



Restaurant Wars:

Winning the Battle Against Pests

RESTAURANT WARS: WINNING THE BATTLE AGAINST PESTS



MENU

	Cockroaches	4
	Ants	7
	Stored Product Pests	8
	Flies	9
	Silverfish.....	10
	Mosquitoes	10
	Wasps	11

PEST CONTROL IS ESSENTIAL TO A RESTAURANT'S REPUTATION

Restaurants and food handling establishments vary in size, shape, geographic location, pest pressure and variety of pests. To make things even tougher, PMPs often face more than one type of pest at a time.

Restaurants typically require regularly scheduled service visits to prevent unacceptable pest activity, but when and where should a PMP focus their time and effort to best manage restaurant pests? Treatments should be directed at pest harborages or applied with a specific pest in mind. Understanding the sites and reasons pests are thriving is important for control and minimizing their resources. Making targeted applications to these sites are critical for pest management.



CSI-Pest, a division of Control Solutions Inc. (CSI) has a product for every pest in your account's establishment. This eBook is meant to help you fight commonly encountered pests in specific areas of food handling facilities, especially restaurants.

4

COCKROACHES



Cockroaches can be a restaurant owners' worst nightmare. Known to carry bacteria, cockroaches can also be a source for allergens, and can ultimately cause major customer complaints. They can easily hide in cracks, crevices and harborage areas behind walls, only to come out to forage at the most inopportune times. Cockroaches can find their way into even the cleanest restaurants. They may be brought in on deliveries or even arrive alongside unaware customers. A restaurant's sterling reputation can quickly be tarnished by sightings or reports of these pests.



PDS for Commercial Kitchens

Before the initial treatment, consult with the staff, janitorial crew, office management, or chef for areas of concern and recent history of activity. Complete a thorough inspection of the property to determine sanitation procedures, and the overall maintenance and upkeep level of the account. Properly identify the pest in question. Next, assess the population size, location and severity. Be sure to note conducive conditions and recommend repair/mitigation of these conditions to appropriate personnel. These small efforts can make huge impact on cockroach infestations.

Introducing: FUSE® COCKROACH GEL BAIT

Fuse Cockroach Gel Bait is a proprietary combination gel bait designed for superior control of cockroaches. It is the newest addition to CSI's Bait Solutions line of products with two active ingredients, **abamectin and fipronil**.

Fuse Cockroach Gel Bait is highly effective against cockroaches and has undergone **rigorous scientific testing at major universities and third-party laboratories**.



Fuse Cockroach Gel Bait

The combination of fipronil and abamectin combats bait-averse cockroaches and provides excellent control against difficult infestations. PMPs can use this bait for heavy infestations, clean outs and long-term maintenance. This bait is also a good resistance management tool. **Research has shown there is little resistance to abamectin in cockroach populations** so you get the added benefit of



5

resistance management with the powerful action of fipronil.¹

Focus Fuse Cockroach Gel Bait applications in areas of presumed and current cockroach activity. Common hot spots include cracks and crevices around pipes, faucets, inside cabinets and behind and underneath appliances. Apply the gel bait in small round spots or in a thin bead (line). For easy application underneath items and appliances, a bead of bait **can be placed on a piece of wax paper and slid underneath hard-to-reach areas.**



PDS WITH DOXEM® PRECISE

CSI's premier product for treating cockroaches and other pests is the Precision Delivery System (PDS) featuring Doxem Precise. Applied with the PDS, Doxem Precise **withstands extreme temperatures** common in commercial kitchens. Its quick and long-lasting formulation makes it a an ideal solution.

Use the PDS to make quick, 3-8 second applications. With the PDS, Doxem Precise can **deliver treatment up to 24 inches into voids**, areas where other baits would be impossible to apply. Be sure to avoid contaminating any food/feed products or preparation surfaces, dishes or utensils at the time of treatment. Examples of areas to treat in and around:



- Unplugged electric/motorized equipment (motor housings, compressors)
- Refrigerator/freezer units / ice makers
- Cabinetry
- High moisture areas (dishwasher, sink)
- Convection ovens/microwaves/fryers
- Bar areas
- Cardboard box storage
- Receiving areas
- Garbage/trash dumpsters
- Grease pits/containers

Reference:

¹Lee S., Choe D., Rust M., Lee C., Reduced Susceptibility Towards Commercial Bait Insecticides in Field German Cockroach (Blattodea: Ectobiidae) Populations From California, Journal of Economic Entomology, Volume 115, Issue 1, February 2022, Pages 259-265.



6

Application of Doxem Precise in commercial and food handling areas is limited to crack and crevice treatments only. These types of applications may be made while the facility is in operation. You will be happy to find that Doxem Precise reduces callbacks and keeps **working for well over 6 months.**

DOXEM® NXT

Doxem NXT is the newest addition to the Pressurized Solutions line from CSI. PMPs can now apply indoxacarb in an entirely new way – as an aerosol! Featuring **four active ingredients and four unique modes of action**, Doxem NXT should be your first choice for rotational pest management programs. With a flexible label that includes food handling uses, Doxem NXT is a premium ready-to-use solution for most pest problems. Since it's formulated with no repellent active ingredients, this aerosol product is compatible with other non-repellent applications, including baits. Additionally, it effectively kills many listed pests on contact while leaving behind a residual. Formulated with **two adulticides and two insect growth regulators (IGRs)**. Doxem NXT was developed with Tekko® Technology, which breaks the insect lifecycle and prevents the growth and reproduction of future pest populations. The aerosol's **360° rotation** allows applicators to target pests and hard-to-reach harborage areas at any angle, **including upside down.**



360° Rotation ▶

Doxem NXT is labeled for a broad range of sites, allowing applications in many different areas both indoors and outdoors. It is labeled for use in **food areas of food handling establishments** as well as in homes, schools, hospitals, and animal housing facilities. With multiple modes of action, Doxem is also tough on other pests like ants, stored product pests, crickets, and springtails. For a full list of allowed sites and labeled pests, please refer to the product label.



7

ANTS



Ants are a constant source of both revenue and headaches for pest management professionals (PMPs). They cause the phone to ring and bring us new clients, but they also are a frequent cause for callbacks and re-treatments. **Pro Tip:** Identify the food sources attracting ants. If ants are attracted to a sweet food, use a sweet bait. If proteins seem to be the most attractive, use a protein-based bait. Give the foraging ants what they want!

PDS + DOXEM® PRECISE

Although Doxem Precise is limited to crack and crevice treatments only, in commercial and food handling areas, it is still a great choice. It attracts and kills listed ants where they hide. Also, **Doxem Precise can be applied while the facilities are in operation.** The goal to combating ant problems in and around a restaurant is to keep ants out-of and off the structure, away from the patrons and food.



CSI-PDS.com ▶

FUSE®

Fuse combines the power of two active ingredients and two modes of action for effective perimeter ant control. Fuse offers PMPs flexible **perimeter pest applications** and customizable pest management programs. The non-repellent formulation is **not detectable to foraging ants so they continue normal behavior**, causing them to unknowingly pick up a lethal dose as they pass through treated zones.



FUSE® ▶

PROFLEX®

ProFlex is an excellent choice for perimeter applications. This product contains **three different active ingredients** with three distinct modes of action. ProFlex is a ZC Formulation that combines the long-lasting benefits of an IGR with fast-acting active ingredients of an adulticide. ProFlex is perfect for PMPs looking for a **simple, easy-to-use** product to control and repel foraging ants. ProFlex makes **dosing and measuring easy** so PMPs can spend more time solving their customer's problems and less time reading and interpreting labels.



PROFLEX® ▶



STORED PRODUCT PESTS



Monitoring and removal of infested food should always be the first step in managing a stored product pest (SPP) infestation. Identification of the pest and locating the source of the insects should provide a PMP information needed to develop a successful management plan.

PDS WITH DOXEM® PRECISE

Follow up with **crack & crevice application**. Treating in and around the area will usually suffice to stop the population from spreading.

TEKKO® TRIO / TEKKO® TRIO FOAM

Many areas around a restaurant or commercial kitchen have difficult-to-reach places that can accumulate foodstuff, and encourages pest activity. Inaccessible areas where food can accumulate should be treated with Tekko Trio concentrate or Tekko Trio Foam, with three active ingredients, (S)-Hydroprene, Novaluron, and Pyriproxyfen. These three-way IGRs should be the



“go-to” treatment for long term management of stored product pests. By treating the accumulated inaccessible food, the PMP has effectively created a SPP bait station that will **stop future generations!** The unique 3-way IGR combination in Tekko Trio breaks the life cycle of stored product pests, preventing them from becoming reproductive adults, and ultimately stopping population growth.



9

FLIES



When battling tough fly problems in commercial kitchens, finding the source is critical. In many cases, the source includes both attractive oviposition (egg-laying) locations and food sources. Key areas around a restaurant that are notorious for fly problems include sinks, drains, bathrooms, bar areas, drink dispensers, and other warm, moist places where organic matter collects.

TEKKO® TRIO FOAM

In areas where liquid insecticides would drain away before being fully effective, Tekko Trio Foam will do the trick. The **unique dry-foaming formulation, fills voids, cracks, and crevices** of equipment, walls, drains and other similar areas, directly targeting potential breeding sites. The insect growth regulator (IGR) in Tekko Trio Foam will **stop flies from completing their life cycle and prevent future generations from developing**. We recommend regular applications of Tekko Trio Foam into these fly breeding areas for continuous control as new organic matter is deposited.



TEKKO® PRO

For horizontal surfaces in kitchens, Tekko Pro is an excellent choice. Flies frequently feed on and breed in the organic debris and moisture that collects in the cracks and damaged grout of tile floors. Using Tekko Pro in these areas will get the IGRs where you need them to **prevent fly development and reduce pest activity**. Tekko Pro is a concentrate and **can easily be mixed with an adulticide** to speed up control.



PROFLEX®

For **long lasting fly control** in areas where adult flies rest, we recommend using ProFlex. Interior and exterior walls, resting sites, around dumpsters and dumpster enclosures, and entry points can be treated with this three-in-one product. If adults are resistant to the adulticide, the IGR active ingredients **decrease the number and successful hatching of eggs** laid by exposed adults.



10

SILVERFISH



PMPs finally have a tool to control silverfish populations where they live: deep in wall voids, under cabinetry, and other inaccessible areas.

DOXEM® PRECISE

The newest tool in the fight to manage silverfish is one you might not expect. Doxem Precise has shown to be **extremely effective** at not only reaching into areas where silverfish are active, but **managing tough populations**.



CSI-PDS.com

MOSQUITOES



Outdoor dining creates added space and revenue for restaurant owners. However, outdoor pests, especially flying, stinging ones can make it a bad experience for diners.

Introducing: VECTOR KLEER

Powered by essential oils and formulated with FIFRA **25(b) exempt ingredients**, Vector Kleer qualifies as a minimum-risk solution that's **safe for use in sensitive environments**, and perfect for outdoor dining areas where atmosphere, scent, and safety matter. Vector-Kleer is ideal for restaurants because it delivers on performance and peace of mind:

- Botanical-Based & 25(b) Exempt
- Indoor & Outdoor Application
- Fast-Acting Knockdown
- Works with mist blowers, misting systems, or traditional spray equipment.
- Pleasant Scent



VECTOR KLEER



WASPS



STRYKER® WASP & HORNET KILLER

Stryker Wasp & Hornet kills wasps and hornets on contact from up to 20 feet away. It knocks them down so quickly that they do not have time to release their stinging (alarm) pheromones, which in turn reduces the possibility of the applicator being stung. Stryker Wasp and Hornet spray is for use outdoors, in crawlspaces, and in attics. It is electrically nonconductive at up to 37,160 volts which makes it perfectly safe to be used around electrical equipment.



STRYKER® WASP & HORNET

PRODUCT INDEX

FUSE® COCKROACH GEL BAIT4	STRYKER® WASP & HORNET KILLER 11
DOXEM® NXT6	TEKKO® PRO9
DOXEM® PRECISE 4, 7, 8	TEKKO® TRIO 8, 9
FUSE®7	TEKKO® TRIO FOAM8
PRECISION DELIVERY SYSTEM (PDS) 4, 5, 7, 8, 10	VECTOR KLEER 10
PROFLEX®7, 9	

Click on Product Name to go to the product page on the CSI website.



SUBSCRIBE & FOLLOW

Subscribe to our website and follow us on social media for promotions, product launches, product info and much more!

SUBSCRIBE NOW



Control Solutions Inc.

A member of the ADAMA Group

Control Solutions Inc. (CSI), based in Pasadena, Texas, is a hybrid manufacturer featuring a broad spectrum of post-patent and innovative products. CSI operates through four main divisions: CSI-Pest, Quali-Pro, CSI Production Animal, and Martin's, each focusing on different aspects of pest control, turf & ornamental, animal health, and consumer products. Over the past ten years, we've pioneered more groundbreaking products than any of our competitors, setting new standards in the specialty chemical industry.



QUALI-PRO

