

Glomerular filtration rates in a few experiments on tadpoles with an average weight of 10 grams ranged between 0.4 and 0.8 ml/hr, when measured as inulin or creatinine clearances with the animals maintained in measured quantities of bath water.

Preliminary Studies On Auditory Organs Of Saltatory Orthoptera

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Collections of saltatory Orthoptera were made on Mt. Desert Island and the adjacent mainland. Eight species of Tettigoniidae, two of Oceanthidae, two of Gryllidae, and eleven of Acrididae were collected and identified. A few other species were collected, but not identified fully. About 1,500 specimens were fixed and preserved for later comparative macroscopic and microscopic study of the auditory organs, using a new fixing agent developed during the summer. Methods were devised for maintaining the animals easily in the laboratory and for obtaining eggs for rearing. Recordings of sounds produced by most of the sound-producing species were made for later analysis, and photographs and photomicrographs of the auditory organs were made.

Protein Binding of 1 — C¹⁴ - Palmitic Acid In The Marine Dogfish (*Squalus Acanthias*)*

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Hypoalbuminemic human plasma binds fatty acids to the B-globulin fraction (Physiological Reviews 40, 1960). This experiment was designed to determine the protein binding site of 1 - C¹⁴ Palmitic acid in *Squalus Acanthias*, an analbuminemic fish. 0.25 to 1.0 μ c of 1 - C¹⁴ Palmitic acid was incubated with 1 milliliter samples of adult and pup dogfish plasma for one to two hours. Thirty microliter aliquots of the above plasmas were electrophoresed using a barbitol buffer at pH 8.6. The strips were evaluated on a paper scintillation scanner to determine peaks of radioactivity and were later scanned by an Analytrol automatic densimeter after staining with Bromphenol blue dye to identify protein fractions. Peaks of radioactivity were found to coincide with the B-globulin fraction in both adult and pup plasmas. Pup plasmas, however, had both a larger B-globulin fraction and a greater amount of protein bound 1 - C¹⁴ - Palmitic acid.

* Supported in part by a grant from the National Institute of Health. U. S. Public Health Service, CCY - 2332.