

## عنوان مقاله:

Phylogenetic Relationships of Scorpion *Compsobuthus matthiesseni* Based on Sequences of Internal Transcribed Spacer ۲ Gene from Khuzestan Province, Iran

## محل انتشار:

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## خلاصه مقاله:

Buthidae family includes scorpions with highly potent venom such as *Compsobuthus matthiesseni* is important due to the prevalence of scorpion stings in Khuzestan Province, Iran. Morphometric comparison of males and females ( $n=5$  each) showed that the body and carapas of the females were longer and wider ( $32.57 \pm 0.23$  mm and  $3.75 \pm 0.22$  mm, respectively) than those of males ( $28.89 \pm 0.25$  mm and  $3.55 \pm 0.12$  mm, respectively). From the seven specimens of *C. matthiesseni* scorpion, ۴۱۰-bp gene fragments of ribosomal internal transcribed spacer ۲ were amplified by polymerase chain reaction. The specimens of CM<sub>1</sub> and CM<sub>2</sub> (isolated from Baghmalek, Khuzestan) were in the same group with bootstrap values of ۸۷%. Nevertheless, CM<sub>۴</sub> and CM<sub>۳</sub> (isolated from Shushtar and Bidroobe, Khuzestan) with bootstrap values of ۷۳% and ۶۲% were separated from the two specimens of Baghmalek, respectively. The two specimens CF<sub>۳</sub> and CM<sub>۵</sub> (isolated from Masjed Soleiman, Khuzestan) with bootstrap values of ۸۸% were placed next to each other in a separate group. CF<sub>۲</sub> was separated from the rest of the specimens with a bootstrap value of ۵۴%. Out of the seven scorpions that were examined, six specimens (CM<sub>1</sub>, CM<sub>2</sub>, CM<sub>۳</sub>, CM<sub>۴</sub>, CM<sub>۵</sub>, and CF<sub>۳</sub>) showed the greatest similarity between ۱.۱% and ۴%. However, the genetic distance between CF<sub>۲</sub> and the rest of the specimens was at the range of ۱۰.۸-۱۴.۲%. It can be concluded that all *C. matthiesseni* scorpions from Khuzestan Province belonged to one species; nonetheless, differences were observed within the species, especially in the case of CF<sub>۲</sub>, which might be intraspecies.

## کلمات کلیدی:

Scorpion, *Compsobuthus matthiesseni*, phylogenetic, Internal transcribed spacer ۲

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1868195>

