

## Sexual Dimorphism in Sri Lankan Saw Scaled Viper Based on the Mensural and Pholidosis Characters

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Sri Lankan SSV was recorded as a sub species of *Echis carinatus* named as *Echis carinatus Sinhaleyus* by Deraniyagala in 1951. The study aimed to explore the sexual dimorphism in Sri Lankan saw scaled viper based on the mensural and pholidosis characters. A total number of 30 adult specimens were collected from the Northern Sri Lanka. In order to determine the sexual dimorphism, 12 mensural, 12 pholidosis and three body colour pattern characters of the male and female specimens were recorded and statistically analysed. The mean rostrum-anus length (RA) of the male was 240.9mm (range 187-280 mm) and the female was 280.3 mm (range 195-354mm). The median tail length (TL) of the male and female specimens was 33.4 mm (range 28-40 mm) and 29.7mm (range 20-36 mm) respectively. Non parametric analysis of covariance confirms that there are statistically significant differences in the RA ( $p= 0.006$ ) and the TL between the male and the females ( $p = 0.028$ ) which derives a positive value in sexual size dimorphism index, confirming that females are larger than males (1.004). The meristic traits appeared to be less variable between male and female except the ventral and sub caudal scales which revealed that the females have high number of ventral scales ( $145.8 \pm 3.3$ ) than the males ( $138.4 \pm 4.07$ ) and males have a greater number of sub caudal scales ( $28.9 \pm 1.85$ ) than females ( $25.8 \pm 2.8$ ) which is proportional to the length. All the other studied mensural and meristic characters showed complete blending between male and female.

**Keywords:** Sri Lanka, saw scaled viper, sexual dimorphism