

# CASE STUDY

## FATAL ATTRACTANTS: WHEN PESTS CAN'T RESIST

### THE POWER OF THE PULL

Attractants have an underrated role in modern pest management. At Sprague, we use attractants to enhance pest control programs while reducing reliance on pesticides – supporting our Environmental Stewardship pledge and helping our customers maintain their green or organic certification.

Attractants lure pests by appealing to their senses – including sight, smell, and taste – making it easier to monitor, control, or eliminate them. There are effective attractants for common pests such as rodents, cockroaches, ants, flies, stinging insects, and stored product pests.

As part of our Integrated Pest Management (IPM) programs, attractants improve overall effectiveness by increasing trap success and reducing the need for chemical treatments.

“Attractants help the other elements of a pest control program be more successful,” said Jeff Weier, a Technical Consultant with Sprague Pest Solutions.

### BAITING FOR BETTER RESULTS

Attractants are essential tools for monitoring pest activity, helping to detect the presence, size of the population, and movement of pests within a facility. By incorporating attractants into monitoring programs, Sprague can identify issues early and intervene before infestations have a chance to spread and cause significant damage.

They also enhance the effectiveness of traps by making them more appealing to pests.

### TYPES OF ATTRACTANTS AND THEIR APPLICATIONS

1. Food Attractants
  - A. Used to mimic natural food sources and help draw pests like flies and rodents to traps or bait stations.
  - B. Feeding stimulants are often incorporated to encourage ants and roaches to stay and consume pesticidal bait, increasing effectiveness.
2. Pheromone Attractants
  - A. These chemical signals are highly effective in attracting some stored product pests, such as indian-meal moths or cigarette beetles, towards monitors.
  - B. A good example is that there is a product that is a synthetic Argentine ant pheromone that increases ant activity in an area so that they can be targeted with insecticide.
3. Visual Attractants
  - A. Used for pests such as flies, these visual cues like colors and shapes lure them towards traps.
  - B. House Flies are attracted to certain shades of blue that have black lines on it and edges - we use these features to attract them towards bait or other insecticides.

“

Attractants help the other elements of a pest control program be more successful.

”

**Jeff Weier, BCE**

Technical Consultant  
Sprague Pest Solutions

## LOCATION, LOCATION, LOCATION

For an attractant to be effective it must be placed strategically within a facility. For instance, cockroaches are non-direct foragers meaning they will wander until they find a food source. If an attractant – a cockroach bait station - is placed in a single location in a commercial kitchen, for example, it is unlikely the attractant will be effective. But if multiple bait stations are deployed near resources the cockroach needs, such as water sources or harborage areas, the control method will be more effective.

Another factor to consider is the location, choosing the wrong location could increase pest activity where it will be too visible and could damage a business' reputation. For example, in a restaurant Sprague was servicing, ants were seen crawling on a windowsill – the structure was below grade and had gardens and vegetation on the exterior that harbored ants.

The technician placed gel bait in the cracks and crevices around the windowsill which achieved the goal of attracting the ants but did so in a highly visible way that customers could see. The situation was corrected, and the gel bait was placed in a more discreet location where the ant trails could not be seen but the intended result delivered.

“Understanding a pest’s biology and behavior as well as knowing what’s happening in the facility when it comes to sanitation and cleaning, maintenance and other conducive conditions is equally important,” added Weier. “All attractants work differently and knowing what will trigger a pest to engage with the attractant will make a program more successful.”

## LURED TO SUCCESS

A stored product pest infestation is a serious challenge for QA and facility managers. Infestations in mills, processing plants, bulk storage facilities, or grocery stores can lead to wasted production time, poor third-party audit performance, costly product recalls, unplanned expenses for replacing contaminated goods, deep cleaning equipment, and additional pest management services.

An effective way to combat highly destructive stored product pests including Indian meal moths (*Plodia interpunctella*) and Mediterranean flour moths (*Espestia kuekniella*) is by implementing a mating disruption program with pheromones. Mating disruption works by introducing artificial species-specific female moth sex pheromones into the environment, which confuse male moths and prevent them from locating females. Without mating, pest populations decline, reducing the risk of widespread infestations.

“Mating disruption prevents stored product pests from completing their life cycle, stopping infestations before they spread,” says Weier. “Mating disruption is a targeted, environmentally responsible approach to stored product pest control.”

Attractants may work behind the scenes, but they are powerful and versatile tools in modern pest programs. From enhancing monitoring effects and improving trap performance to reducing pesticide reliance, attractants give pest professionals the upper hand. When used strategically and paired with expert knowledge of pest behavior and facility conditions, they become an invaluable part of protecting food safety, operational efficiency, and brand reputation.



**All attractants work differently and knowing what will trigger a pest to engage with the attractant will make a program more successful.**



**Jeff Weier, BCE**

Technical Consultant  
Sprague Pest Solutions



**Mating disruption is a targeted, environmental responsible approach to stored product pest control.**



**Jeff Weier, BCE**

Technical Consultant  
Sprague Pest Solutions