

Colorado Insect of Interest

Masked Hunter

Scientific Names: *Reduvius personatus* (L.)

Order: Hemiptera (True Bugs, Cicadas, Aphids, Scale Insects, Hoppers, etc.)

Family: Reduviidae (Assassin Bugs)

Identification and Descriptive Features: The adult is very dark brown to black, ranging from 10-12 mm in length. Typical of most assassin bugs the head is narrow with a prominent beak projecting below. The fore legs are slightly thickened, an adaptation for grasping prey. The nymphs are gray-brown. However, they are almost always covered with debris.



Figure 1. Masked hunter adult.

Distribution in Colorado: Potentially statewide and may be locally common. The masked hunter is a European species that has increased its range largely through transport by humans.

Life History and Habits: The masked hunter is a predator of other insects which they impale and paralyze with piercing-sucking mouthparts. The nymphs hunt by ambush and camouflage themselves with lint, sawdust or other debris that clings to their sticky body. Where such covering material is abundant the insect is completely obscured and may resemble a walking ball of dust.



Figure 2. Mask hunter nymph with lint covering.

The masked hunter likely has a two year life cycle. Adults may be present during most of the warmer months but are most commonly seen from Late June through early August. Adults are winged, can fly, and may be attracted to lights. Eggs are laid in crevices as small masses and the first stage nymphs subsequently begin to hunt small flies, springtails and other prey they can subdue.

Based on information from other areas the overwintering stage during the first year after egg hatch is typically a third instar nymph. Development continues the second year and the subsequent winter of the masked hunter life cycle is spent as a fifth instar nymph, the last immature stage. Molting to the adult form occurs the next spring.

The masked hunter may complete its development both indoors or outdoors. Because of its habit of feeding on indoor arthropods it is sometimes called the “bed bug hunter”, although it normally feeds on many different kinds of insects. If handled or accidentally pressed against the skin they may produce a painful bite. In some cases swelling and pain may persist for several days.



Figure 3. Late stage masked hunter nymph. This individual does not have much covering debris.



Figure 4. Masked hunter eggs. Photograph courtesy Joseph Berger and IPM Images/BugWood.

Note on First Aid for Assassin Bug Bites:

Assassin bugs are not aggressive and do not seek out or attack humans but will bite if handled or accidentally pressed against the skin. Assassin bug bites can be quite painful immediately with some pain and swelling persisting for a day or two. In very rare cases medically important complications develop, from secondary infections of the bite or anaphylactic shock.

The following statement on first aid for assassin bug bites was borrowed from the Texas A&M blog *Bugs in the City* by Michael Merchant: "Persons who are bitten should wash and apply antiseptic to the site of the bite. Oral analgesics, such as aspirin or ibuprofen, may be useful to reduce the pain. Treatment by a physician is not usually needed, though Caladryl® or topical corticosteroids may help reduce swelling or itching at the site of the bite. As with any insect sting or bite, the victim should seek medical attention immediately if there is any sign of anaphylactic reaction, such as generalized swelling, itching, hives or difficulty breathing."