Harlequin Bug

Figures 1, 2. Harlequin bug adults showing a range of color and patterning.

Scientific Name: *Murgantia histrionica* (Hahn)

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

Identification and Descriptive Features:
Harlequin bugs have a broadly oval form typical of other stink bugs and are moderate sized (8-11 mm). However, they are very distinctively marked with orange, black and white.

Distribution in Colorado: Harlequin bugs have been collected from both eastern and western Colorado, but are most abundant in the southeastern counties. They are only moderately adapted to the winter temperatures typically found in this state and high populations usually are only observed in the northern areas of the state if previous winter conditions have been mild.

Life History and Habits: Harlequin bugs survive winter in the adult stage, hidden under plant debris and other cover. They resume activity in spring when they seek out and feed on host plants. Various crucifers (Brassicaceae family) are the primary hosts including common weeds such as shepard's purse and wild mustards as well as many crop plants (cabbage, radish, horseradish, canola, rutabaga, etc.)

Eggs are laid in distinctive masses. The eggs are barrel-shaped and banded, usually laid in to parallel rows. Eggs hatch in 5-15 days, depending on temperature. The newly emerged nymphs, which are pale green with black markings, originally feed in a group, but disperse as they age. A generation may be completed in about two months and probably two generations are normally produced in the state.

Figure 3. Harlequin bug eggs.

Figure 4. Harlequin bug nymphs and associated leaf damage.

Visible feeding injuries are often produced that typically appear as diffuse whitish blemishes and new growth will distort when damaged by feeding harlequin bugs. Harlequin bugs are rarely abundant enough to cause more than minor crop injury in Colorado with outbreaks most often occurring during seasons with above-average temperature.

Similar Species: Harlequin bugs sometimes are mistaken for the brightly colored patterned stink bugs of the genus *Perillus*. These species develop as predators of other insects, particularly beetle larvae. One of them, known as the **twospotted stink bug**, *Perillus bioculatus* (F.), can be an important predator of the Colorado potato beetle.

Figure 5. Twospotted stink bug, mating pair.