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Distribution and Color Patterns of Chromatophores in the Grass Shrimp Palaemonetes Sp.

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Poster Presentation P59

DISTRIBUTION AND COLOR PATTERNS OF CHROMATOPHORES IN THE GRASS SHRIMP PALAEMONETES SP.

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The ability to change body color to suit the environment is essential for many species as a mechanism to avoid predation. This is achieved in some crustaceans through the expansion and contraction of four different pigments in the chromatophores or pigment-bearing cells in their dermis (Anger, 2001). The coloration in Palaemonetes sp. was analyzed by observing both the action and the distribution of chromatophores. Shrimp were cultured in dishes with different background colors, either fully covered or only on the bottom. Individuals were further examined to determine if they expressed visible change after a certain amount of time. Our results show that the distribution of chromatophores was more intense on the anterior region of the body. Additionally, color changes were observed in the shrimp cultured in fully covered dishes, while the shrimp cultured in the dishes that were covered only on the bottom did not express color change. Between the shrimp cultured in different background colors, variety of chromatophoric actions was observed.