

## *Gea heptagon* (Seven-sided Orb Weaver)

Order: Araneae (Spiders)

Class: Arachnida (Spiders, Scorpions and Mites)

Phylum Arthropoda (Arthropods)



**Fig. 1.** Seven-sided orb weaver, *Gea heptagon* (female).

[<https://nature.mdc.mo.gov/discover-nature/field-guide/heptagonal-orbweaver-seven-sided-orb-weaver>, downloaded 26 October 2016]

**TRAITS.** *Gea heptagon* is on average 6mm in body length, with the males being slightly smaller. The species is characterized by its six white or grey spine-like bumps and lateral white stripes across its abdomen, in addition to a dark brown triangular patch at the back of the abdomen. The abdomen when viewed dorsally appears like a heptagon for which the species is named. It is patterned by white and brownish stripes across its legs and body. The cephalothorax (front section of the body, including the head) is brown with yellow spotting (Fig. 1). The diameter of the web is generally around 13cm, with no stabilimentum (strengthened area).

**DISTRIBUTION.** The species occurs in the Americas, West Indies and Argentina.

**HABITAT AND ECOLOGY.** Due to the diet of small invertebrates, females build their webs low and vertical in shrubs, grasses and fences. Similar to many orb weavers the females are the

web spinners. Webs are constructed at nightfall or early morning, and are not disassembled unless destroyed (Sabath, 1969). A noteworthy trait of *Gea heptagon* is its ability to change colour. When provoked on its web, the spider drops from the web and changes its white colours to black and dark brown (Sabath, 1969). It proceeds to conceal itself under debris while its colour returns. At first contact with prey on the web, the spider shakes the web, pauses, shakes it once more then scurries over to the unfortunate victim should it move. Using silk, the prey is swathed and wrapped about four times and transported to the hub after mending the web. At the hub it is wrapped a few more times, then fed upon.

**REPRODUCTION.** Hatched spiderlings spread out and begin functioning and fending for themselves, constructing webs and hunting. The females at maturity are sought out by males. After mating, she increases food consumption and produces eggs.

**APPLIED BIOLOGY.** They are effective in pest control, primarily of flying insects, and are no documented harm to humans.

#### REFERENCE

Sabath, L.E. 1969. Color Change and Life History Observations of the Spider *Gea heptagon* (Araneae: Araneidae). *Psyche*, **76**: 367-374.

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