

BIODISTRIBUTION OF *Apis mellifera* VENOM IN MOUSE ORGANS

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The colonization of Brazilian rural areas by African bees has resulted in a high prevalence of human accidents with this species. The pharmacokinetics of the venom from this species are poorly understood and in this study we have examined the biodistribution of the venom in mice. *Apis mellifera* venom was labelled with ¹²⁵I using the chloramine T method.

Groups of five mice (≈ 30 g) were inoculated (s.c.) with venom and at various time intervals thereafter the animals were sacrificed and their organs perfused and removed. The radioactivity of each organ, reflecting venom concentration, was determined in a gamma counter.

The results showed the kidneys to be the principal organ for venom uptake although the liver and spleen also bound significant quantities of venom during the initial hours after venom administration.

The lungs, heart and skeletal muscle had similar venom concentrations while that of the brain was lower than the other organs. A detailed knowledge of bee venom biodistribution may therefore be of diagnostic and therapeutic importance in the treatment of bee sting victims.