ABSTRAK

Penelitian ini berjudul Pengaruh Bahan Organik Total Pada Sedimen Terhadap Kelimpahan Gastropoda di Ekosistem Mangrove Muara Kali Ijo, Kebumen. Tujuan dari penilitian ini adalah mengetahui konsentrasi bahan organik total, kerapatan mangrove, kelimpahan gastropoda, pengaruh bahan organik total terhadap kerapatan mangrove, dan pengaruh bahan organik total terhadap kelimpahan gastropoda. Metode penelitian yang digunakan adalah metode survei. Pengambilan data tingkat kerapaatan mangrove dan kelimpahan gastropoda menggunakan metode transek kuadrat 10 x 10 m dan 1 x 1 m. Hasil penelitian menunjukkan bahwa konsentrasi bahan organik total termasuk dalam kategori tinggi (40,41 – 65,80%). Kerapatan mangrove termasuk dalam kategori sedang sampai sangat baik (1.733 – 3.800 ind/ha). Kelimpahan gastropoda berkisar antara 2,32 – 38,16 ind/m². Hasil analisis regresi menunjukkan bahwa bahan organik total berpengaruh nyata terhadap kerapatan mangrove dan kelimpahan gastropoda.

Kata kunci: *Bahan Organik Total*; *sedimen*; *Kelimpahan; gastropoda; Mangrove*.

ABSTRACT

This study is entitled The Effect of Total Organic Matter in Sediment on the Gastropods Abundance in the Muara Kali Ijo Mangrove Ecosystem, Kebumen. The purpose of this study is to determine the total organic matter concentration, mangrove density, gastropod abundance, the effect of total organic matter on mangrove density, and the effect of total organic matter on gastropod abundance. The research method was used the survey method. Data collection of mangrove density level and gastropod abundance using the 10 x 10 m and 1 x 1 m squared transect method. The results showed that the total organic matter concentration was included in the high category (40,41 – 65,80%). The density of mangroves is included in the medium to very good category (1,733 – 3,800 ind/ha). The abundance of gastropods ranges from 2,32 – 38,16 ind/m². The results of regression analysis showed that total organic matter was have significant effect on mangrove density and gastropod abundance.

Key words: *Total Organic Matter*; *Sediment*; *Abundance; gastropods*; *Mangrove density*.