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THE DISTRIBUTION AND AVERAGE SIZE OF GRANULAR

GLAND IN POISONOUS ROCK FROG, Odorrana hosii

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ABSTRACT

Frog skin is reported to have potential in medical application especially the granular gland on the skin producing secretion containing peptide. The objective of this paper was to examine the distribution and average size of granular glands in *Odorrana hosii' s* skin. The skin histology was stained with Haematoxylin-Eosin to identify granular gland. Results revealed that the distributions of granular glands were statistically significantly different between six regions of the frog skin ($F(5,234) = 3.47$, $p=0.005$) with dorsal central region of skin has the highest mean number of granular gland (2.22 ± 1.69). The average size of the granular glands was statistically significantly different between six skin regions ($F(5,234)=4.04$, $p=0.012$) with dorsal central region contained the biggest granular gland size (11.95 x 103 ?m2). This study showed that the granular glands in O. hosii were significantly abundant in dorsal head region and the largest size was in the dorsal central region as compared to other regions of the skin. This implicates the dorsal head and central skin region can be used for peptides extraction due to the abundance and size of granular glands.

Key words: Skin histology, dorsal, ventral, granular gland, frog