



Ethan Estabrook, BCE

## Insect Spotlight: The Rice Weevil



Rice Weevil (*Sitophilus oryzae*) can cause major damage to stored products. They feed on barley, corn, sorghum, rice, wheat, and other dried goods. Whole grains with round holes are a typical sign of infestation by emerging adults. Weevil infestations can lead to rising grain temperatures, increased moisture levels, mold issues, and almost complete product destruction.

Adult rice weevils have a prolonged head or snout and are dark brown with 4 distinct lighter yellowish spots on their wing covers. They are about 2.5 to 4 mm in length and can fly. Female rice weevils can lay 300–575 eggs over a 5–8 month lifespan. Females lay a single egg within a grain kernel. The larvae will spend their immature life eating inside a grain kernel and will emerge as a mature adult.

Below is a [time-lapse GIF](#) of rice weevil damage to rice over 250 days. We started with 100 individuals and maintained them in an incubator at 82 degrees F (28 degrees C) and 50% relative humidity. You can see how quickly these insects cause major damage to the rice and how they introduce mold issues over time.



Monitor for Rice Weevils

# Fumigants & Pheromones

Insects Limited, Inc.



Pat Kelley, BCE

## Insects are Loving This Pandemic



By now, we all have a pretty good idea of how people are responding to COVID-19 pandemic and all that goes with it. We see a lot of fear and a lot of hope, we see the best in people and the worst in people. Let's briefly consider how insect pests are doing through all of this.

### **Insects Enjoy the Solitude**

While the human species focuses on survival and self-isolation, the insects find themselves in an enviable position. Like a four-year-old child who finds themselves in the kitchen all alone with a birthday cake, or a youth sports team that wanders into a breakfast buffet bar with no parents or coaches to suppress their over-eating, insects everywhere are finding themselves in empty food warehouses, museums and retail stores with no people to keep a check on what they are eating and how much damage they are inflicting. We know that insects thrive best when they have an unlimited food supply and are left undisturbed, and by all accounts, they are doing their best right this minute. A mild winter in North America was already giving the insects an advantage over a typical year. Having very few people to monitor and

control their populations could very well launch their numbers into the stratosphere this year. Given all of these strikes against us, how are we to proceed?

### **Barebones Monitoring is Better than No Monitoring**

With shelter-in-place being the norm, a majority of the population is working from home or out of work. Because of this, many of our food storage warehouses, retail stores and many other institutions that contain dried food goods or protein-based museum objects sit empty. I have been approached by several large museums that tell me that over the past month the only people who have access to these wonderful and expansive spaces are a few lone security guards who have no training in IPM. My advice to everyone who is in charge of protecting their products in spaces void of a human presence would be to implement (at the very least) a barebones monitoring program to alert you about any drastic pest population increases. The luxury of spending many hours checking traps and searching for signs of pests is simply no longer an option. In areas where you may have had 20+ traps that you could check regularly in the past, you may now need to reduce this to a single strategically placed trap that can be easily checked by a security guard or by other key personnel when they are doing their daily or weekly rounds. Although a single trap may not give you a detailed pest analysis, it can alert you to the presence of a potential pest crisis. The alternative to this is coming in after several months of being away and finding widespread losses.

### **This is a Perfect Time to use Remote Monitoring**

Being able to check for insect or rodent activity while you are sitting in the safety of your own home makes remote monitoring systems a perfect solution during the COVID-19 crisis. Remote devices allow us to actively

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check our spaces without a physically presence. There are remote rodent monitoring devices that will show which specific traps have captured rodents, so you know exactly which areas have issues and which specific traps need to be addressed when you are able to access the property. Along those same lines, remote insect monitoring systems like the [SightTrap™](#) take a daily picture of the trap and send an image to our smartphones or computers at home. Users have access to an automatic data-producing dashboard paired with each trap, so they know whether or not there is a pest concern in that area. This is the best scenario possible when we are not able to physically be at the location where the trap is located.



*SightTrap Remote Pheromone Monitoring System*

### Focus on the Most Susceptible Products

Given that we have limited time and resources to have any monitoring devices checked, we should focus our attention on the areas with the most susceptible materials. Think back to where the majority of pest issues have

originated in the past or where those things most likely to be consumed by insects are located within your facility and place your trap or traps in these spots. With the correct trap placement, you will be notified when early signs of pest activity appear, and you may be able to react in time to resolve a pest problem before it gets too far out of hand.

### Don't Give Up Hope

The biggest thing to note during these strange times is to not give up hope about your ability to protect your products and objects. Feelings of panic will do you no good at all. Take a step back from the situation and think about your options. Use whatever monitoring resources that you have at your disposal in the most thoughtful and rational way possible. Finally, react to the pests based on what you see and with the tools you can use in your own unique setting. The insects are using this as an opportunity to thrive. We humans should see it as an opportunity to become smarter in our pest management approaches.

[Learn more about remote monitoring](#)

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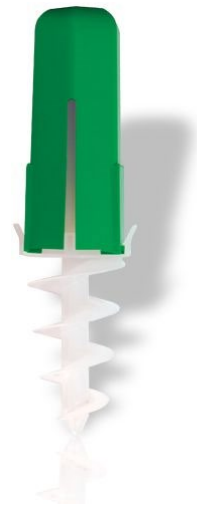
## Insects Limited Distributing Ant Products

As the weather starts warming up, we are sure you will start to notice an increase of ants both inside and out. [Insects Limited](#) now has you covered! Our expanding product line now has a line of indoor and outdoor [ant bait stations](#) made with customers like you in mind.

[Gourmet Ant Bait Gel](#) (indoor use) is a blend of sugars and proteins that attracts and kills a wide variety of ants and roaches. It has a low toxicity level and is safe to use around children and pets. This product will give you ongoing indoor protection and will kill not only the worker ants, but also queens and the colony.



[ANTOPIA® 6 Bait Stations](#) along with [Green Way® Liquid Ant Killing Bait](#) (outdoor use) are a weather-tolerant, bait dispensing systems that make it easier for ants to access the bait and return safely to their nests, where they can share the bait with the colony. The bait station screws securely into the ground outdoors. It is spill-resistant and is built strong for multi-season use and cost-effectiveness.



These products are made to kill ants 24/7 while protecting the environment and beneficial insects!

We are excited to provide yet another product that aids customers in the fight against pesky home and garden intruders.

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