COMPARISON OF BIOLOGICAL ACTIVITIES OF THREE SUBSPECIES (Crotalus durissus terrificus, C. durissus cascavella AND C. durissus collilineatus) OF THE SOUTH AMERICAN RATTLESNAKE

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The subspecies of the South American rattlesnakes Crotalus durissus are classified according to their external morphological feature and geographical distribution. These criteria are quite subjective and usually give rise to doubts about their correct identification. In a search for characteristics that might help in establish their proper classification, we have examine the usefulness of biological activities in the venoms as an auxiliary tool for distinguishing among subspecies.

The three subspecies examined could not be differentiated by their minimum coagulant doses (performed in bovine, rat, and human plasmas and fibrinogens), phospholipase A₂ activities, myotoxic activities, median lethal doses, or median platelet aggregating doses (on rabbit and human platelets). However, the electrophoretic profile and the dose-response curve for edematogenic activity for C. d. cascavella were different from the others. With regard to the inorganic element content of venoms, higher contents of Br, Cl, and Mg, and a lower level of Zn, were found in C.d. cascavella.

These results indicate that the venoms from the three studied subspecies of *C. durissus* were very similar, except for the paw edema-inducing activity, electrophoretic profile, and inorganic element contents of *C. d. cascavella*. They also suggest that classification of *C. durissus* subspecies should be revised.