



PSEUDOSCORPIONS

House pseudoscorpion, *Chelifer cancroides* (L.)
Arachnida, Pseudoscorpiones

Pseudoscorpions are tiny arachnids, 2 to 8 millimeters in length, with four pairs of legs and one pair of relatively large pedipalps (pincer-like claws). Most people do not notice or recognize pseudoscorpions, which is primarily due to the secretive nature and small size of these animals. Frequently, homeowners discover pseudoscorpions in bathroom sinks and tubs, and many believe they are either ticks or small spiders. Pseudoscorpions are neither dangerous, nor destructive; they eat many small arthropods, including caterpillars, flies, ants, beetle larvae, and booklice. Most of the more than 2000 described species inhabit the tropics, where they occupy animal nests, crevices of bark, and leaf litter. Several dozens species are present in Pennsylvania. The pseudoscorpion species commonly encountered by Pennsylvanians is cosmopolitan—the house pseudoscorpion, *Chelifer cancroides* (L.).

DESCRIPTION

The house pseudoscorpion (Fig. 1) adult is 3 to 4 millimeters in length and has a rich mahogany color. Its four pairs of legs increase sequentially in length. It has one eye on each side of its cephalothorax (head plus thorax) and a 12-segment abdomen (only ten are easily visible). Overall, the body resembles a teardrop. The pedipalps, located in front of the first pair of legs, are more than twice as long as the legs. When extended, crab-like, they measure 7 to 9 millimeters across.

LIFE HISTORY AND BEHAVIORS

The mating behavior of *C. cancroides* is interesting. Mature males create a mating territory 1 to 2 centimeters in size. They rub their ventral surface on the center of this territory, which some arachnologists postulate as pheromone placement. When a female enters this area, the male begins a mating dance by rapidly vibrating his body and displaying his pedipalps. He deposits a sac that contains sperm (spermatophore) on the substrate, moves backwards over it, and guides the female on top of the sac, where she then picks up the sperm. The entire mating process takes from 10 minutes to 1 hour.

The female produces 20 to 40 eggs that she carries beneath her abdomen. After the young house pseudoscorpions, which look like small adults, emerge, they stay with the female for several days, sometimes riding on her back. The entire brood then dis-

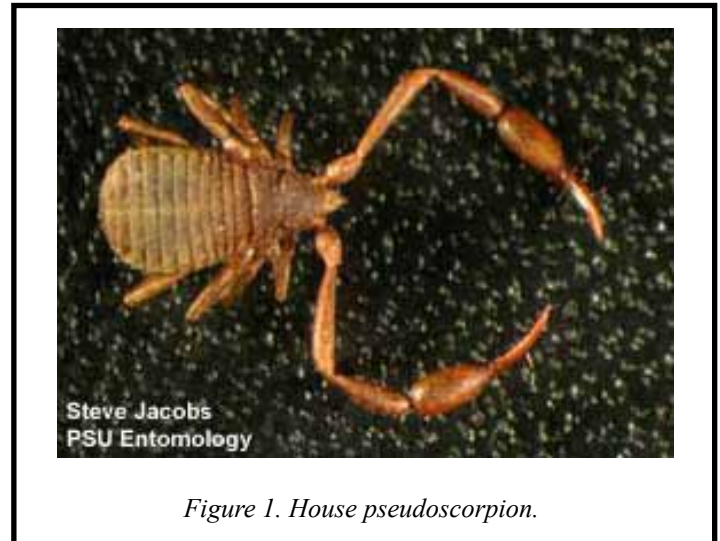


Figure 1. House pseudoscorpion.

perses. This process, from egg deposit to brood dispersal, can take 3 weeks.

The young house pseudoscorpions molt three times before adulthood; these stages are protonymph, deutonymph, and tritonymph. The developmental period is temperature dependent and takes 10 to 24 months. Adults do not molt and can live for 3 or 4 years.

Older house pseudoscorpions are less agile. They often have difficulty climbing smooth surfaces and are less likely to right themselves after flipping onto their backs. These factors, plus their increased visibility due to their large size, may explain why only adult specimens are submitted for identification.

MANAGEMENT

Pseudoscorpions pose no hazards for homeowners. Their presence may diagnose a high level of atmospheric humidity and/or a population of other arthropods, on which the pseudoscorpions are feeding. Using pesticides to control these animals is not recommended.

WARNING

Pesticides are poisonous. Read and follow the label directions and safety precautions. Handle them carefully and store in original, labeled containers—out of the reach of children, pets, and livestock. Dispose of empty containers quickly, in a safe manner and place. Do not contaminate forage, streams, or ponds.

Steven B. Jacobs
Sr. Extension Associate
Dept. of Entomology
August 2006
Reviewed January 2013

NP-17

©The Pennsylvania State University 2013

This publication is available in alternative media on request.

Where trade names are used, no discrimination is intended and no endorsement by The Pennsylvania State University or Pennsylvania Department of Agriculture is implied.

Entomological Notes are intended to serve as a quick reference guide and should not be used as a substitute for product label information. Although every attempt is made to produce Entomological Notes that are complete, timely, and accurate, the pesticide user bears the responsibility of consulting the pesticide label and adhering to those directions.

Issued in furtherance of Cooperative Extension Works, Acts of Congress May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture and the Pennsylvania Legislature. D. Jackson, Director of Cooperative Extension, The Pennsylvania State University.

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. It is the policy of the University to maintain an academic and work environment free of discrimination, including harassment. The Pennsylvania State University prohibits discrimination and harassment against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Discrimination or harassment against faculty, staff, or students will not be tolerated at The Pennsylvania State University. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 328 Bouke Building, University Park, PA 16802-5901, Tel 814-865-4700/V, 814-863-1150/TTY.