

VENOM AND ENVENOMATION OF IRANIAN BLACK WIDOW SPIDER, *LATRODECTUS*

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Abstract – Spider *Latrodectus* (black widow) has a wide distribution around the world. The bite of this spider due to its lethal neurotoxic venom is medically important. In this study two species of spiders *Latrodectus palidus* and *Latrodectus dahli* were hunted from the central provinces of Iran like Saveh, Ghazwin (Boinzahra), Teheran (Savojbolagh) in large number and their venom was extracted by homogenization of dissected venom glands and centrifugation of homogenate, separation of filtrate and lyophilization of extracted venom. The amount of freeze dried venoms were 0.7 grams for *L. palidus* and 0.8 grams for *L. dahli*. The toxicity of the venoms were tested in 18-20 grams Albino mice through tail vein according to Spearman and Karber method. The LD₅₀ of so called venoms were 13.9±0.2 microgram for *palidus* and 19.8 microgram for *dahli*. Electrophoresis results from SDS-Page showed 10 bands for *Palidus* and 12 bands for *Dahli* with molecular weight ranging from 10 to 110 kilodalton.

Key words : Spider, *Latrodectus palidus*, *Latrodectus dahli*, venom, toxicity, LD₅₀