PURIFICATION AND CHARACTERIZATION OF VENOM PROTEIN OF SRI LANKAN RUSSELL'S VIPER
(Vipera russelli russelli)

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Snakebite is a serious health issue, not only in Sri Lanka but also in the whole world. Such incidences are highly visible in the dry zone and the mostly contributing snake to such cases is viper.

The major objective of present study is characterization and purification of protein in viper venom in order to develop antivenom against Russell's viper venom. Balb C mice at the weight range (27-31) g and rats (375-447) g were used for animal experiments. Venom was collected from the Animal House, Faculty of Medicine, University of Peradeniya and subjected to fractionation by gel filtration chromatography followed by anion exchange chromatography.

For one gel filtration attempt, 500µl of crude venom was used and its protein concentration was 249.6 mg/ml. The relative mobility of crude venom proteins were determined and the detected molecular weight range was (10.6-130) kDa. Moreover, four peaks were identified by gel filtration and the relative mobility of two kinds of proteins of peak 1 and peak 4 were determined. There molecular weights were 10.08 kDa and 85.19 kDa respectively.

The LD_{50} values for crude venom were 0.73 mg/kg and 1.39 mg/kg for mice and rat respectively.