

RINGKASAN

PUTRI MUSTIKA SARI. Pola Sebaran Siput gonggong di Perairan Malang Rapat dan Senggarang Kepulauan Riau. Dibimbing oleh RIKA ANGGRAINI dan FADLIYAH IDRIS

Ekosistem padang lamun di perairan Malang Rapat dan Senggarang merupakan habitat alami siput gonggong bernilai ekonomi tinggi, namun informasi mengenai pola sebaran serta faktor lingkungan yang memengaruhinya masih terbatas. Penelitian ini bertujuan untuk mengidentifikasi spesies serta menganalisis pola sebaran dan faktor lingkungan yang memengaruhi terhadap sebaran siput gonggong di Perairan Malang Rapat dan Senggarang. Penelitian dilaksanakan pada bulan Februari 2026 menggunakan metode transek garis dan kuadrat 1x1 m pada tiga titik pengamatan di masing-masing lokasi, disertai pengukuran parameter fisika-kimia perairan dan analisis karakteristik substrat yang diambil pada setiap titik 50 meter dalam transek garis sepanjang 100 meter. Hasil penelitian menemukan dua spesies, yaitu *Canarium urceus* dan *Laevistrombus turturella*. Di Perairan Malang Rapat hanya ditemukan *Canarium urceus* sebanyak 270 individu dengan kepadatan 4,09 ind/m² dan pola sebaran yang dimiliki membentuk mengelompok. Sedangkan di Senggarang ditemukan dua spesies yaitu, 159 individu *Canarium urceus* dengan kepadatan sebesar 1,29 ind/m² dan 85 individu *Laevistrombus turturella* 2,41 ind/m², keduanya memiliki pola sebaran mengelompok. Nilai keanekaragaman dan keseragaman di Malang Rapat masing-masing 0,00 dengan dominansi 1,00. Sedangkan di Senggarang memiliki struktur komunitas siput gonggong dengan nilai indeks keanekaragaman 0,55, nilai indeks keseragaman 0,79, dan nilai indeks dominansi 0,62. Kondisi kualitas perairan secara umum masih mendukung kehidupan biota, dengan nilai pH 7,6-7,8, suhu 30,9-31,1°C, salinitas 27,8-30,2 ‰, dan oksigen terlarut 6,0 mg/L. Karakteristik substrat di Malang Rapat didominasi pasir halus sebesar 81,0% sedangkan di Senggarang didominasi pasir kasar sebesar 68,3%. Perbedaan kondisi kualitas perairan serta komposisi substrat berpasir menjadi faktor utama yang menentukan komposisi dan pola sebaran spesies tersebut.

Kata kunci: Ekosistem Padang Lamun, Pola Sebaran, Siput Gonggong

SUMMARY

PUTRI MUSTIKA SARI. Distribution Patten of Gonggong Snail in the Waters of Malang Rapat and Senggarang of the Riau Islands. Supervised by RIKA ANGGRAINI and FADLIYAH IDRIS

The seagrass ecosystem in the waters of Malang Rapat and Senggarang is a natural habitat for the gonggong snail with high economic value, but information on distribution patterns and environmental factors that affect them is still limited. This study aims to identify species and analyze the distribution patterns and environmental factors that affect the distribution of bark snails in the waters of Malang Rapat and Senggarang. The research was carried out in February 2026 using the 1x1 m line and square transect method at three observation points at each location, accompanied by measurements of aquatic physico-chemical parameters and analysis of substrate characteristics taken at each 50-meter point in a 100-meter line transect. The results of the study found two species, namely *Canarium urceus* and *Laevistrombus turturella*. In the waters of Malang Rapat only 270 individuals were found with a density of 4.09 ind/m² and the distribution pattern was grouped. Meanwhile, in Senggarang two species were found, namely, 159 individuals of *Canarium urceus* with a density of 1.29 ind/m² and 85 individuals of *Laevistrombus turturella* of 2.41 ind/m², both of which have a clustering distribution pattern. The value of diversity and uniformity in Malang Meetings is 0.00 each with a dominance of 1.00. Meanwhile, Senggarang has a community structure of siput gonggong with a diversity index value of 0.55, a uniformity index value of 0.79, and a dominance index value of 0.62. The general water quality condition still supports biota life, with a pH value of 7.6-7.8, a temperature of 30.9-31.1°C, a salinity of 27.8-30.2‰, and a dissolved oxygen of 6.0 mg/L. The characteristics of the substrate in Malang Rapat are dominated by fine sand by 81.0% while in Senggarang it is dominated by coarse sand by 68.3%. Differences in water quality conditions and sandy substrate composition are the main factors that determine the composition and distribution pattern of these species.

Keywords: *Seagrass ecosystem, Disribution Pattern, Gonggong Snail*