

Araneus diadematus

From Wikipedia, the free encyclopedia

The spider species *Araneus diadematus* is commonly called the **European garden spider**, **diadem spider**, **cross spider**, or **crowned orb weaver**. It is an orb-weaver spider found in Europe and North America.

Contents

- 1 Range
- 2 Size and markings
- 3 Specialization
- 4 References
- 5 External links

Range

A. diadematus is found throughout Europe and across North America, from southern Canada to Mexico, and from British Columbia to Newfoundland.^{[3][4]}

Size and markings

Individual spiders' colourings can range from extremely light yellow to very dark grey, but all *A. diadematus* have mottled white markings across the dorsal abdomen, with four or more segments forming a cross. The markings are formed in cells filled with guanine, which is a byproduct of protein metabolism.^[5]

Adult females range in length from 6.5 to 20 mm (0.26 to 0.79 in), while males range from 5.5 to 13 mm (0.22 to 0.51 in).^[6] Occasionally, the female will eat the male directly after mating. (See video below.)

Specialization



Ventral view

The legs of orb-weaver spiders are specialized for spinning orb webs. The webs are built by the larger females who hang head down in the center of the web or remain hidden in nearby foliage, with one claw hooked to a signal line connected to the main orb waiting for a disturbance to signal the arrival of prey. Prey is then quickly bitten and wrapped in silk before being stored for later consumption. The

Araneus diadematus



Female, size=18 mm^[1]



Male

Scientific classification

Kingdom:	Animalia
Phylum:	Arthropoda
Class:	Arachnida
Order:	Araneae
Suborder:	Araneomorphae
Family:	Araneidae
Genus:	<i>Araneus</i>
Species:	<i>A. diadematus</i>

Binomial name

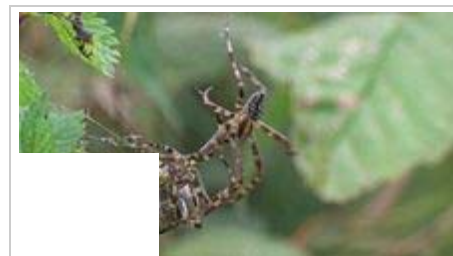
Araneus diadematus

Clerck, 1758 ^[2]

initial bite serves to paralyze the prey and minimize the danger the spider herself being stung or bitten, and the enzymes thus injected serve to begin liquefaction of the prey's internal structures.

A. diadematus is a reclusive creature and only bites humans if cornered or otherwise provoked. The bite is not unlike a mild bee sting.^[4]

Some orb-web spiders (e.g., *Neoscona arabesca*) routinely recycle the metabolically costly silk by disassembling and eating their webs in the morning or evening, depending on the species' diurnal or nocturnal nature, or in anticipation of a thunderstorm. This complex process can take just a few minutes.^[7]



Courting male is consumed by the female (video, 1m 38s)

References

1. Cirrus Digital: *Crowned Orb Weaver - Araneus diadematus* (http://www.cirrusimage.com/spider_cross_orbweaver.htm)
2. Nikita J. Kluge (2007). "Case 3371. Araneidae Clerck, 1758, *Araneus* Clerck, 1758 and *Tegenaria* Latreille, 1804 (Arachnida, Araneae): proposed conservation" (<http://www.insecta.bio.pu.ru/z/pdf/BZN64%281%29Case3371.pdf>) (PDF). *Bulletin of Zoological Nomenclature* **64** (1): 15–18.
3. *Cross Orbweaver* (<http://bugguide.net/node/view/3376>); at BugGuide online; retrieved April 2013
4. Cross Spider (http://naturemappingfoundation.org/natmap/facts/cross_spider_712.html), Washington NatureMapping Project
5. Rainer F. Foelix (1992). *Biologie der Spinnen [Biology of the Spiders]* (in German). Stuttgart: Thieme. ISBN 3-13-575802-8.
6. Cross Orbweaver (<http://ento.psu.edu/extension/factsheets/cross-orbweaver>), Penn State Entomology
7. Cirrus Digital:Orb Weaver Spider - *Neoscona arabesca* (http://www.cirrusimage.com/spider_orb_weaver_Neoscona_arabesca.htm)

External links

- European orb-weavers (<http://www.xs4all.nl/~ednieuw/Spiders/Araneidae/Araneidae.htm>) at Spiders of NW-Europe



Wikispecies has information related to: ***Araneus diadematus***



Wikimedia Commons has media related to ***Araneus diadematus***.

Retrieved from "http://en.wikipedia.org/w/index.php?title=Araneus_diadematus&oldid=648531229"

Categories: Araneus | Orb-weaver spiders of Europe | Spiders of North America | Animals described in 1758

- This page was last modified on 23 February 2015, at 21:00.
 - Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.