



# The **Protocol** Builder

FOR TREATING COMMERCIAL AND RESIDENTIAL ACCOUNTS

*These protocol guidelines were put together by our experts in order to help you use our products more effectively. It's all part of a commitment to be more than just a supplier of professional products, but to be the pros that PMPs can consistently turn to for support, service and new ideas.*



- TRAPS • CONCENTRATES • FOGGERS • GRANULES •
- SPRAYS • AEROSOLS • BAITS • POWDERS • WATER-SOLUBLE POUCHES •

# Building a Zoëcon Protocol – Solutions Behind Pro-Formance

Every formulation within the Zoëcon® Professional Product lineup is designed to walk softly and carry a big stick. The goal is to minimize our environmental footprint with targeted control of disrupting insect pests. **Zoëcon® Product Solutions:**



**IGRs** - Insect growth regulators negate the development of insects. In lieu of stopping insects through direct toxicity, IGRs affect development essentially preventing larvae from reaching adulthood. Zoëcon originated the IGR (S)-methoprene.



**Insecticides** - Quick knockdown and targeted control with minimal environmental impact is the modus operandi for Zoëcon® insecticides. A majority of these are formulated with either pyrethrins, Etofenprox or Imidacloprid as active ingredients.



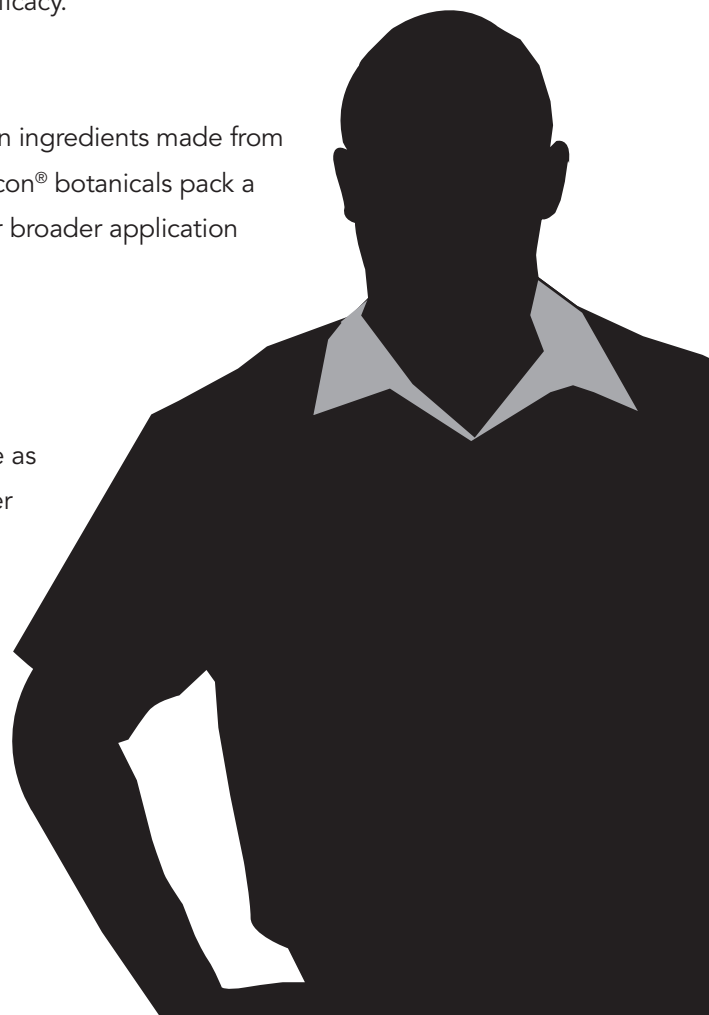
**Combinations** - A mix of an insect growth regulator and insecticides in one easy-to-use product. The active ingredients have to complement each other. Zoëcon® combination products are carefully formulated and tested for efficacy.



**Botanicals** - Soft chemistry insecticides that contain ingredients made from the essential oils of naturally occurring plants. Zoëcon® botanicals pack a punch as naturally derived insecticides allowing for broader application opportunities.



**Synergists** - Expanding the control of pyrethrins, Zoëcon® synergists are powered by PBO and serve as excellent tank-mix partners. When mixed with other insecticides, synergists provide an extra boost for stronger stopping power.



# Think Application

Zoëcon carries a wide variety of product format options that can be used in combination, so PMPs have a choice when it comes to control. **Zoëcon® Product Formats Include:**



**Sprays**



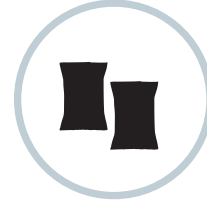
**Aerosols**



**Powders**



**Traps**



**Water-soluble  
pouches**



**Foggers**



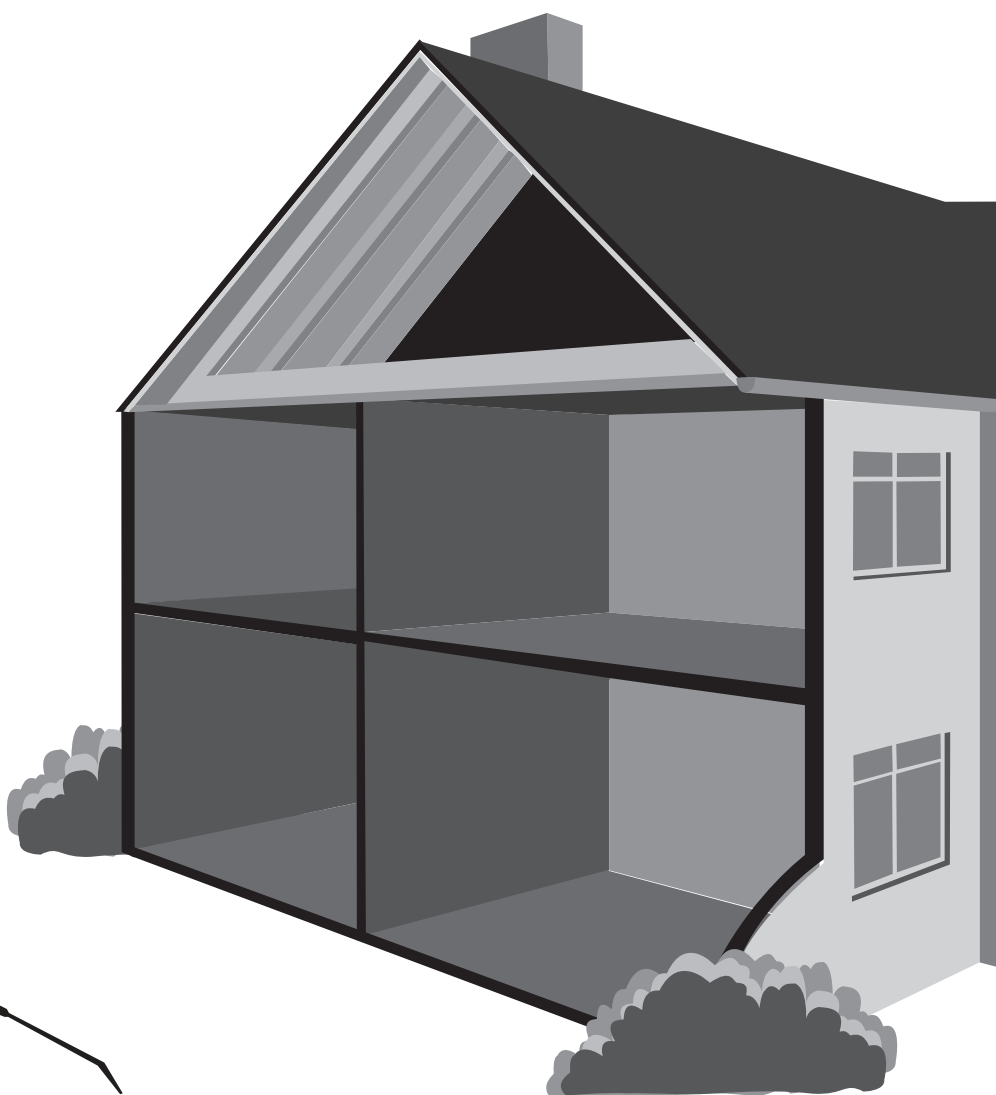
**Granules**



**Baits**



**Concentrates**



# KITCHEN

*The*

Put together a protocol with Zoëcon® Professional Products that fights kitchen invaders and can be applied where food is prepared without slowing down operations.

# Protocol

TREATING COMMERCIAL AND RESIDENTIAL

### Featured Products:



**Essentria® IC-3**  
Botanical insecticide



**Essentria® All Purpose Insecticide Concentrate**  
Botanical insecticide



**Gentrol® Family - Aerosols, Concentrate, and Point Source**  
Synthetic insect growth regulators



**ExciteR™**  
Synergist

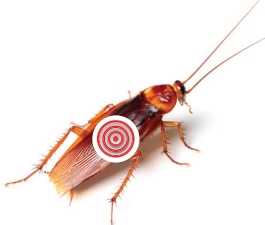


## Target Insects:



### Ants

Inspecting for proper identification is key to control; make inspections easy by removing pantry items and pre-baiting exteriors to stimulate activity. To keep nuisance low, maintain food-free surfaces and place bait in voids and hidden areas.



### Cockroaches

When inspecting for cockroaches, use a mirror to check areas under sinks, countertops and adjacent to dishwashers. Keep in mind that nymphs don't wander far from their harborages, so seeing one means that a harborage is nearby.



### Stored Product Pests

During inspection, note that stored product pest larvae can move far from breeding sites and primary infestations. During treatments, make sure to properly seal and dispose of infested items until they can be removed from the premises.



### Drain and Fruit Flies

Drain and fruit fly infestations in the kitchen are marked by the visible presence of mature adults. Drain flies rest on walls and ceilings; they're not good at flying, so their breeding site (a pipe or drain) will be nearby. Fruit flies breed in old or decaying fruits, vegetables, alcohol and meat. Remove such foods and waste items before treatment.

# 1



## A Two-Step Solution:

To effectively fight against a multitude of insects, spray **Gentrol® aerosols** for spot and surface treatments, or use as foam in cracks and crevices.



# 2

Follow up with exterior perimeter treatments using **Lambda 9.7 CS**.

## Combos Make it Last:



For control that just won't stop, combine **Gentrol® IGR Concentrate** with **ExciteR™** synergist to flush out, kill, and prevent future infestations.

For food handling areas, tank mix **Lambda 9.7 CS** with the IGR power of **Gentrol® IGR Concentrate** to prevent pests from re-emerging for more than four months.

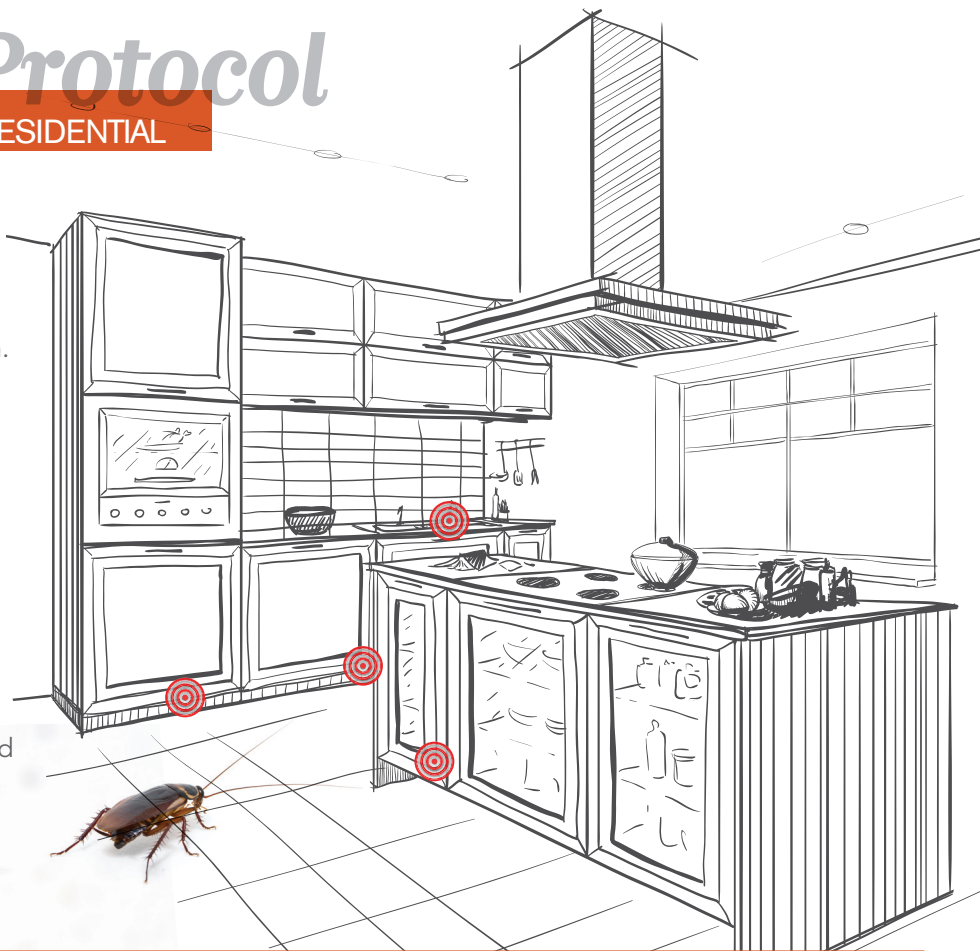


# The KITCHEN Protocol

TREATING COMMERCIAL AND RESIDENTIAL

## Where to Look: ➤

- 🎯 For ants, examine edges of counters, seams, baseboards and other elements of construction.
- 🎯 For cockroaches, look in cracks and crevices that are close to water and food sources.
- 🎯 Small flies breed in drains, rotten vegetable matter and disposal lines. Note that they can emerge from sewer areas through drain traps and improperly sealed toilets.
- 🎯 Check for stored product pests in packaged and spilled food items, wool and organic debris.



## ◀ Focus on Food:

Pests can invade foodstuffs and use them as breeding grounds. Remove infested items and treat surrounding cracks, crevices and surfaces with **Gentrol®** in order to control migrating immature stages and prevent adult emergence of hidden larvae.

## Future Prevention:

Regularly treat fruit and drain fly breeding sites such as drains and disposal lines with **Gentrol® IGR Concentrate** or **Gentrol® aerosols**. Prevent insects from entering into the home by refilling drain traps and properly sealing plumbing fixtures.



## Easy Add-Ons for Fly Control:



### Indoor

After treating a kitchen for flies, finish the job by leaving behind fly traps such as the insecticide-free **Musca-Stik™ Sticky Fly Trap**, **Lure-Fly™ Fly Catchers** or the **Starbar® EZ Trap®**.



### Outdoors

Even after a kitchen has been treated, flies from exterior areas such as dumpsters and outdoor waste receptacles can find their way in. Keep them out by employing a scatter bait rotation around the exterior of the building, with special focus on disposal areas. **QuikStrike® Fly Bait**, **Golden Malrin® Fly Bait**, **Starbar® QuikStrike® Fly Abatement Strip**, **Cyanarox™ Insecticidal Bait** and **Starbar Captivator® Fly Trap** draw flies away from food sources and kill them immediately after ingestion.



## A “Greener” Alternative:

Given their food-centric nature, it should come as no surprise that demand for natural pest control alternatives in kitchens is especially high. Fortunately, it's easy to build an eco-friendly kitchen protocol with botanical products that pose no harm to humans or the environment.

### Here's how:



Low fragrance formula with two essential oils, use **Essentria® All Purpose Insecticide Concentrate** to control accessible crawling insects. Pay special attention to cracks, crevices and dark corners, as well as around waste receptacles, windows and doorways.



Apply **EcoPCO® D-X Dust Insecticide** as a dust in non-food handling areas such as drains, bathrooms, storage and garbage areas.



Powered by three essential oils, combat ants, cockroaches, beetles, mites and spiders with **Essentria® IC-3 Concentrate** in accessible areas, as well as in hard-to-reach areas like cracks, crevices, dark corners and drains.

Apply **EcoPCO® WP-X Water Soluble Pouches** to cupboards and storage areas with spot, crack and crevice treatments. This formula is especially effective against ants, spiders and stored product pests.





# The BATHROOM Protocol

TREATING COMMERCIAL AND RESIDENTIAL

*Pest invasions are especially visible in both commercial and residential bathrooms. Fight them with a protocol featuring Zoëcon® Professional Products.*



**Zenprox® EC**  
Insecticide



**Lambda 9.7 CS**  
Insecticide

## Featured Products:



**Gentrol® Family - Aerosols, Concentrate, and Point Source**  
Synthetic insect growth regulators

## Target Insects:



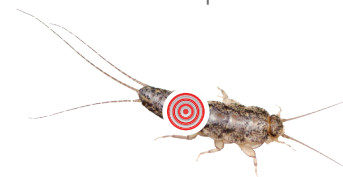
### Ants

Different ant species require different treatments, so be sure to properly identify the invaders. The key is to identify what is drawing them in – usually food and water sources – such as standing water or hair in drains.



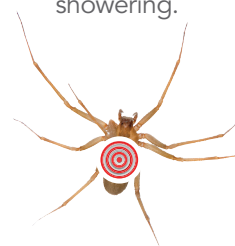
### Cockroaches

In both commercial and residential bathrooms, water tends to pool up and attract cockroaches. Puddles should be wiped regularly to avoid these pests.



### Silverfish

Silverfish love humidity, so advise clients to ventilate bathrooms after showering.

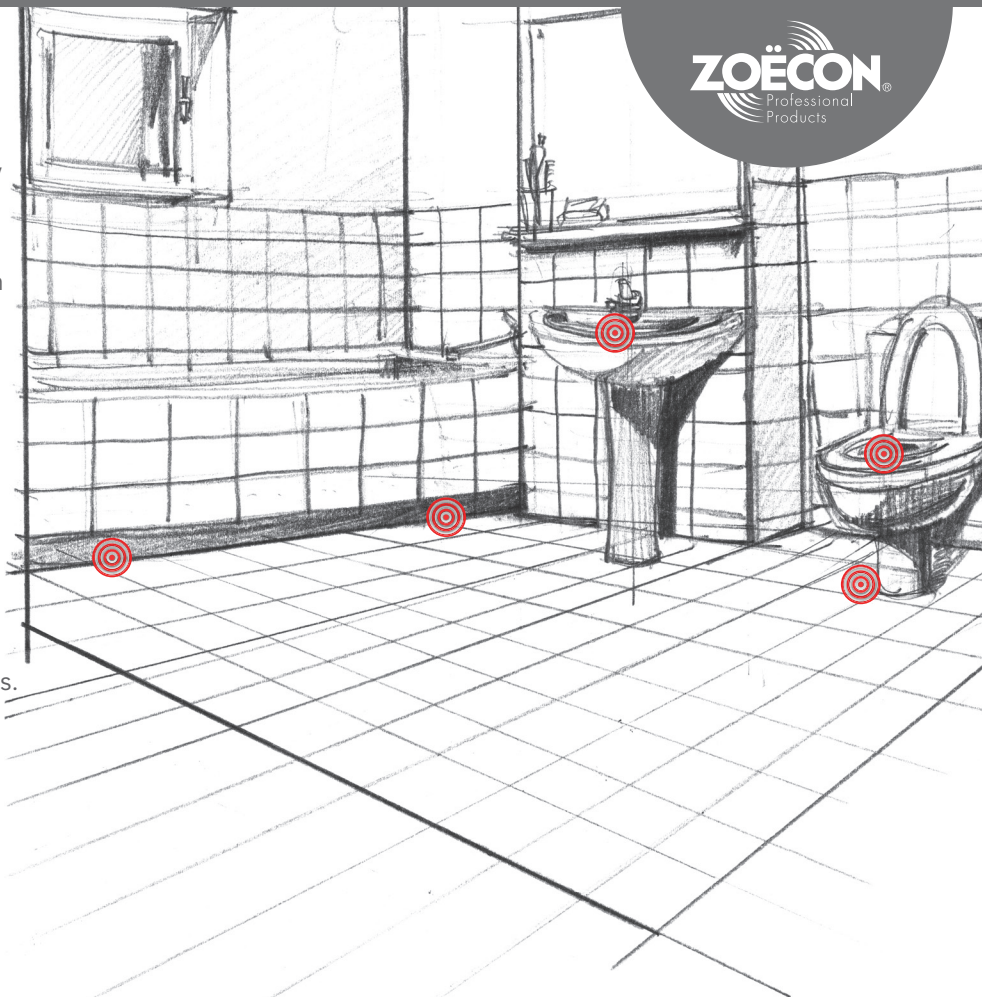


### Occasional Invaders

When identifying an occasional pest infestation, keep in mind that different species invade during specific weather conditions.

## Where to Look: ➤

- 🎯 To spot ants, look along the edges of toilets, sinks, bathtubs, pipes and baseboards.
- 🎯 Because they are unable to climb on smooth surfaces, silverfish are often found trapped in sinks and tubs. Look for infestations in baseboards, plumbing jets and humid areas.
- 🎯 Springtails and other occasional invaders need moisture to survive, so they often congregate around sinks and tubs.
- 🎯 Look for cockroaches underneath sinks, drains, rubber mats and in dark, damp places.



## A "Greener" Alternative:

For accounts that request an eco-friendly pest control protocol for bathrooms, use the following techniques:



Low fragrance option to kill crawling insects, spray **Essentria® All Purpose Insecticide Concentrate** around cracks, crevices and drains.

Use **EcoPCO® D-X Dust Insecticide** around drains, in wall voids and around the bases of toilets, sinks and bathtubs.



Apply **Essentria® IC-3 Concentrate** to exposed areas, cracks, crevices, corners and drains.

Spray **EcoPCO® ACU Insecticide** in cracks and crevices, behind appliances and under sinks.



## A Three-Step Solution:

1



Treat cracks and crevices of window frames with **Zenprox® EC** or **Lambda 9.7 CS** insecticides.

2



Apply crack, crevice and spot treatments to lights and exhaust fans, which are often entryways for pests.

3



Open and treat drains and plumbing access to jetted bathtubs with **Gentrol® IGR Concentrate**, **Gentrol® Aerosol** and **Gentrol® Complete Aerosol**.

# The Hotel & Bedroom Protocol

## TREATING COMMERCIAL AND RESIDENTIAL

*Treat pests in bedrooms and hotel rooms with a protocol that will put invaders to rest.*

### Featured Products:



**ExciteR™**  
Synergist



**Precor® 2625**  
Premise Spray  
Insecticide



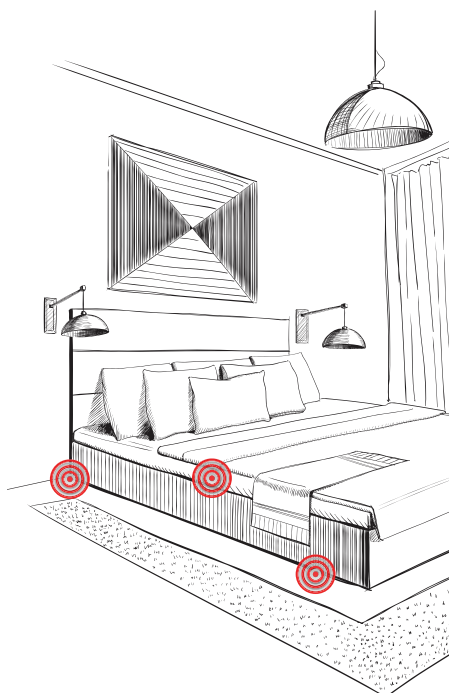
**Zenprox® Xtend**  
Aerosol and  
**Zenprox® EC**  
Insecticide



**Gentrol® IGR**  
Concentrate  
Synthetic insect  
growth regulators

### Where to Look: ➤

- ☉ Check for ants around bed seams, baseboards and the edges of desks and dressers.
- ☉ For bed bugs, examine the narrow elements of headboards, mattresses, box springs, bedframes and nightstands. They can easily spread horizontally and vertically, so check for infestations in adjacent rooms.
- ☉ Look for fleas where pets spend a lot of time, such as under pet beds or near doors. Note that larvae and eggs seek protection in carpet fibers, under cushions and in cracks and crevices.
- ☉ Cockroaches are constantly on the search for water, so look for this species near toilets, under sinks and in bathtubs.



### A “Greener” Alternative:

Zoëcon offers an array of natural and botanical pest control products. Here's what to use for an eco-friendly bedroom and hotel room protocol:



For a quick knockdown of bed bugs, fleas and other listed pests, spray **Essentria® Contact Spray** on mattresses, headboards, baseboards, carpeting, furniture and pillows.



Apply **EcoPCO® D-X Dust Insecticide** on headboards, baseboards, carpeting and mattress seams to treat bed bugs. Dust inside empty dressers, on carpet edges and on bed frames.



Use **EcoPCO® ACU Insecticide** aerosol on baseboards, upholstery, walls, floors and mattresses.



## Target Insects:



### Ants

Before planning a control protocol, properly identify the ant species present. Bait placement should be in hidden areas to avoid nuisance.



### Cockroaches

Cockroaches can enter through cracks and crevices, sewers, vents and drainpipes. Treat these areas and make sure that all plumbing is properly sealed.



### Bed Bugs

Treat all furniture from multiple angles for harborages hidden underneath bed frames and furnishings. To prevent bed bugs from spreading, keep beds away from walls and limit floor contact.



### Fleas

Fleas go through four stages throughout their life cycle – eggs, larvae, pupae and adults. Control them during every stage with a combination of adulticides and insect growth regulators (IGRs).

## A Two-Step Solution:



1



Treat entry points, hidden areas, cracks and crevices, surfaces, bed frames and box spring seams with **Precor® 2625 Premise Spray** or **Zenprox® EC** insecticide combined with **Gentrol® IGR Concentrate**.

2

Follow up with a broadcast application of **Zenprox® EC** insecticide or **Precor® 2625 Premise Spray** to floors and carpets. This will prevent bed bugs from migrating into the room.

## A Trifecta of Bed Bug and Cockroach Control

For a quick knockdown – and control that lasts – tank mix **Zenprox® EC** insecticide, **ExciteR™** synergist and **Gentrol® IGR Concentrate**. **Zenprox® EC** insecticide combined with the synergist **ExciteR™** quickly flushes and kills cockroaches and provides a month of residual control. The insect growth regulator in **Gentrol® IGR Concentrate** prevents populations from rebounding for up to four months.



# BACK YARD

*The*

*Protocol*

*From residential yards to commercial landscapes, put together a protocol for all the insects you'll come across.*

TREATING RESIDENTIAL AND COMMERCIAL

## Featured Products:



**ProBait® Formulation for Professionals Insecticide**



**Mavrik® Perimeter Insecticide**



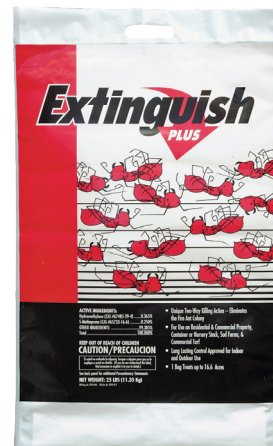
**Lambda 9.7 CS Insecticide**



**Essentria® Wasp & Hornet Spray Insecticide**



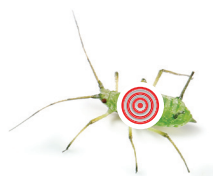
**Altosid® Insect Growth Regulator**



**Extinguish® Plus Insecticide**



## Target Insects:



### Honeydew-Producing Insects

While the honeydew itself is harmless to plants, sap-sucking insects such as aphids, leafhoppers, mealy bugs, psyllids and whiteflies can inflict serious damage.



### Occasional Invaders

Outdoor treatments of occasional pests such as spiders, earwigs and springtails are key to preventing them from making their way indoors.



### Ants

In addition to targeted insecticide treatments, encourage clients to maintain good lawn health in order to prevent future ant infestations.



### Wasps

Unless it is located in a dangerous or inconvenient position, there is no harm in leaving the physical nest where it is. Residual insecticide on the nest will kill any wasps that encounter it after the initial spray.



### Mosquitoes

Source reduction is key to mosquito control. It involves getting rid of unnecessary mosquito breeding grounds (areas with standing water) and resting grounds (weedy areas with excessive vegetation).






### Fire Ants

Leaving pet food outdoors is like sending an open invitation to fire ants. Encourage clients to bring pet food bowls indoors.



## Where to Look:



-  Wasp nests are often not visible, but you will see wasps at entrance points that lead to nests around the eaves and ledges of houses.
-  Mosquitoes breed in standing water, so areas near puddles, birdbaths, gutters, artificial containers and stormwater retention ponds may be especially infested.
-  Most species of ants nest underground, while some can be found in compromised wood, dead mulch, leaf litter and gutters.

# The BACKYARD Protocol

TREATING COMMERCIAL AND RESIDENTIAL



1



2

## Two-Step Solution for Honeydew-Producing Insects:

Treat all landscape plants in the vicinity of buildings with **Mavrik® Perimeter** or **Lambda 9.7 CS** insecticide for quick knockdown and long-lasting residual control of plant-feeding insects.



## Stop Stinging

Every spring, summer and fall, treat visible wasp nests and potential nesting sites with **Essentria® Wasp & Hornet Spray** for immediate knockdown and control of wasps and hornets.



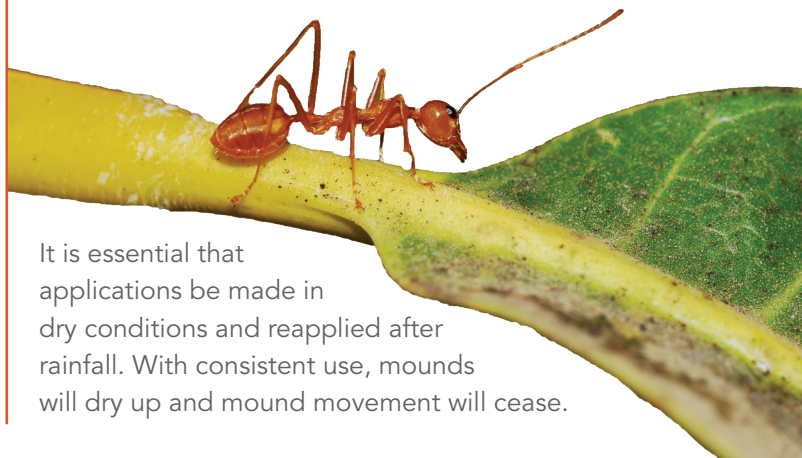
## Eliminate Unwanted Winter Guests:

As temperatures cool in the fall, treat eaves and inside edges of rain gutters with **Lambda 9.7 CS** insecticide to prevent overwintering insects, such as spiders, from entering buildings.



## Fire Ant Focus:

If you live in southern and southwestern states, fire ants are as common as the sunrise. Apply **Extinguish®** and **Extinguish® Plus** fire ant baits around fire ant mounds with a spreader or a scoop. For smaller colonies that are not visible for spot treatments, consider broadcast applications.



It is essential that applications be made in dry conditions and reapplied after rainfall. With consistent use, mounds will dry up and mound movement will cease.



## A “Greener” Alternative:

It's easy to take care of outdoor pests with botanical formulas in many easy-to-use, convenient formats.



Apply low fragrance **Essentria® All Purpose Insect Concentrate** to areas where pests congregate.



Powered by three essential oils, spray **Essentria® IC-3 Insecticide Concentrate** around windows, doorways, porches, vegetation and soil to control a broad range



Apply **EcoPCO® WP-X Water Soluble Pouches** as a perimeter or crack and crevice treatment to control a broad spectrum of flying and crawling insects.



Treat wasps and other stinging insects by spraying **Essentria® Wasp & Hornet Spray** in the entrances of nests. Apply **EcoPCO® D-X Dust Insecticide** on the nests and their surrounding areas for complete control.



To kill ants, mites, chiggers and fleas, apply **Essentria® G Granular Insecticide** as a landscape, turf and perimeter treatment. For best results on ants, pour directly onto the mound.

## Mosquito Management:

As awareness of mosquito-borne illnesses such as West Nile virus, Dengue and Zika virus increases, mosquito control has become an important source of revenue for many pest management professionals. The most effective management techniques attack these pests at every stage of their life cycle.

To prevent mosquito larvae from developing into breeding, biting adults, add **Altosid®** to areas with standing water. Next, eliminate adult mosquitoes with a barrier treatment of **Mavrik® Perimeter**, a contact-kill insecticide with long residual control.



The

Protocol

When insects in warehouses infest stored goods, the resulting damage can be extremely costly. Keep insects under control with a protocol specifically designed for warehouses and storage areas.

TREATING THE WHOLE SPACE

### Featured Products:



**Lambda 9.7 CS**  
Insecticide



**Gentrol® aerosols**  
Insecticide



**Gentrol® IGR Concentrate**  
Insect Growth Regulator



**QuikStrike® Fly**  
**Abatement Strip**  
Insecticide



**Pyronyl™ Fogging**  
**PF Concentrate**  
Insecticide

## A Two-Step Solution:

After disposing of infested materials, treat racks, loading docks and foundation expansion joints with a tank mix of a residual and an IGR. Recommended products include **Zenprox® EC** or **Lambda 9.7 CS** insecticides combined with **Gentrol® IGR Concentrate**.



1

or



+



2

## A Quick Kill:

If breeding sources and sites have already been addressed, simply treat the facility with **Pyronyl™ Fogging PF Insecticide** as a fogging or space spray application. This adulticide has been approved for use in food handling areas.



## Target Insects:



### House Flies

Sanitation is essential when it comes to controlling house flies. After cleaning the warehouse, ensure that all food and waste receptacles are properly sealed.



### Stored Product Pests

Before treating for stored product pests, destroy all infested foods and sanitize surrounding areas.



### Phorid Flies

While most fly species will fly away when threatened, phorid flies can be identified by their tendency to run or “scuttle” away.



### Cockroaches

To prevent cockroaches from re-entering the facility, seal up cracks in windows and doors.

## Where to Look:



While house flies like to rest on floors, walls and ceilings, they breed in decaying matter such as food, garbage and drains.



Stored product pests infest whole grains and processed foods. They can be found underneath product containers as well as inside of them.



Phorid flies breed in garbage, drains and in the soil under concrete slabs. In the case of the latter, you may need to break through the concrete and remove the dirt.



Cockroaches enter buildings through loading dock doors and drains. They often hide in expansion joints around building foundations.

## A “Greener” Alternative:

Finding an eco-friendly pest control protocol is especially important among warehouses that hold sensitive materials and foodstuffs.



Spray **Essentria® All Purpose Insect Concentrate** on floors, walls and niches to treat crawling insects.



Use **EcoPCO® D-X Dust Insecticide** around door openings, in hollow surfaces in walls and around equipment.



Spray **EcoPCO® AR-X Multi-Purpose Insecticide** or **EcoPCO® ACU Insecticide** aerosols into cracks, crevices and void spaces where crawling insects could be hiding in non-food handling areas.



To treat cockroaches, spiders, crickets and stored product pests, apply **EcoPCO® WP-X Water Soluble Pouches** to walls, cracks, crevices and pipe openings.



To kill wasps, hornets and yellow jackets on contact, spray **Essentria® Wasp & Hornet Spray** on nests where food is not present.



# The Transportation Protocol

## TREATING THE WHOLE SPACE

Transportation vehicles such as rail cars, buses, airplanes, tractors and trailers can carry pests from all over. Put together a protocol for fighting insects in these high-traffic areas.

### Featured Products:



**Lambda 9.7 CS Insecticide**



**Precor® 2625 Premise Spray Insecticide**



**Zenprox® EC and Zenprox® Xtend Aerosol Insecticide**



**Pyronyl™ Fogging PF Insecticide Insecticide**



### Where to Look: ▼

- 🎯 For cockroaches, look behind lighting, under the door, in cracks, crevices, windows and doorframes and inside exhaust pipes.
- 🎯 Ants can live in cracks, crevices, windows and doorframes, near the edges of baseboards and seats, in corners and even within seat upholstery.
- 🎯 Search for bed bugs in the seat fabric.
- 🎯 Look for fleas in the seat fabric, as well as in carpeted aisles.
- 🎯 Flies can be found resting on surfaces such as floors, windows, seats and ceilings. They may come in through windows and doorframes.

### Go Deep For Fleas and Bed Bugs

Spray **Precor® 2625 Premise Spray** on upholstery and carpeting for a quick kill and long-lasting control of fleas and bed bugs. Finish by applying **Zenprox® EC** insecticide to floors in order to keep bed bugs from migrating onto seats.



## Target Insects:



### Cockroaches

Food and wrappers that have been stuck between seat cushions provide cockroaches with food in a dark and cool environment. Be sure to clean this area thoroughly.



### Ants

These pests are attracted to water, sugar and food crumbs. Drivers, captains, pilots and attendants should check every seat on a day-to-day basis.



### Bed Bugs

Once an infestation has occurred, prevent future problems by recommending active or passive monitoring programs on high-traffic vehicles.



### Fleas

Regular washing and vacuuming of seats are essential to preventing flea infestations.

## A "Greener" Alternative:

Many transportation vehicles are both high traffic and confined, so some clients may request treatments that require no downtime.



Use **EcoPCO® D-X Dust Insecticide** around equipment in dark areas.



Apply **EcoPCO® WP-X Water Soluble Pouches** as a barrier treatment to prevent ant infestations.

To kill ants, cockroaches and fleas, apply **EcoPCO® AR-X Multi-Purpose Insecticide** aerosol to cracks, crevices and voids around garages, storage areas, machinery, vents, windows and pipes.



To control ants, cockroaches, beetles, mites and spiders, spray **Essentria® IC-3 Insect Concentrate** in exposed areas as well as in cracks, crevices, drains, dark corners and walls.

## The Dream Team:

**Zenprox® EC** insecticide can be applied as a crack, crevice and spot treatment along aisles, bases of seats, corners, floors, exhaust pipes and window frames. Tank mix with an IGR for long-lasting control.



Spray **Lambda 9.7 CS** insecticide in corners, overhead storage bins and other hard-to-access hiding areas. Combine with an IGR such as **Gentrol® IGR Concentrate** for preventative control.





To learn more about the comprehensive selection of preventative pest management solutions contact your Zoëcon distributor, call 1.800.248.7763 or visit [Zoecon.com](http://Zoecon.com)



Adonis, Altosid, Essentria, ExciteR, Extinguish, Gentrol, Gentrol Point Source, Golden Malrin, Mavrik, PBO-8, Perm-X, Petcor, Precor, ProBait, Pyronyl, QuikStrike, Starbar, Starbar with design, Wasp-X, Zenprox, Zoëcon, and Zoëcon with design are trademarks of Wellmark International. Captivator, EZ Trap, Fly Terminator, FlyRelief, Lure-Fly, Musca-Stik, Musca-Stik Jr., Red to Yellow colorgradation, and Trap 'N Toss are trademarks of Farnam Companies, Inc. EcoPCO is a trademark of Kittrich Corporation. PCO 19-008