Thermal niche overlap of the corner recluse spider Loxosceles laeta (Araneae; Sicariidae) and its possible predator, the spitting spider Scytodes globula (Scytodidae)

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Loxoscelism is a health problem caused by the bite of spiders of the genus Loxosceles. In Chile all cases are attributable to Loxosceles laeta. It has been suggested that the spitting spider Scytodes globula may be a predator of L. laeta and control its population, which is only possible if they share the microhabitat. This study compared the thermal preferences and tolerances of the two species. Later, spiders acclimated to 15. °C and 25. °C were exposed to decreasing and increasing temperatures to determine the lower and upper critical temperatures. The preferred temperatures were lower during the morning, but there were no differences between the species. The thermal niche breadths were similar for the species, with a large overlap. Both species showed tolerance to extreme temperatures, but L. laeta showed greater tolerance to low temperatures. Both species showed acclimation of the lower critical temperatures to changes in acclimation temperatures. The similarity of preferred and t