

KEANEKARAGAMAN DAN KELIMPAHAN IKTIOFAUNA DI PERAIRAN BAWAH TANAH GUA SANGHYANG KENIT

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ABSTRAK

Ekosistem gua memiliki habitat terestrial maupun akuatik. Perairan gua merupakan habitat penting bagi bermacam organisme salah satunya adalah ikan. Gua Sanghyang Kenit memiliki ekosistem akuatik yang dihuni oleh komunitas ikan yang belum diteliti sebelumnya. Tujuan dari penelitian ini adalah untuk mengetahui keanekaragaman dan kelimpahan iktiofauna, serta keterkaitannya dengan parameter fisika kimia habitat. Metode yang digunakan pada penelitian ini adalah sampling ikan dengan koleksi langsung menggunakan *seine net* dan jala tebar pada zona terang, zona remang, dan zona gelap yang masing-masing dilakukan pengulangan sebanyak 3 kali, pengukuran faktor fisika kimia yang diukur adalah suhu air, intensitas cahaya, DO, pH, salinitas, total nitrat, dan total fosfat untuk dilakukan uji korelasi faktor-faktor fisika kimia terhadap indeks kekayaan, indeks keanekaragaman, dan indeks kelimpahan dengan menggunakan koefisien korelasi Spearman dengan nilai ρ 0,05. Hasil penelitian menunjukkan spesies ikan yang hidup di perairan bawah tanah Gua Sanghyang Kenit terdiri dari 6 spesies ikan yaitu Ikan Keting (*Mystus micracanthus*), Lele (*Clarias teijsmanni*), Wader (*Barbodes schwanenfeldii*), Jeler Kecil (*Nemacheilus fasciatus*), dan Berod (*Macrornathus maculatus*). Kekayaan jenis terbanyak diperoleh pada zona remang dengan nilai Indeks Kekayaan 1,33 dan terendah pada zona gelap 0,30 kemudian pada zona terang dengan nilai 0. Zona gelap memiliki kelimpahan ikan sebesar 7 ind/m², di zona remang sebesar 3 ind/m², dan pada zona terang 0 ind/m². Nilai indeks keanekaragaman Shannon-Wiener (H') pada zona remang 1,39, pada zona gelap 0,6 dan zona terang 0. Parameter fisika kimia seperti suhu air, intensitas cahaya, dan pH air berkorelasi nyata terhadap nilai indeks kelimpahan yang berbanding lurus pada suhu air dan pH sedangkan berbanding terbalik dengan pH. Kadar DO, total nitrat, dan total fosfat berkorelasi kuat terhadap nilai indeks kekayaan, dan indeks keanekaragaman. Suhu air, intensitas cahaya, kadar DO, total nitrat, dan total fosfat berkorelasi negatif sedangkan pH berkorelasi positif.

Kata kunci: ikan, keanekaragaman, kekayaan, kelimpahan, gua

DIVERSITY AND ABUNDANCE OF ICHTHYOFAUNA IN SANGHYANG KENIT CAVE UNDERGROUND WATERS

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ABSTRACT

Cave ecosystems have both terrestrial and aquatic habitats. Cave waters are important habitats for various organisms, one of which is fish. Sanghyang Kenit Cave has an aquatic ecosystem inhabited by a fish community that has not been studied before. The purpose of this study was to determine the diversity and abundance of ichthyofauna, as well as their relationship to the physical and chemical parameters of the habitat. The method used in this study was fish sampling by direct collection using a seine net and stocking nets in the bright zone, dim zone, and dark zone, each of which was repeated 3 times, the measurement of physicochemical factors measured were water temperature, light intensity, DO, pH, salinity, total nitrate, and total phosphate to be tested for correlation of physicochemical factors on the richness index, diversity index, and abundance index using the Spearman correlation coefficient with a value of 0.05. The results showed that the fish species living in the underground waters of Sanghyang Kenit Cave consisted of 6 fish species, namely Keting Fish (*Mystus micracanthus*), Catfish (*Clarias teijsmanni*), Wader (*Barbodes schwanenfeldii*), Small Jeler (*Nemacheilus fasciatus*), and Berod (*Macrogathus maculatus*). The highest species richness was obtained in the dim zone with a Richness Index value of 1.33 and the lowest was in the dark zone of 0.30 then in the light zone with a value of 0. The dark zone had an abundance of fish of 7 ind/m², in the dim zone of 3 ind/m², and in the light zone 0 ind/m². The value of the Shannon-Wiener diversity index (H') in the dim zone is 1.39, in the dark zone is 0.6 and in the light zone is 0. Physical and chemical parameters such as water temperature, light intensity, and water pH are significantly correlated with the abundance index value which is directly proportional to water temperature and pH while inversely proportional to pH. DO levels, total nitrate, and total phosphate are strongly correlated with the value of the richness index, and the diversity index. Water temperature, light intensity, DO levels, total nitrate, and total phosphate are negatively correlated while pH is positively correlated.

Keywords: fish, diversity, wealth, abundance, caves