of tactics to manage residential pest control. By Jeff Tucker

Well, what else can be said about integrating pest management? I think we all understand that a variety of tactics should be used to manage pest populations in the residential environment. However, what's missing are specific interaction recommendations for specific products in residential accounts. When we think of integrating pest management in the residential environment, most often we think of integrating chemical and non-chemical approaches to pest control. However, there is an equally important form of integration that involves the use of chemical products with different active ingredients and formulations. The idea is to align the active ingredient and the formulation with the target site and pest.

With surfaces such as wood, gypsum board, painted surfaces, concrete, brick, dirt and mulch, the residential environment presents a formidable challenge to insecticide efficacy and availability. To successfully integrate products, you must think not only about the pest but also about the environment in which the pest is found. There is no one individual product or formulation that is entirely suitable for all the different environments that can be found in and around modern residential housing. The following are a few recommendations for integrating specific Prescription Treatment products into your residential pest management strategies.

1. Avert® Dry Flowable Cockroach Bait

Avert Dry Flowable is a spectacular formulation containing abamectin. I have yet to see a cockroach that didn't quickly and aggressively feed on this formulation and die as a result. When doing clean outs in homes or apartments with large German cockroach populations, Avert Dry Flowable



Avert Dry Flowable Cockroach Bait

With surfaces such as wood, gypsum board, painted surfaces, concrete, brick, dirt and mulch, the residential environment presents a formidable challenge to insecticide efficacy and availability.

is an excellent alternative to the Avert gel formulations. Since it is formulated as a dust, it can be placed deep into cracks, crevices and voids, reaching cockroaches that may never feed on gels placed near crack or crevice openings. To apply the product, carefully inject very small amounts into cracks, crevices or voids. While ideal for German cockroach control, Avert Dry Flowable is also highly effective against larger cockroach species such as the American and smokybrown cockroach.

2. Tri-Die® Pressurized Silica & Pyrethrum Dust

Tri-Die contains pyrethrin and amorphous silica dioxide. The pyrethrin produces quick knockdown and the silica is repellant and desiccating. It is available in both pressurized and non-pressurized forms. Tri-Die is an excellent long-term protectant and is effective against virtually all insects and mites. It should be used primarily in voids and secondarily in cracks and crevices. Consider Tri-Die for use in soffit voids, wall voids, voids under cabinetry and in cracks and crevices around built-in cabinets. Tri-Die's flushing and quick knockdown along with its very long residual activity make it an ideal product for use on the initial service in new residential accounts.



Tri-Die Pressurized Silica & Pyrethrum Dust

3. Cy-Kick® CS Controlled Release Cyfluthrin

This product has been widely used for exterior perimeter treatments. However, it's not always necessary to apply large volume applications with power sprayers. In some cases, spot applications can be just as effective. The convenience of a hand-held pressurized form of Cy-Kick CS is clearly demonstrated when making applications around windows, doors, utility penetrations, weep holes, window shutters and other decorative trim. It is also very effectively used under the edges of exterior siding, particularly in late summer before cluster fly and other fall invading insects become a problem. Indoors, pressurized Cy-Kick CS is ideal for use in and around damp or wet areas such as in bath traps, under dishwashers or where plumbing penetrates the floor in houses with a crawlspace.



Cy-Kick CS Controlled Release Cyfluthrin

4. Wasp-Freeze® Wasp & Hornet Killer

Frankly, Wasp-Freeze is the product by which all other wasp, yellow jacket and hornet control products are measured. There is simply nothing more effective against nesting bees, hornets, yellow jackets and wasps than Wasp-Freeze. During the spring and summer it would not be uncommon for PMPs to locate at least one wasp nest somewhere on a customer's property. By keeping a can or two of Wasp-Freeze on your service vehicle you can quickly and efficiently remove these potential threats to your customer's safety and well-being. It takes almost no time at all to apply Wasp-Freeze and when properly applied, I have yet to see it fail.



Wasp-Freeze Wasp & Hornet Killer

5. Ascend® Fire Ant Bait

Ascend Fire Ant Bait contains the active ingredient abamectin and is my No. 1 recommendation for use against fire ants. In parts of the country where fire ants are a problem, PMPs should use a formulation specially designed for fire ants instead of baits designed for other ant species. Ascend can be used to treat yards already infested with fire ants and to pre-



Ascend Fire Ant Bait

vent re-infestation. Also labeled for indoor use, Ascend may be applied around areas where fire ants are entering the residence – weep holes (which access wall voids) or around utility penetrations. Indoor use should be limited. Once ants begin feeding, move your bait placements to the exterior perimeter. When possible, always redirect ant activity outdoors, not indoors.

6. Ultracide® Pressurized Flea IGR & Adulticide

The technology of flea control has changed drastically within the last decade. Today, most flea control is targeted at the primary environment of the flea, the host animal. This has been an effective approach, however, the incidence of residential flea infestation is increasing. Carpets, rugs and stuffed furniture are once again becoming an ideal place for larval flea development. Rarely has there been a product as convenient and as effective against fleas as Ultracide. Containing the adulticide permethrin and the IGR pyriproxyfen, Ultracide kills both active adult fleas and prevents larvae from developing for seven months. One 20-oz. pressurized can will treat up to 2,625 sq. ft. In other words, you can treat most homes with a single can of Ultracide. The convenience of a pre-mixed, pressur-



Ultracide Flea IGR & Adulticide

The technology of flea control has changed drastically within the last decade.

ized delivery system coupled with a low odor, low volume and quick drying formulation, add up to convenience for both the service specialist and the homeowner.

To successfully integrate Prescription Treatment products, you must first understand the nature of each product's active ingredients and its formulation. When selecting products, you will want to select those that best fit the specific pests and construction materials commonly found in your part of the country. If you are uncertain about how a Prescription Treatment product works, its formulation or where it can be used to achieve the best results, remember that no one excels at customer education like Whitmire Micro-Gen. Just give them a call and they will do whatever it takes to assist you in integrating Prescription Treatment products into your residential treatments programs. ❧

Jeff Tucker, B.C.E., is president of Entomology Associates and a consultant for Whitmire Micro-Gen.

Sales Mix Optimization: Finding the Right Balance

What mix will you use to grow your termite business? By Jeff Vannoy

As I travel around the country talking with PMPs, it's rare to find a company today that only utilizes one treatment approach to termite control. In most cases, I find companies with a ratio of baits, liquids and liquid plus monitoring in their sales mix. For the past ten years, the pendulum has swung both ways regarding PMPs' favored treatment applications. This article focuses on why homeowners and PMPs choose certain treatment methods and which ratio may be best for your business.

Liquids as Part of the Mix

Full liquid termite treatments are one of the earliest termite treatment approaches in the United States. Although creosote-treated timbers and other methods existed before liquids, liquid treatments have been part of termite control standards for decades. Many PMPs feel comfortable with the concept of liquid treatments: both from their residual nature in the soil and the immediacy they deliver to the homeowner. On average, liquid jobs typically sell for \$700-\$1,000, based on home size, and have renewal values of approximately \$125/home.

For most PMPs, liquid treatments satisfy homeowners who desire immediacy of control, balanced with a lower price point. In research with homeowners, most state the reason for not choosing a liquid treatment option are:

- Invasiveness to their home and landscape
- Fear of chemical and odors
- Desire for long-term continuous protection
- Desire to have a visible sign of termite protection

Baits: A Critical Part of the Selling Mix

Homeowners and PMPs buy products to meet both their logical needs of control and emotional needs of aggression against the termite colony. Both needs must be met to satisfy the purchase of a product. Bait systems clearly do an excellent job of meeting both needs.

Research has concluded that these are the primary reasons why consumers choose the Advance Termite Baiting System:

1. Desire to kill the colony
2. Minimize invasiveness to their home and landscape
3. No chemicals and odors

4. Offer long-term continuous protection
5. Provide a visible sign of termite protection

Baits are crucial to a PMP's selling mix due to the fact that 30-40% of homeowners prefer bait treatments over liquid treatments. On average, installation and renewal revenue tends to be significantly higher than liquids. Typically, across the U.S., bait installations sell for approximately \$300 more and renewals generally \$200 more than liquids. This increased revenue creates more bottom line profit when using a quarterly bait system like the Advance™ Termite Bait System. Many PMPs generally add spot liquid treatments of 5-20 gallons of a non-repellant liquid to meet a homeowner's objections about speed of control. As a result, the two critical needs of a homeowner are met:

- Need for immediacy of control
- Need for continuous, long-term protection

Monitors: Seeing is Believing

By nature, bait systems do not degrade in the soil as liquids do. Thus, by utilizing a bait system that is properly maintained, homeowners need not worry about the age-old question, "How long will this liquid last?"

Monitors, on the other hand, although they bring the opportunity of additional revenue value, are generally limited to achieving two primary things for homeowners:

- Identification of termites around untreated structures
- Meeting the homeowner's emotional need to have the perimeter of the home monitored at all times

Many PMPs who offer liquid plus monitoring service are able to meet the homeowner need of additional home visits to check monitors annually. Many claim this is unnecessary, but the industry must be able to meet customers' practical and emotional needs to be successful.

Some PMPs develop "detection" programs that are add-ons to their general pest control accounts. For a small charge they monitor termites and if they are detected, a termite bait system can be installed around the home for preventive protection. Most of the time, six to eight monitors are used in these "detection only" programs. Whitmire Micro-Gen offers four monitoring stations – PT® 701 and

PT® 702 Termite Monitoring Stations, and PT® 706 and PT® 707 Termite Monitoring Systems – all which may be customized with your company name printed on the cap.

Sales Mix Optimization

As a PMP, you must decide which selling mix options you prefer to offer your customers. Each decision carries corresponding pros and cons. From a profitability and sales standpoint, making termite bait systems a key part of your selling mix is important to the long-term value of your company. Baits not only offer excellent efficacy, as in the Advance Termite Bait System, but also excellent long-term profit.

For most PMPs, consumer preference and pricing will dictate a minimum mix of bait and liquids on six out of ten jobs. It's on the undecided four out of ten jobs that PMPs can influence the sales and profitability mix. By adding spot treatments to baiting, you can meet and address speed of control issues and increase bait ratio. Where liquids prove to be an option, add a monitoring program to increase renewal revenue, which also helps meet the homeowner's emotional ties to monitors. ❧

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Jeff Vannoy is termite marketing manager at Whitmire Micro-Gen.



Advance Termite Bait System

1. The Quick-Lock™ cap offers a low-profile design for easy servicing.
2. The Termite Bait Station (TBS) utilizes an ultra-low disturbance design, which means less termite abandonment of the station.
3. The Termite Bait Cartridge (TBC) is used during baiting phase. It contains 93 grams of compressed Puri-Cell bait matrix with diflubenzuron. The Termite Inspection Cartridge (TIC) is used during monitoring phase. It contains 93 grams Puri-Cell monitoring matrix without active ingredient.
4. The Termite Monitoring Base (TMB) is the preferred wood species with easy, horizontal groove access.
5. Vertical slots allow for soil to penetrate the interior and provide maximum wood-to-soil contact.

Solving Averse Cockroach Problems with Baits

Baiting techniques for a new cockroach environment. By Dave Poling

For years, the beauty of cockroach management could be found in the simplicity of the control strategy. “Best practice” in the industry was to place cockroach gel bait in every crack and crevice known harborage. In some respect, it was a numbers game. The more bait placements made, the greater the chance of achieving total cockroach elimination. Application equipment was lightweight, easy to use and rarely malfunctioned. Training time to learn this method of cockroach management was approximately one hour in the classroom and a few days on the job. At that point, a new technician could reasonably manage cockroach populations in most accounts. Pest management companies throughout the United States adopted this strategy and cockroach control became almost foolproof as ant control became the number one nuisance pest.

Ten or so years have passed and times have changed. We now have a new breed of cockroach, a highly selective roach that simply will not eat cockroach gel bait. This new

cockroach is causing our phones to ring. Callbacks are on the rise. Profits are under siege. In desperation, many PMPs tried applying gel bait ... and more gel bait ... and more gel bait ... but things didn't change. Then, many pest management companies did the unthinkable—they stopped baiting for cockroaches. “Retro-pest management” was suddenly in vogue, along with the Whitmire Micro-Gen System III® and compressed air sprayers. Once again, cockroaches were under control. And for many accounts, retro-pest management was an appropriate response to cockroach management challenges.

Then, university researchers climbed aboard to investigate the phenomenon – why were baits failing? Was it the bait matrix? The active ingredient? Insecticide resistance? Technician error? It turned out that cockroaches had developed an aversion to certain carbohydrates. However, not all cockroaches have this aversion and no one knows for sure exactly what percentage of the cockroach population has acquired this aversion. Whitmire Micro-Gen research-



The Avert family offers one of the widest varieties of cockroach treatments on the market today.

ers estimate the aversion exists in no more than 10-15% of the cockroach population. Unfortunately, it's a hard number to calculate. While we suspect the problem is limited to a small percentage of the total cockroach population, we haven't been able to nail down exact numbers. One of the problems is that the averse cockroach appears to be just like any other cockroach. Technicians usually don't realize there is an aversion population when treating a site until the cockroaches don't take the bait and customers are calling to complain. However, with the correct baiting technique, this scenario can be avoided.

So what is the solution? Retro-pest management is a good choice and there are many products available that will provide sufficient results, but what about accounts that aren't interested in retro-pest management? What about technicians who despise using compressed air sprayers inside buildings? Is there a better solution? I believe there is by using optimum baiting techniques from the start. Don't wait for a callback to get it right.

Here are the three main considerations for mastering cockroach population control with baits as the primary control tool.

1. Bait must be applied in ALL necessary locations.

An audit of your cockroach accounts as well as your technicians' in-service treatment strategies is mandatory. Many PMPs have mentioned to me that their technicians are applying gel bait over, under and around old gel bait. By using this technique, technicians are actually allowing their "senses" to dull; they're no longer hitting all the necessary spots. Because things had been under control for so long, the few extra minutes required to cover all cockroach areas is deemed unnecessary. The results are obvious – cockroaches survive. Ironically, some of the first locations to be skipped are the "best" and "largest" cockroach harborages – voids. Granted, they can be difficult to reach (with gels); plus, correct application may slow you down.

2. Use the correct bait formulation.

There are two major objectives when contemplating cockroach bait formulations. First, are you dealing with gel bait averse cockroaches? If so, choose a bait that is effective on gel bait averse cockroaches. Secondly, are you using the best formulation for the application site? Do you have access to the inside of a void to treat effectively? Will the bait placement be exposed and result in bait contamination or inadvertent removal? Could some of the cracks and crevices be eliminated with a dab of caulk? For many years now, gel baits have dominated cockroach management, and for good reason. Gels are excellent for treating cracks and crevices. Keep in mind – voids commonly house more cockroaches than cracks and crevices. Cockroaches may reside safely and in great numbers in inaccessible voids. Obviously, the best strategy for baiting voids is to apply bait into the void, not merely into cracks or crevices at the void entrance. If possible, eliminate access to all voids entirely

and force cockroaches to live in "less suitable" areas, thus reducing the carrying capacity of the account.

3. Use bait with a long useful life.

Always keep in mind that cockroaches may be introduced into your account at any time. Never let your guard down. Always provide the highest level of protection to guard against reinfestation. Choosing a long-lasting bait that remains effective until your next treatment reduces the

An audit of your cockroach accounts as well as your technician's in-service treatment strategies is mandatory.

chance of callbacks due to reinfestation. The useful life of a gel is the time frame when a cockroach finds the bait attractive and will consume it freely. Unfortunately, bait presence does not mean it is attractive or palatable to cockroaches.

If baiting is the cornerstone of a good cockroach management program, yet gels often don't effectively treat voids nor typically remain useful for more than a few months, what is the baiting solution? Avert® Dry Flowable Cockroach Bait. This product (formerly known as PT® 310) has been around longer than commonly used professional gel baits. Avert Dry Flowable is a dry powder that can be "puffed" into voids without having total access to the void itself. Avert Dry Flowable is highly effective when treating voids. Today, many PMPs use gels and dry flowables in tandem, treating cracks and crevices with gel and treating voids with dry flowable.

Avert Dry Flowable is different from gels; it does not physically change significantly over time. It does not skin over or dry up; it is dry to begin with. Avert Dry Flowable also has a dual mode of mortality. It is readily consumed as a food source by cockroaches, plus it is picked up on body parts as roaches pass through it. During the grooming process, the powder is consumed, ultimately causing mortality. Whitmire Micro-Gen conducted studies that demonstrated ten-year-old product was as effective in controlling cockroaches as new product. Whitmire Micro-Gen also tested Avert Dry Flowable against averse cockroaches (several strains, including the Gainesville strain); Avert Dry Flowable achieved mortality equal to that of our leading competitor. Summaries of both studies can be found at www.averseccockroaches.com.

Discover the value of Avert Dry Flowable, particularly when eliminating gel averse cockroach populations. Better yet, get a free tube by going to www.averseccockroaches.com and see for yourself the advantage of using Avert Dry Flowable. ❧

Dave Poling is business director, residential markets at Whitmire Micro-Gen.

The Buzz on Vector® Fly Control Systems

How to respond when selling Vector Fly Control Systems to customers in denial. By Julie Pruitt

*I heard a Fly buzz – when I died –
The Stillness in the Room
Was like the Stillness in the Air –
Between the Heaves of Storm –*

*The Eyes around – had wrung them dry –
And Breaths were gathering firm
For that last Onset – when the King
Be witnessed – in the Room –*

*I willed my Keepsakes – Signed away
What portion of me be
Assignable – and then it was
There interposed a Fly –*

*With Blue – uncertain stumbling Buzz –
Between the light – and me –
And then the Windows failed – and then
I could not see to see –¹*

Looking for a way to sell Vector Fly Control Systems . . . just show your customers this poem by Nineteenth-century American poet, Emily Dickinson. If poor ol' Em had only had a Vector system, she wouldn't have been bugged by flies. Of course, we wouldn't have this great American poem to behold, either.

Okay, so maybe that's just not your selling style. Need a few tips that are a little less fanciful? Here are some of Whitmire Micro-Gen's favorite selling points for Vector Fly System.

If the customer remarks to you, "The price is too high ..."

First, ask the inquirer if he can afford to have customers complain about unsightly and unsanitary flies. More importantly, can he afford a citation from the health inspector? How many people do you know who refuse to go into certain businesses (especially restaurants) because they once saw some kind of pest in that establishment? Flies are a major turn off.

Which brings us to the after effect of unsightly flies – unfavorable word-of-mouth advertising. Statistics show that one unhappy customer will tell 9-10 friends and may tell as many as 20 about his or her bad experience.

Remind your client that whether he chooses to buy Vector Systems outright or lease them, you can determine the payoff period. The inquirer will be pleasantly surprised to find the payoff period is just a few short months.

Sell the safety, sanitation and monitoring benefits of a Vector Fly Control System. Inform the inquirer that a Vector Fly Control System acts as a monitoring device because the insects remain intact. This allows you to target pest problems and permits proper treatment of the problem before it results in high costs.

Next scenario, "But, I don't have a fly problem ..."

Occasionally you will have a customer who doesn't believe he has a fly problem, but you know better (and so does he, usually). Prove it to him. Offer to leave the Vector Fly Control System on a loan basis for a specified amount of time, one week for example. The proof will be on the adhesive trapping board! Captured flies speak louder than words!

What if the customer says, "Where will the Vector system be placed?"

That's easy. There may be times when optimal placement is difficult due to facility restrictions that are out of your control. Because the traps can be either wall-mounted or placed on a tabletop, more placement options are available to you. Here are some suggestions to help you in placement selection. Always keep in mind to look where flies congregate. This is where traps will be most effective. Here are a few examples:

- Near food prep areas where the food is readily available
- Around indoor trash, near dumpsters and compactors
- Near passages from food prep areas to public areas
- Place Vector system so that it is not visible from the outside
- Place Vector system within 3' to 5' of the floor whenever possible



Vector Discreet® is an insect light trap (ILT) that combines high UV output with a completely out-of-sight glueboard, resulting in a discreet solution to difficult flying insect control problems in sensitive or public areas.

- Do not install the Vector system next to competing light sources
- The Vector system can be placed outdoors as long as it is not exposed directly to the weather

How about when they say, “Will my health inspector allow it?”

If your customer questions whether or not his health inspector will allow the Vector to be placed in his facility, suggest contacting the inspector. By doing this you are being proactive. Vector systems meet all PDA and USDA guidelines and it may be placed in and around food preparation areas. You can always refer to Section 6-202.13 (B) of the 1993 Food Code (a copy may be obtained from Whitmire Micro-Gen). If you still encounter resistance, technical support may be obtained from Whitmire Micro-Gen. We'll be glad to help.

Don't Forget to Sell the Servicing of Vector Fly Control Systems.

In addition to selling the Vector Fly System, there is also the often-overlooked opportunity of selling an add-on service. Whitmire Micro-Gen highly recommends that each Vector unit be properly serviced and maintained. And, since service is what you do best why not capitalize on your expertise?

The Vector Fly Control System uses innovative technology, making it easy for you to create your own fly control program. When selling Vector systems, you need to emphasize that it is not a noisy bug zapper, but in fact a control device with the added benefit of being a monitoring tool. It actually allows you to utilize your expert knowledge in identifying and targeting pest problems. Simply put, adding the Vector Fly Control System to your IPM program lets you sell solutions to flying insect problems. Here's how:

- Vector systems' adhesive trapping boards have to be changed. Depending on the time of year or how bad the infestation, changing the board once per month is average.

- Light bulbs must be changed annually for optimal performance. It is recommended that the bulbs be changed at the beginning of fly season, around April. This will give peak performance throughout the fly season.
- Based upon the insects caught in the adhesive trapping board, you can give your customer a report of your findings and make any appropriate treatment recommendations. This is the best evidence that you have to show your customer that the Vector system is effective and you are getting results.
- As long as there is a Vector system in place there will always be the need for continuing service. And, if you walk into an account that already has a Vector system in place chances are that it's not being serviced. This is your opportunity to sell your complete program.



Vector Bio-5® Drain Cleaner is an insecticide-free drain cleaner that eliminates fly breeding sites, food sources and the offensive odors produced by filthy drains. Vector Bio-5 breaks down drain build-up, resulting in clean drains free of flies and odors.

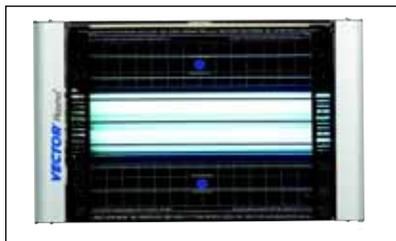
So, whether you warble sweet pesty poems or dazzle customers with the unparalleled benefits of the Vector Fly Control Systems, make sure you get a jump-start on the competition – start your new fly control programs today. Or, to find out more information about Vector products and order free selling literature (such as the nifty “fan fly deck” selling tool), visit www.vectorflycontrol.com. 

¹ World Poetry, Inc., “How to Use a Fly,” *Poetry Daily*. 9 March 2004. Found online at <http://www.poems.com/essaryan.htm> (22 November 2004).

Julie Pruitt is communications specialist at Whitmire Micro-Gen.



Vector Classic® is an insect light trap (ILT) that captures flying insects as pests descend on the reflective grid found behind the two 15-watt bulbs, a one-second low voltage pulse at eight-second intervals causes insects to fly directly into the hidden, non-toxic glueboard in the bottom of the trap – out of sight. The bottom board is easy to service.



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Vector Fruit Fly Trap is designed to help pinpoint fruit fly breeding sites and eliminate breeding through good sanitation. The patented attractant in these traps results in quick catch of fruit flies and thus keeps them from coming back.



STEVEN SIMS

WHO'S YOUR DADDY?

The term “daddy longlegs” is often used to identify Opiliones and Pholcidae. To find out which is which, read on — there is a difference as Dr. Steven Sims, Whitmire Micro-Gen senior research entomologist, points out.

The name daddy longlegs is an ambiguous common name referring to several unrelated terrestrial arthropods that have in common extremely long slender legs. Its use can be regional, so that the “daddy longlegs” of one area is completely different from another.

The creatures most correctly called daddy longlegs are in their own separate order, the Opiliones, within the class Arachnida. Common names for this Order are 1) daddy longlegs, 2) harvestmen and 3) opilionids. They are characterized by having one basic body segment which shows segmentation on the posterior portion and at most two eyes. All eight legs attach to the pill-like body segment. They are usually found under logs and rocks, prefer moist habitat (although they can be found in the desert) and usually have long flexible legs in the temperate Northern hemisphere (but there are also



A “harvestman” peeks from its hideaway. (Photo by Dr. Steven Sims)

short-legged daddy longlegs). They do not produce silk so they are never found in webs unless they have been captured and are being eaten by spiders. Because they are often found under logs or in dense vegetation, daddy longlegs are infrequently observed by the PMP.

Are harvestmen medically important, i.e., can they bite people and are they poisonous?

Harvestmen lack fangs and venom glands so, although they can pinch the skin with their chelicerae (i.e., claws with a moveable finger like a crab claw) they seldom are able to penetrate human skin. They do have defensive secretions produced by a pair of scent glands on the front end of the body but these secretions can't be injected by their mouth parts. Some people may be sensitive to the scent gland secretions but this would affect them through skin contact, not through bites. Some species have sharp leg spines that can cause bleeding but these spines are more likely to be found in males of large South American species.

The other spider-like organisms called daddy longlegs are true spiders. These long-legged spiders belong to the family Pholcidae (class Arachnida, order Araneae). Because the Pholcidae are spiders, they have two body basic body parts (cephalothorax and abdomen) and have eight eyes that are most often clumped together in the front of the body. The abdomen shows no evidence of segmentation and the eight



An opilionid poses for photo. (Photo by Jeff Tucker)



A *Pholcus* in full spread. (Photo by Jeff Tucker)

legs are all attached to the anterior body part (the cephalothorax). They make webs out of silk.

The members of Pholcidae live in houses and buildings and are the daddy longlegs commonly seen by the general public. They make their untidy webs in the corners of walls or ceilings. They are also often found in the basement or in cellars, thus the other common name “cellar spiders.” When they are disturbed or when they are under a threat of attack, they start vibrating in their web violently to scare off and discourage their enemy. Therefore, they are also known by yet another common name of vibrating spiders. The male spider

(continued on page 16)

JARED HARRIS



DON'T LET THE BUGS BITE

Jared Harris, Whitmire Micro-Gen technical support specialist, fields a customer's question concerning bed bugs. By using the proper treatment, technicians can avoid misinterpreting and mistreating this age-old problem.

Q: John and Mary Homeowner called my pest control company because they are being bitten in bed at night. This occurred over the last five months after returning home from a wonderful vacation. I realize it is probably a bed bug infestation, but I have never encountered them myself. Any help would be appreciated.

A: A thorough inspection will probably reveal your suspicions are correct. Before we begin the inspection process, here are some biology and habits you should know. Female bed bugs can lay between 200 and 500 eggs in their lifetime. They generally lay three to four eggs per day. Eggs hatch after six to seventeen days and then they go through several molts to reach adulthood. Bed bugs usually (but not always) can be found harbored 10 to 20 feet from the host's bed or feeding site. The bed bug has a piercing/sucking mouth part and feeds on human blood.

Inspection is the key to any successful pest control service. The primary inspection tool for bed bugs is a flashlight, but be prepared to move and/or disassemble beds or pull up carpets or rugs near the edge of the room – this area is also a suitable har-



565 Plus XLO® Pressurized Contact Insecticide

borage for bed bugs. You should inspect the bed frame; does it have hollow piping or rungs? Inspect the box springs, the tufts, seams and buttons on the mattress. Continue the inspection with the headboard, night stands, dressers, under lamps, behind pictures hung above or near the bed, wall voids, crack and crevices and the carpet edge at the wall molding. And don't forget to check the luggage from the vacation! What you are looking for are live insects. Cast nymphal skins and blood spots or stains may also be found on sheets or linens. As you perform your inspection, utilize this time to educate your customer about bed bugs and how this infestation may have occurred. Communicate with your customer the methods you will use to treat the bed bug infestation, the products you will choose and their mode of action. This should build confidence for your customer and begin to relieve his concerns.

You must control the source of infestation and reduce their presence quickly. You may choose to use a vacuum first to reduce the source population or move directly to treatment with non residual or residual products. Continue to educate your customer about bed bugs as you proceed. Your next step is to determine your treatment strategy. Bed bugs typically group together in cracks and crevices, making applications of Prescription Treatment® brand products an excellent choice. I recommend P.I.® or 565 Plus XLO contact insecti-

Cy-Kick® CS Pressurized Crack & Crevice Residual



cide for a contact kill of bed bugs. You may choose to treat some crack and crevices with a residual insecticide. Cy-Kick CS* or Cy-Kick* aerosol and PT® 250* are excellent choices for such an application.

Keep in mind the infestation did not happen overnight, so applications of residual products will aid in long term control of the insect. And don't forget Tri-Die® for void treatments; it not only kills the bed bugs but leaves behind a repellency that should reduce the likelihood of reinfestation of the void or its use as a traveling point. Tri-Die is also highly effective for voids in furniture, hollow bed frames and any other voids uncovered by your inspection.

Now that the treatment has been completed, you will want to place a few monitors in strategic locations and schedule a follow up inspection and service call a week or so from your initial treatment. ❧

Jared Harris is technical support specialist at Whitmire Micro-Gen.

** Whitmire Micro-Gen has applied for the addition of bed bugs on these product labels. Check your local regulations concerning this use.*



JULIE PRUITT

THE BUG MAN COMETH

When confronted with a tough ant problem, the Bug Man (Michael Bohdan) handled the infestation with grim determination and a killer combination. Soon the ants were pushing up daisies instead of overrunning the house.

A shadowy figure slowly crosses the doorway of a home. Suddenly, activities from within cease. Thousands of eyes are riveted on a menacing form that has a look of determined annihilation glistening in his eyes. Roaches run, termites tremble and ants abandon their work and flee. Why? Because the Bug Man cometh.

Who is this Bug Man who's able to eliminate pests in a single leap? It's Michael Bohdan, owner of The Pest Shop in Plano, Texas.

In "them thar parts," he's sort of known as a celebrity ... a maverick of pest management ... a bug slinger with an attitude. He's definitely not your average pest control professional. For instance, his establishment, The Pest Shop, is not only a full-service pest control firm, but it's also a gift shop and bug museum (visit Bohdan's Web site at www.pestshop.com). The premier attraction of Bohdan's entomological emporium is the nationally known Cockroach Hall of Fame. There, you



Cy-Kick® CS Crack & Crevice® Residual

will find the lovely critters adorned as celebrities, like "Liberoache" and "David Letterroach." The bodacious Bohdan has also appeared as a pest control

expert on numerous television shows, including *The Tonight Show*, *Live with Regis and Kathie Lee*, *The View* and *Good Morning America*. Bohdan has also written a book, *What's Buggin' You*, which offers tips on identifying and treating everything from ants to gophers and whiteflies.

Besides his luminary status, Bohdan is a licensed professional pest control operator with more than two decades of experience. He is the former regional director of the Texas Pest Control Association and holds a degree in zoology. To put it plainly, this buckaroo knows his stuff. From gnats to tarantulas – and everything in between – Bohdan always gets his bug.

Yet there have been a few solitary instances when even The Bug Man found himself up against the wall, stumped by insidious insects. In one specific case during a particularly hot Texas summer, Bohdan had to use every ounce of experience, ingenuity and strategy to get the job done. That's when he hitched up with some partners he could depend on – Prescription Treatment® Cy-Kick CS Pressurized Residual and 388B Advance® Ant Gel Bait.

The job began as a routine residential pest call; little did Bohdan



388B Advance Ant Gel Bait

know, it would turn into the job from H... (a certain hot spot presumably located in the center of the earth). The call came as Bohdan sipped on a cool iced tea and finished up polishing Liberoache's grand piano at the Cockroach Hall of Fame.

A desperate homeowner in Plano was at wit's end with an ant invasion. Apparently, armies of crazy and odorous house ants were heavily infesting her home. The homeowner was desperate for a solution and sought out The Bug Man to save the day. Bohdan loaded his wagon, grimaced into the sun and headed out for the duel.

Upon arriving at the house, Bohdan immediately found the source of the infestation – an overgrowth of trees and bushes surrounding the structure. (Poor sanitation inside the house didn't help the situation.) He had seen ants crawling out of cracks in the earth and entering the home. On the inside, ants were everywhere. Ants were in the kitchen, the bathroom, garage, family room and threatening to overthrow the family for supremacy of the remote control. Little did the ants know – their days were numbered.

Initially, Bohdan treated the perimeter of the house with a wettable powder formulation and used sweet

gel bait to treat inside the home. It seemed to work, but then ... the ants rallied and returned for another battle.

"The first treatments resulted in some control, but it didn't last," Bohdan explained. "Within two weeks, the ants were still around and I was getting callbacks."

Michelle Senne, Bohdan's Univar sales representative, suggested he try Cy-Kick CS residual insecticide for the exterior and 388B Advance Ant Gel Bait for inside the home.

Whitmire Micro-Gen's Cy-Kick CS residual insecticide, featuring Cool Cap Technology, is an advanced capsule suspension product that provides quick knockdown and long-lasting relief from insect pressure in and around residential and commercial structures, including food-handling areas. Cool Cap Technology is a process that increases the number of microcapsules produced while decreasing their size, resulting in thorough blanketing of capsules over treated surfaces. This translates to better coverage, quicker knockdown and creates a highly effective barrier.

Whitmire Micro-Gen's 388B Advance Ant Gel Bait is the first gel that attracts ants like a liquid. The patented inert ingredient absorbs the sweet liquid with just enough force to maintain its shape while keeping the liquid accessible to ants. It's easy to apply in areas where ants are active by using the PT® 345 applicator gun. 5.4% of borax allows worker ants time to deliver the bait to other workers, reproductives, larvae and queens.

Bohdan applied Cy-Kick CS residual insecticide around the perimeter of the home. He then injected 388B Advance into plumbing penetrations and cracks and crevices in areas of high ant activity. Within three days after the first treatment, the ants were gone ... smoked ... pushing up daisies. Even with his expertise, Bohdan was amazed by the results.

"I was using other products in an attempt to control ant infestations, but the combination of using 388B Advance Ant Gel and Cy-Kick CS



Michael Bohdan poses with a few of his friends at his business establishment, The Pest Shop, where the Cockroach Hall of Fame is located.

residual insecticide is better," said Bohdan. "Cy-Kick's Cool Cap Technology and 388B's gel application really solved the problem. Since I have been using these Whitmire Micro-Gen products, my retreat rate is zero." With PT Cy-Kick CS and 388B Advance Ant Gel Bait, Bohdan is a Plano hometown hero.

That initial application of Cy-Kick CS residual insecticide and 388B Advance Ant Gel Bait resulted in complete elimination of the odorous and crazy house ant infestation. The customer was extremely relieved and Bohdan was not only impressed with the Whitmire Micro-Gen products, but also with the company's posse (known as "customer service" to Easterners).

"Whitmire Micro-Gen makes quality products that get results," said Bohdan. "And their customer support has always been very profes-

sional and helpful."

When the job was completed and Bohdan was riding off into the sunset amidst the cheers of the happy ant-free family, he could be heard humbly murmuring under his breath, "Just doin' my job, ma'am."

For 70 years, Whitmire Micro-Gen has been providing innovative Prescription Treatment solutions for professional pest management and provides superior training and support to its customers. For more information on Prescription Treatment brand Cy-Kick CS residual insecticide with Cool Cap Technology, 388B Advance Ant Gel Bait or other Whitmire Micro-Gen products, call (800) 777-8570 or visit Whitmire Micro-Gen's Web site at www.wmmg.com.

Julie Pruitt is communication specialist at Whitmire Micro-Gen.

WHOS YOUR DADDY? (continued from page 12)

has large palps.

The most common pholcid spiders found in U.S. homes are both European immigrants. *Pholcus phalangioides* is a uniformly grey spider with rectangular, elongate abdomen and is found throughout the U.S. *Holocnemus pluchei* also has a rectangular, elongate abdomen but has a brown stripe on the ventral side (the belly side – which is typically directed upwards since the spider hangs upside down in its web) that covers its sternum and is a stripe on the abdomen. These spiders are very common along the Pacific Coast and in the Southwest deserts. Pholcids are often confused with the

recluse spider (*Loxosceles*) but the latter does not occur in a web, is much more robust and is very agile on all surfaces.

Are pholcids medically important, i.e., can they bite people and are they poisonous?

There is a common myth that, of all the spiders, the pholcids have the deadliest venom. The venom of pholcids is known to be neurotoxic and is deadly to small prey. However, there is no reference to any pholcid spider biting a human and causing any detrimental reaction. Their jaws are typically unable to penetrate human skin and the venom dose is also too minute. If these

spiders were indeed deadly poisonous but couldn't bite humans, then the only way we would know that they are poisonous is by milking them and injecting the venom into humans. For obvious reasons, this research has never been done. Furthermore, there are no toxicological studies testing the effects of pholcid venom on mammalian systems (mice can breathe a sigh of relief). For the time being, the question of pholcid venom toxicity remains a mystery. ❧

Dr. Steven Sims is senior research entomologist at Whitmire Micro-Gen.

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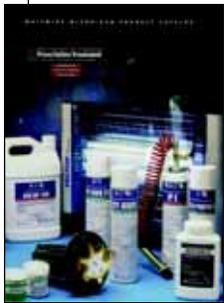
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and behavior of pests, inspection and treatment techniques and other basic building blocks for success. Each program features interactive and engaging activities, quizzes and final exams.

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All the Whitmire Micro-Gen Products at Your Fingertips Whitmire Micro-Gen introduces its new Product Catalog



Whitmire Micro-Gen recently unveiled its new product catalog. With more than 60 products detailed, the new catalog is a first in the market to include each product's material safety data sheet and extensive training/education opportunities.

Every product description includes thorough overviews, descriptions, photos, PMP testimo-

nials, helpful tips, and in-depth technical data. Included in the catalog is a product/insect chart that lists exactly which products can be used for specific pests. Ninety-one common pests are identified in the chart.

With meticulous attention to customers' pest control needs, the new Whitmire Micro-Gen catalog exemplifies the company's 70-year tradition of exceptional customer service, support, and training. To order a copy of the new 2004 Product Catalog, visit the Whitmire Micro-Gen Web site at www.wmmg.com, or call 800-777-8570.