**Carpet beetles**

Winter is the time of year when insects fade away from your customers’ thoughts; they are no longer bombarded by mosquitoes, harassed by flies, or graced by the beauty of a passing butterfly. During this quiet, reflective time they are bound to spend more time indoors and while doing so, might notice damage to natural fibers like wool, leather, carpet, fur, and even spices, corn, flour, and grains. Once your customers notice a little damage, they might quickly notice a lot and give you a call. The most likely culprit is the aptly named carpet beetle.

Several species in the family Dermestidae are called carpet beetles (black carpet beetle, varied carpet beetle, common carpet beetle, furniture carpet beetle), and they have similar biology, behavior, and destructive capabilities. It is in fact the larval stage that causes all the damage, adults prefer to be outdoors feeding on the nectar and pollen of flowering plants (though they don’t always find their way outside once they have emerged as adults).

The black carpet beetle and varied carpet beetle are the most common of these pests in Ontario. The black carpet beetle, *Attagenus unicolor*, is a dark brown to black and reaches a maximum size of 6mm in length. Larvae are 13mm or less in length and quite skinny. Their most distinctive characteristic is a tuft of hairs that extends out from their abdomen. The varied carpet beetle, *Anthrenus verbasci*, is about half the size of the black carpet beetle and has an interesting and irregular pattern of white, yellow/orange, and brown scales. Varied carpet beetle larvae are oval-shaped at 5mm or less in length, and are characterized by having long, bristly hairs covering much of the body.

Damaged materials often have several small holes concentrated in a single area, but this isn’t always the case. Only natural fibers are attacked, purely synthetic fibers are left alone since the larvae can’t extract nutrition from them. In addition to damaged fibers and finding live larvae or adults, the cast-off skins of larvae are another indication of their presence. Cast-skins are the small, curled-up, bristled, and almost shell-like items left behind when a larva molts. Larvae prefer to feed in dark and quiet places, so cast skins and damage are more likely to be found in those locations. It should be noted, however, that larvae are capable of moving quite a bit throughout a structure.

Species-level ID is always recommended and can help you best understand what types of food or fabric are most likely to be attacked and the details of their life cycle, both of which can help in your control efforts. As with other fabric and stored product pests, the first step is to locate damaged material. This isn’t always as easy as it seems; if you happen across an adult in a sticky trap or during an inspection, it can be very difficult to determine what their larval breeding source was. Infested fibrous products can be discarded or treated (heat, cold, or dry cleaning) at the discretion of the customer. Since insecticidal options are somewhat limited, you might want to focus on exclusion by shoring up cracks and crevices and installing tightly fitting weather-stripping and door sweeps.