

Protecting New Homes Against Foreign Grain Beetles

People usually appreciate buying a new house because it is usually free from the need for frequent repair. Within one year or two, often in the early fall, the homeowners may be panic-stricken to find tiny brown beetles crawling around in their new home. Initially, only a few beetles may be seen, then they emerge by the hundreds from wall voids, under baseboards, behind electric outlets, and everywhere or nowhere. Being strong fliers, the tiny beetles spread to all rooms of the house rapidly. Homeowners may become alarmed and call for help from county agents or pest control professionals.

The most common beetle occurring in new houses is the foreign grain beetle, *Ahasverus advena* (Waltl). These beetles are very small, about 2 mm long, and are reddish brown in color. The key identifying characteristic of the foreign grain beetle is the presence of a round knob on each front corner of the thorax. A microscope or hand lens (10x or greater) is necessary to see this character. The foreign grain beetle belongs to the same family as the saw-toothed grain beetle and is similar in size but can be differentiated by the lack of saw-toothed projections on the side edges of the thorax.

What do they eat?

Despite their name, foreign grain beetles are not normally associated with stored products. Instead, they feed entirely on molds and fungi. If they are found infesting stored grain, the grain is damp and moldy.

Why are they frequent problems in new houses?

When new houses are being built, rain and moisture may fall onto wood frames before the roof and walls are added. If enough moisture has accumulated on the wood, on sawdust left in wall voids after construction, or on bales of straw used as insulation material in walls, surface fungi may grow on them. Thus, foreign grain beetles, being present in nature, may find some of these homes



and begin to feed and breed on fungi and molds. After many months, the populations of these beetles within the walls grow and the beetles move out of the wall voids and are attracted to windows and lights. Large numbers of emerging beetles often occur in August and September in Alabama. They can continue to emerge from the walls of a new house for an extended period until the home completely dries out.

The foreign grain beetle can also occur in older houses in which high moisture conditions promote fungal and mold growth. Since they are strong fliers and are attracted to light, beetles originating outdoors may enter homes as “accidental invaders” through screens or through cracks and crevices in the wall to locate mold. Adults have an average life span of 230 days. These mold-feeding beetles sometimes are found in decaying plant materials.

Do they pose a health risk or cause damage to the house?

No. Foreign grain beetles are a nuisance and an annoyance, but they do not harm anything within the home. They do not bite, sting, spread human diseases, or damage plants, wood, fabric, or food. Further, they do not infest stored products in sound condition and thus are not a “pantry pest.”

Would the problem continue forever or get worse with no control?

Usually, beetle problems are temporary and self-limiting. Most new homes dry out naturally within the first few years and the fungi and mold

and beetles disappear. If known moisture problems such as leaky pipes within a wall exist in an infested house, these should be corrected immediately.

Prevention: Enhance the drying of a new house by using fans and air conditioning to discourage and eliminate growing mold and fungi. Timely repair of plumbing leaks and condensation problems also helps. Create good ventilation. If the beetles are known to originate outdoors, there may be some benefit to exclusion techniques such as the use of tight-fitting screens and doors and caulking cracks and crevices around windows and doors.

Control: Any actions taken to dry out damp conditions that support fungal growth will reduce or eliminate foreign grain beetle populations. Beetles occurring inside the home can be vacuumed or swept up and discarded. Common flying insect aerosol sprays containing pyrethrins (Spectracide PRO Residual Insecticide, Paragon, and PT 505 XLO) can provide a rapid relief, but repeated treatment is needed to kill newly emerging adults. Control can be achieved by locating the infested wall areas or source of dampness and injecting residual aerosols or dusts (for example: Boric acid, DeltaDust, EcoPCO®D, EcoPCO®ACU) into cracks and crevices along the baseboard and into the wall voids.

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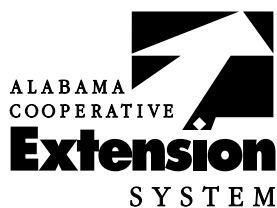
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