

Pest Management News

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Letter #4

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What You Should Know Before Hiring a Pest Control Company

John D. Hopkins

What did you find...ants, termites, cockroaches, spiders, bedbugs, fleas, flies, gnats, bees, wasps, ticks, clothes moths, carpet beetles, wood-destroying beetles, stored product pests, or something else??? Most pests encountered are merely a nuisance, while some are capable of causing serious damage to property. Others may, bite, sting or transmit disease-causing agents. After the initial shock of finding some type of insect or other pest in their home, many people suffer additional anxiety when trying to decide which pest control company to hire. This article is intended to help the average person with the information needed to make that decision.

Pest Management Professionals (PMPs), who are licensed in the state of Arkansas, must take and pass an examination administered by the [Arkansas State Plant Board](#) and must attend training on a continual basis to maintain their license. When hiring a pest control company, always carefully read and understand the contract you sign. Ask the salesperson to clarify anything you do not understand or with which you do not feel comfortable. Check with the Better Business Bureau or a present customer of the company to satisfy yourself that the company you select has a good record. Pest control services can be separated into two different categories: general household pest control (also called “pest control” in the industry) and termite control.

General Household Pest Control Service is the type of service provided for all pests with the exception of termites, wood destroying insects and, usually bed bugs. ***Be aware that most companies will require a separate contract for bed bug service.*** When you are seeking “General Household Pest Control Service” or “Bed Bug Service”, you should base your selection decision on two things: 1) an evaluation of the effectiveness of a company’s pest management methods and 2) the company's customer service record.



1) Evaluating Pest Management Methods: Ask for specific steps that the PMP will, use in their pest management program. The University of Arkansas, Division of Agriculture recommends the use of an Integrated Pest Management (IPM) Strategy when developing a pest control program. IPM is a decision making process that anticipates & prevents pest activity & infestation by combining several control tactics to achieve long term solutions. The pest control company should be responsible for providing the five basic steps in an “IPM Program”. These include; inspection, target pest identification, establishing an action threshold (joint decision with the customer), employment of two or more control measures that are environmentally compatible & economically feasible, and a follow-up evaluation of effectiveness. With the IPM approach, there are also certain steps that the homeowner/customer is responsible for, that being sanitation and pest exclusion.

Customer Responsibilities for Sanitation:

- Keep the kitchen area clean.
- Wipe down countertops, stove, and cabinets with warm, soapy water.
- Keep food in sealed containers, including pet food that may be stored outside.
- Keep garbage cans covered.
- Take out the trash at least once a week.
- Do not leave water standing in the sink. Water is the most important factor for pest survival.
- Clean out cabinets. Beetles or moths found in the kitchen area may have come from food that is infested. Check foods such as cereals, rice, and grains to see if they are infested. Discard infested food. Vacuum cabinets thoroughly and wipe surfaces clean before the pest control operator arrives. Leave the cabinets empty so the PMP has a clear treatment area. Chemical treatment should be confined to the cracks and crevices of the cabinet because that is where the insect pests will hide. Do not replace cabinet items until the treatment is dry.
- Clean out closets. Beetles or moths found in the bedroom, hall, or closet areas may be coming from clothing or carpeting. Check woolen sweaters and rugs for moth cases or beetle larvae as well as the adult forms. Dry cleaning clothes before storing them will make clothes less attractive to these destructive insects. Dry cleaning after an infestation is discovered will also kill these destructive insects. Thoroughly brushing clothing or rugs outside will also help eliminate these insects. After inspecting and cleaning clothes or rugs, clean out closets and thoroughly vacuum the inside before the PMP arrives.
- Fix leaky pipes that can cause moisture problems. Moisture problems cause mold and fungi to grow. Mold and fungi are used as food by some beetles and other small nuisance insects such as psocids. Chemicals alone cannot effectively control these types of insects unless the moisture problem is solved.
- ***The pest control company should provide an additional list of customer responsibilities when bed bug service is provided.***

Customer Responsibilities for Exclusion:

- Repair window screens and doors to keep flying insects such as gnats, mosquitoes, and flies from entering.
- Repair door sweeps to exclude crawling pests such as cockroaches, millipedes, spiders or pillbugs.

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2) Evaluating a Company's Customer Service Record: Customer satisfaction is mostly a matter of personal preference.

Ask neighbors/friends to recommend a pest control company they were satisfied with:

- Why did they select that company?
- Have they had bad experiences with other companies?

Ask the prospective company:

- To provide you with a list of references.
- Other things to observe about the company:
 - Does the PMP appear neat and professional?
 - Is your PMP on time?
 - Is the PMP able to answer your questions satisfactorily?

Things that you should be sure of:

- What is your chemical tolerance? Are you sensitive? Are you indifferent?
- Do the proposed techniques fit your lifestyle? If your PMP asked you to carry out all the suggestions for sanitation and pest exclusion listed above, would you be willing to do them? Some pest control companies will do minor repairs such as fixing leaky pipes, repairing window screens, and caulking cracks for an additional fee. Do you need to look for a pest control company that can offer you these additional services?
- Do you prefer monthly, quarterly, or yearly pest control? Some contracts will allow you to call the company only when you have a pest problem. Products have changed over the years so that monthly applications to non-harborage areas are not necessary. Even though most PMPs service monthly, homeowners can investigate other options. The trend is toward more extensive service with fewer trips. One advantage to monthly pest control is that someone is looking at your house regularly to identify pest problems or things that may lead to a future problem. One disadvantage of monthly pest control is that homeowners sometimes insist that PMPs apply a chemical treatment monthly whether there is a pest problem or not. Monthly chemical treatments may not be necessary and may cause undue exposure to the occupants. Would you be willing to have someone monitor your house monthly and apply a chemical treatment as needed? Sometimes it is not even necessary for the PMP to enter the home to take care of pest problems. Most insect pests originate outside the home. Servicing from the outside does not require you to be home when the servicing is done, which is convenient if you have a busy schedule. Outside treatments also reduce inside exposure to occupants. Ask about perimeter treatments?
- If you chose quarterly or yearly pest control, will you be charged if you call the PMP for a problem between scheduled visits? As a rule, materials that are registered for General Household Pest Control will not last for a whole year. However, you are buying the expertise of the PMP and that includes inspections of inaccessible voids where insects may occur, such as attics, soffits, eaves, wall voids, built-in furniture, and the like.
- Are the prospective company's prices and service comparable to that offered by competitors? Remember, the lowest price does not always mean the best deal when shopping for pest control service.

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- Are you and the pest control company clear on the terms of your contract? Be sure the contract includes the name of the company, the length of service for the contract, what services are covered, and the price.
- Make sure to look for possible exclusion clauses in the contract. Exclusion clauses specify the things that can cause the contract to be canceled.
- Can either you or the pest control company cancel? Will there be penalties assessed if you cancel the contract?
- Is there an arbitration clause or other method to settle possible disputes?
- Ask to see a certificate of insurance. Does the company carry complete insurance coverage with adequate coverage including an “errors and omissions” clause? An “errors and omissions” clause covers things like inadvertent staining on carpets or accidental breakage of items.
- Be sure that the company is licensed by the [Arkansas State Plant Board](#).
- The contract should be signed by both parties.

Subterranean Termite Control Service. If you have a termite infestation in your home, it is recommended that you **DO NOT** attempt to do your own treatment. Contract the services of a pest management professional (PMP) that is licensed by the Arkansas State Plant Board for “Termite and Other Structural Pest Control.” PMPs have training, specialized equipment that is not feasible for a homeowner to purchase, and control products not available to the homeowner. PMPs are trained in special application procedures to ensure the best protection for your home. These procedures include trench applications, drilling, rodding, and application to voids that are beyond most homeowner’s expertise. To be performed correctly, these procedures should be done by a skilled professional.

If you need termite control service, consider the following, in addition to the evaluation criteria listed under General Household Pest Control:

- Ask if the company has experience in dealing with subterranean termites. If they do, ask for the number of years they have worked in termite control, and ask for the number of jobs completed.
- Ask for references to previous subterranean termite work that has been completed.
- Do not feel pressured by a company to buy a treatment on the spot. Take a few days to thoroughly research treatment options and different pest control companies. Termites work slowly, and will do little additional damage in the time you take to select a reputable termite control company.
- Compare prices with contract coverage from different pest control companies and get their recommendations concerning the most effective method of treatment for you.
- Make sure that the pest control company makes a complete inspection of the entire building from crawl space to attic.
- Make sure your crawl space or attic is accessible and does not contain so much clutter that the PMP cannot do a proper inspection. **It is your responsibility to remove any clutter that would impede a thorough inspection.** In order to do the inspection, the PMP should carry protective clothing for crawl space inspections, plus a flashlight, a probe, a moisture meter, and a clipboard to draw a graph of the inspection areas. The inspection should determine the point of termite entry into a structure and the extent of the

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infestation. The PMP cannot recommend the proper treatment for your structure without a thorough inspection.

- Be sure to get a written report that tells you the location(s) of the infestation(s) and the probable point(s) of entry into the structure. The report should include a graph indicating areas of termite activity. Understand that this is a visual inspection only. Additional damage may be found in concealed or hidden areas. The graph cannot guarantee that all damage is represented. Further inspection by a building expert or structural engineer may be required where extensive damage has occurred. It stands to reason that the older the home, the greater the probability of damage or concealed areas (areas that have been covered or repaired).

Contracts for Termite Control Service:

- Be aware that there are many different types of contracts for termite control. Contract wording will vary from company to company. Contracts also will vary with the type of construction that is being treated. Note that contracts for bait treatments will differ from contracts for soil termiticide treatments. In all cases, read the contract and know what you are getting.
- Termite contracts generally have two sides. Read both sides thoroughly.
- Some companies will offer a contract with a “retreatment only” clause. “Retreatment only” generally means that the company will come out and retreat your house if termites infest the structure after they have treated it. The company will not assume liability for damage done by the termites. There may be a number of exclusion clauses, so be sure to read and understand the contract you sign.
- Some contracts contain a “damage replacement” clause. “Damage replacement” clauses usually mean that the company will replace and pay for any damages incurred by the termites while you have been under contract with the company. There may be a number of exclusion clauses associated with this type of contract also, so be sure to read and understand the contract you sign.
- If your house is constructed with any Exterior Insulating Finishing System (EIFS), synthetic stucco, rigid foam board insulation, or any other decorative facade that is installed below the soil line (below grade), many pest control companies will not issue either a “retreatment only” or “damage replacement” type contract unless contact with the soil is cut off, leaving an inspection space of 6 to 8 inches. The inspection space is now a requirement in the Southern Building Code.
- Any type of construction that will create “conductive conditions,” or conditions that are favorable to termite infestation and survival, will disqualify many homeowners from receiving contracts with “retreatment only” or “damage replacement” clauses. Some conducive conditions are leaking roofs, landscape plants that are too close to the house, water sprinklers directed toward the house, and wood-to-ground contact. There are many more.
- Be aware that the contract for treatment of an existing subterranean termite infestation may not be the same as the contract for an annual reinspection.
- Make sure you have a contract before any work begins.
- Contracts should contain the name and address of the pest control firm.
- Make sure you know the length of time for which the contract is good.

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- Know which parties can cancel the contract and at what anniversary date.
- Look on the back for disclaimers. Look for “small print.”
- Look for an arbitration clause or other methods to settle disputes.
- Ask if the contract makes any distinction between the Formosan subterranean termite and native subterranean termite. Any company whose contract makes a distinction probably realizes the need for this separation. Research indicates that the Formosan subterranean termite is more aggressive and may cause significant damage in a shorter period of time compared to native subterranean termites. **BE AWARE THAT FORMOSAN SUBTERRANEAN TERMITES HAVE NOT BEEN FOUND IN ARKANSAS TO DATE.**
- Remember that the wording of the contract is only as strong as the parties involved. Make sure the company with which you contract has adequate coverage and the financial stability to perform all contractual obligations.

You can always contact the [Arkansas State Plant Board](http://plantboard.arkansas.gov) and ask if the company with whom you may contract has any outstanding complaints. If they do, ask for the nature of those complaints. The state law dealing with pest control in Arkansas is known as Circular 6 - ARKANSAS PEST CONTROL LAW- ACT 488 of 1975 as Amended, ACA Section 17-37-101 through 17-37-221 and the most recent revision (revised July, 2009) can be viewed online at:

<http://plantboard.arkansas.gov/plantindustry/documents/circular6pestcontrollaw.pdf>.

If you have other questions or if you want to verify the identity of an insect infesting your home, you may contact your local Cooperative Extension office at:

<http://uaex.edu/counties/default.aspx>).

By being familiar with the things discussed above, you can be confident in your choice of a pest management professional. Pay attention to the value and the service you expect for the price you pay. Also, remember that good pest control cannot be achieved without your cooperation and attention to things you are responsible for doing.

Dow, DuPont Merger Proceeds

John D. Hopkins

As reported by *Pest Management Professional's* sister magazine, *Landscape Management*, stockholders at both [DuPont](#) and [Dow Chemical](#) have voted to approve all stockholder proposals necessary to complete the merger of equals transaction. It's a key milestone in the process to merge the two companies and subsequently pursue the intended spins of three independent companies.

The companies expect the merger transaction to close in the second half of 2016, subject to customary closing conditions, including receipt of regulatory approvals.

“The overwhelming support of Dow and DuPont stockholders to approve this historic merger transaction is a clear testament to the compelling value proposition and enhanced shareholder value that DowDuPont represents,” Andrew Liveris, Dow’s chairman and CEO, said July 27. “Today is a pivotal step toward bringing together these two iconic enterprises, and to the subsequent intended separation into three leading, independent technology and innovation-based science companies that will generate significant benefits for all stakeholders.”

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DuPont and Dow intend that, following the completion of the merger, the combined company will pursue the separation of the combined company's agriculture business, material science business and specialty products business into three independent, publicly traded companies, subject to approval by the DowDuPont board and receipt of any required regulatory approvals.

The intended subsequent separation into three independent, publicly traded companies is expected to be consummated as soon as practicable following the merger closing, but finalization of the separations is not expected to exceed 18-24 months after the merger closing.

The final voting results on all agenda items for each company's special meeting will be filed with the SEC in separate Form 8-Ks and will also be available at on both [Dow](#) and [DuPont](#) websites, after certification by each company's inspector of elections. *Source PMP-The Buzz Online*

Edward Breen (left), chairman and CEO of DuPont, and Andrew Liveris, president chairman and CEO of Dow.



Photo by Dow Chemical/DuPont

ChemChina-Syngenta Merger Clears Important US Hurdle

John D. Hopkins

A U.S. national security panel has cleared ChemChina's \$43 billion takeover of Swiss pesticides and seeds group



Syngenta, the companies said, boosting chances that the largest foreign acquisition ever by a Chinese company will go through. The U.S. reviewed the deal because more than a quarter of Syngenta's seeds and crop protection revenue last year came from North America. The major regulatory hurdle the deal now has to clear is an antitrust review by the European Union, which the companies may seek to facilitate through divestitures, if need be.

The decision by the U.S. national security panel removes significant uncertainty over the takeover of the world's largest pesticides maker. Several U.S. lawmakers and groups representing farmers had expressed fears over a Chinese state-owned company being in a position to influence the U.S. food supply.

Syngenta reiterated that it expected the deal to close by the end of the year. It added that completing the transaction was subject to "anti-trust review by numerous regulators around the world and other customary closing conditions". *Source: Reuters*

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Fall Armyworm Update

Kelly M. Loftin

As we all know too well this has been the summer for fall armyworms and so far they have not relented. This year, fall armyworms appeared at treatment levels in pastures about two or three weeks earlier than normal – around mid-June. Calls and reports are still coming from most regions of Arkansas. We are not alone, some neighboring states are reporting major infestations. The majority of fields I've seen have armyworms of mixed sizes which indicates overlapping generations. Anytime we see overlapping generation we can expect frequent outbreaks because moths can be out laying eggs nearly any day. Some producers have had to treat multiple times especially those that applied products with short residual activity. During outbreaks with overlapping generations (armyworms of mixed sizes), products with more residual activity can reduce the number of applications necessary to produce a hay crop.



Although we usually think of fall armyworms as bermudagrass pests, which they are, we need to think about our winter annuals. Producers are either beginning or at least thinking about planting their winter annuals. Fall armyworms could still be around through at least September and maybe into October. With this in mind, newly emerged winter annuals (ryegrass and small grains) should be routinely scouted for fall armyworms to prevent major losses. Also remember, the treatment threshold is three or more worms per square foot and to make at least 10 samples within the field. Pyrethroid insecticides such as lambda-cyhalothrin, zeta-cypermethrin and beta-cyfluthrin have limited residual activity compared to other products such as Prevathon® (chlorantraniliprole), Besiege® (chlorantraniliprole and lambda-cyhalothrin) and Intrepid® (methoxyfenozide), all with longer residual activity. Additional information on armyworms can be found in “Managing Armyworms in Pastures and Hayfields” and is available at: <http://www.uaex.edu/publications/PDF/FSA-7083.pdf>. The Forages section of the “2016 Insecticide Recommendations for Arkansas” lists products available for fall armyworm control in forages and is available at: <http://www.uaex.edu/publications/pdf/mp144/c-forages.pdf>.

Section 18 Crisis Exemption for Sivanto™ prime: Sugarcane Aphids on Sweet Sorghum

Kelly M. Loftin

A Section 18 crisis exemption for use of Sivanto™ prime to control sugarcane aphids on sweet sorghum was approved for Arkansas earlier this year. The application rate is 4.0 to 10.5 fl oz/A with a pre-harvest interval of seven days. Application directions specific to the exemption (rate, pre-harvest interval, minimum application volume and etc.) are found on the Section 18 emergency exemption

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label. Therefore, anyone making a Sivanto™ prime application on sweet sorghum must have a copy of the Crisis Exemption in hand. Sivanto™ prime applications made on sweet sorghum must be reported to the Arkansas State Plant Board within ten days of application. The report includes information such as the applicator's name and address, farmer's name and address, acres treated, pounds of active ingredient per acre, location of field, and time and date of application. The section 18 emergency exemption label and reporting forms can be found on the Arkansas State Plant Board Website under pesticide registration - <http://plantboard.arkansas.gov/Pesticides/Pages/PesticideRegistration.aspx>.



Bayer CropScience LP
P.O. Box 12014, 2 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709
1-866-99BAYER (1-866-992-2937)

SIVANTO™ prime
EPA Reg. No. 264-1141

For Use on Sweet Sorghum to control
Sugarcane Aphid.

SECTION 18 CRISIS EXEMPTION

File Symbol: 16-AR-04

**FOR DISTRIBUTION AND USE ONLY IN THE STATE OF ARKANSAS
UNDER SECTION 18 EMERGENCY EXEMPTION**

In addition to the Section 18 emergency exemption for Sivanto™ prime, a Section 24(c) special local needs label was approved this year. The Section 24(c) label is for control of sugarcane aphids on sorghum using a reduced pre-harvest interval. The application rate is from 4.0 to 7.0 fl oz/acre with a seven day pre-harvest interval for forage and a fourteen day pre-harvest interval for dried stover or straw.

House Finch Eye Disease

Becky McPeake

Pests come in all shapes and sizes, and some of the smallest are of the microscopic variety. The Cornell Lab of Ornithology periodically asks citizens to help track diseases affecting a number of backyard birds through Project Feederwatch at <http://feederwatch.org/learn/house-finch-eye-disease/>.

Mycoplasma gallisepticum is the bacteria responsible for causing house finch eye disease. This disease can affect other species such as American goldfinch and purple finch.

The eye disease first appeared in North America in 1994 when people noticed birds with swollen, runny eyes at their feeders. A strain of bacteria usually found in poultry was able to jump the species barrier and began growing successfully in house finches. The house finch lineage of bacteria has been mutating since it was first detected.



This blind female house finch was found at a backyard feeder in Little Rock. Photo courtesy of Karen Colvin.

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A study conducted from 2007 through 2010 tested 2,000 individual songbirds from 53 species and found 27 species were infected with the bacterium. The number could be even higher because the test for antibodies is known to produce false negatives. Symptoms may not appear in some infected species. When symptoms do appear, an infected bird displays conjunctivitis, or swollen, runny, or crusty eyes. In extreme cases, the eyes become swollen shut and the bird becomes blind. Infected birds usually don't die from conjunctivitis, but rather from starvation, exposure, or predation as a result of not being able to see.

To reduce disease transmission, recommended bird-feeding guidelines are:

- Space your feeders widely to discourage crowding.
- Clean feeders regularly with 10% bleach solution and allow to dry thoroughly.
- Remove any buildup of dirt around food openings.
- Rake the area underneath your feeder to remove droppings and spread old, moldy seed.
- If you see diseased birds, clean feeders and remove for a few days to encourage sick birds to disperse.

Blossom End Rot: A Nutrient Disorder

Amanda McWhirt

Blossom end rot is a nutrient disorder that is common on pepper and tomato. The disorder is caused by a calcium deficiency, which results in thin cell walls on the blossom end of the fruit (opposite end of the stem). Due to the weakened tissue the fruit walls start to decay and may present symptoms that look like some diseases. Blossom end rot however is confined to the bottom 1/3 of the fruit and does not appear near the stem; whereas most diseases will be on the side of the fruit or near the stem.

The two most important ways to prevent blossom end rot are to ensure soil pH is in a healthy range (6.0-6.5) prior to planting and to maintain consistent watering. Low soil pH limits calcium uptake from the soil, and because calcium is brought into the plant with water uptake inconsistent watering can also limit calcium uptake. Avoid letting plants wilt between watering events during flowering and fruit-set when calcium uptake is most critical.

Once symptoms are present, corrective action can be taken to try to prevent the problem on later developing fruit. Calcium nitrate is a good source of nitrogen that provides around 19% calcium and it can be applied through drip irrigation systems. Foliar calcium sprays are generally less effective as only low levels of calcium can be absorbed through the skin of young fruit.

Late summer and fall are a great time of year to soil sample and determine if soil pH needs to be amended this fall in preparation for NEXT year's successful tomato or pepper crop!



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Name That Weed

Bob Scott

This month's weed is for the pasture guys, but can also be a problem in row crops from time to time. It is an annual invasive weed growing 12 to 36 inches in height. Native to the United States, it can quickly overpower shorter plants in the region. This plant is easily identifiable with a unique aroma and dense hairs on the stems and leaves. This gives the plant a grayish tint. This plant tends to grow in overgrazed pastures and disturbed areas next to riverbeds and roads. Dove like it, but I'm only accepting the most accepted common name. Be the first to email me at bscott@uaex.edu with that name and win a prize. Please **do not** hit reply or reply all to this message.



All chemical information provided in this newsletter is given with the understanding that no endorsement of named products is intended, nor is criticism implied of similar products that are not mentioned. Individuals who use pesticides are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Before purchasing or using any pesticide, always read and carefully follow the label directions.

To The Readers

Please offer any suggestions for Urban or Livestock Integrated Pest Management topics (insect pests, plant diseases, weed problems, wildlife control problems) that you would like to see – **OR** – feel free to submit an article that you have prepared. Kelly and I will be glad to include it (subject to editing). Send feedback to jhopkins@uaex.edu or kloftin@uaex.edu

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