

What's Eating You? *Centruroides exilicauda*

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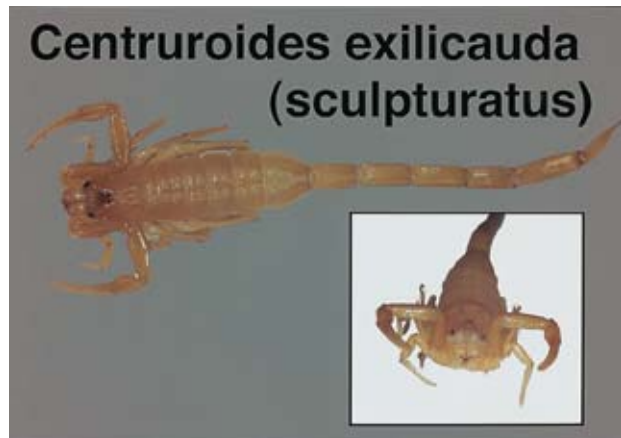
Identifying Characteristics

Generally considered the only lethal scorpion in the United States, *Centruroides exilicauda* (formerly, *Centruroides sculpturatus*) (Figure) is found in Arizona; the area around Las Vegas, Nevada; western New Mexico; Baja, California; and northern Mexico. It is a small yellow to straw-colored scorpion. Two dorsal stripes may be present. The proximal tail segments are elongate, and a small blunt thorn (subaculear tooth, tubercle, or hair) is present at the base of the stinger. Pectines (comb organs) behind the fourth pair of legs are important for mating, and hairs on the legs detect vibrations of potential prey.

C exilicauda have a long slender body and range in size from 1.3 to 7.6 cm. Their color varies from pure yellow to prominently striped in a single litter; however, their background color is creamy yellow, even in specimens with prominent stripes. *C exilicauda* often are found in cracks and crevices or under loose bark. They tend to cling to the underside of tables, boards, stones, and other objects. Victims often are stung when attempting to lift an object that has a scorpion clinging underneath. Most stings occur between April and November.¹ *C exilicauda* commonly enter homes, where people often are stung when getting dressed or entering bedsheets into which the scorpions have crawled.

Adverse Reactions

C exilicauda venom contains a neurotoxin, a potent polypeptide that can cause cardiac failure and



Centruroides exilicauda.

respiratory paralysis.^{2,3} Other symptoms resulting from *C exilicauda* stings include restlessness, nystagmus, paresthesia, excessive salivation, muscle fasciculation, blurred vision, and dysphagia. Immediate hypersensitivity reactions also may occur. *C exilicauda* stings cause pain and systemic symptoms but only rarely produce local purpura, swelling, or erythema. This lack of local tissue reaction helps distinguish *C exilicauda* stings from those of other scorpions commonly found in Arizona.¹

All patients will experience pain at the site of envenomation; however, the incidence of severe systemic reactions is low. In one series of more than 400 stings, 92% of patients were treated at home with conservative therapy. Children younger than 5 years appear to be more prone to severe reactions.¹

Treatment

Antivenin is available, and published data suggest that it may relieve symptoms related to the neurotoxin present in *C exilicauda* stings in most patients within 30 minutes.⁴ The role of antivenin therapy and criteria for patient selection are controversial. Antivenin therapy is associated with a significant

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The opinions expressed are those of the authors and should not be construed as official or as representing those of the Army Medical Department, the United States Air Force, or the Department of Defense.

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incidence of serum sickness.⁵ Currently, antivenin is not approved by the US Food and Drug Administration.

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