Spiders

Spiders are predators of insects and other arthropods and are often very important in managing pest insect in agricultural crops. Numerous kinds of spiders have been found associated with hemp fields in eastern Colorado and several likely contribute to suppressing several hemp insects pests, including various caterpillars, young stages of stink bugs and Lygus bugs, aphids, and other insects.

Most consistently found are crab spiders in the genus Mecaphasa (Fig. 1). These are ambush hunters that lie in wait on the leaves and stems of plants, waiting for prey to pass close by. Crab spiders can be distinguished by their having the front two pair of legs being considerably longer than the hind pair.

Fairly similar in appearance, and also possessing elongated front legs, are running crab spiders, mostly in the genus Philodromus (Fig. 2a, b). These are usually a bit larger than crab spiders but are much more active and can run quite quickly.

Several species of jumping spiders may occur in hemp. These are very active hunters with excellent vision. They are capable of stalking and can make short jumps to pounce upon and overcome their insect prey (Fig. 3a-c).

None of the above kinds of spiders use silk for prey capture. They do use silk for other purposes, such as in production of egg sacs and for a dragline laid down so that they can drop safely off a plant. Perhaps the most commonly seen silken structures on hemp plants, other than webs, are retreats constructed by spiders for shelter (Fig. 6).

Figure 1. A crab spider (Mecaphasa sp.)

Figures 2a-b. Two running crab spiders found in hemp. The top is a Philodromus species. The lower image is of a Tibellus species.
Among web producing spider the most common are longjawed spiders in the genus *Tetragnatha* (Fig. 4). These spiders have a very elongated body and live with webs constructed among leaves of a plant.

The larger spiders found in hemp that produce webs are in the orbweaver family (Fig. 5). These can produce large distinctively patterned webs which often stretch between plants and cross rows. Most common are various spiders in the genus *Araneus*. Occasionally one may find one of the very large orbweavers in the genus *Argiope*, usually the banded garden spider (*A. trifasciata*).

**Figures 3a-c.** Three kinds of jumping spiders found on hemp.

**Figure 4.** A longjawed spider, *Tetragnatha* sp.

**Figure 5.** An orbweaver spider, *Araneus* sp.
Special acknowledgement to Wendlin Burns for the sampling and identification of spiders in hemp.

**Figure 6.** A silken retreat constructed within the seed head produced by a jumping spider as a late season shelter.