

Colorado Arachnid of Interest

Banded Garden Spider (Banded Argiope)

Scientific Name: *Argiope trifasciata* Forsskal

Class: Arachnida (Arachnids)

Order: Araneae (Spiders)

Family: Araneidae (Orbweaver spiders)

Identification and Descriptive Features:

The banded garden spider (Figure 1 and 2) is a large species, with a generally ovoid form and bright markings. Mature females may be 13-14.5 mm when fully extended and the carapace of the body typically between 5-6.5 mm in length. Males are substantially smaller, with a body length of only about 1/3 that of the female. Adult males also have prominently enlarged pedipalps projecting from the side of the head and these are used in sperm transfer.



Figure 1. Banded garden spider adult, dorsal view.



Figure 2. Banded garden spider, ventral view.

The back of the spider is covered with silvery setae. Numerous dark lines cross the body and yellow banding is usually present as well. The legs are dark yellowish-brown with darker rings.

Distribution in Colorado: Statewide, except at highest elevations

Life History and Habits: The banded argiope is an orbweaver spider that produces its large concentrically patterned web in areas of tall grass and shrubby vegetation. The web is sticky and strong, capable of holding fairly large and active insects such as wasps and grasshoppers.

The banded argiope is a day active hunter and can usually be observed resting in the center of the web, although they may drop readily when disturbed. Unlike many orbweaver spiders, they do not make a retreat along the edge of the web.

The overwintering stage is the eggs, which are protected within an egg sac attached to vegetation. Upon hatch in spring the spiderlings disperse, often by ballooning with wind currents. Prey items are captured by snaring them in sticky webs then paralyzing them with venom injected through the fangs. Often prey are swathed and bundled with silk to be later eaten (Figure 3). Webs are torn down and reconstructed frequently during their development.



Figure 3. Banded garden spider adult with webbing-wrapped prey.

web. Mating occurs in the latter half of the summer and females produce egg sacs, which have a general shape of a kettle drum. Freezing temperatures kill off all remaining spiders at the end of the season and they have a one year life cycle.

Related Species: Many orb-weaver spiders (Araneidae family) occur in Colorado and make their characteristic patterned webs amongst vegetation. Among the more commonly encountered are spiders in the genera *Araneus*, *Neoscona* and *Aculepeira*. The latter also include species that are large bodied and often rest during the day in the center of the web, similar to the banded garden spider.



Figure 4. *Aculepeira packardi*, a large orbweaver found in eastern Colorado.