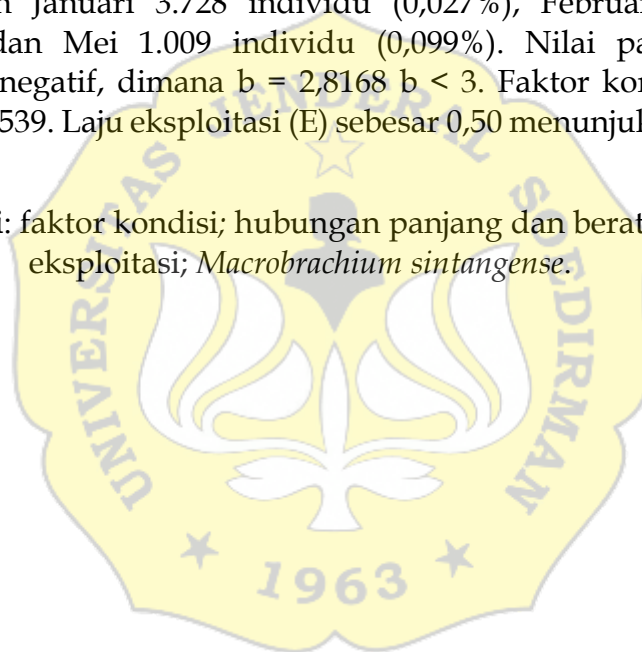


ABSTRAK

Penelitian ini berjudul “Populasi Udang Regang (*Macrobrachium sintangense* De Man, 1898) di waduk PB Soedirman, Provinsi Jawa Tengah. Udang Regang merupakan udang air tawar asli Indonesia Famili Palaemonidae yang paling banyak ditemukan di Indonesia. Kajian khusus mengenai struktur populasi Udang Regang di Waduk PB Soedirman belum banyak dilakukan. Padahal secara ekologis, udang air tawar berperan dalam menjaga keseimbangan ekosistem dalam suatu perairan. Tujuan penelitian ini untuk mengetahui kelimpahan, hubungan panjang berat, faktor kondisi, dan laju eksploitasi Udang Regang di Waduk PB Soedirman. Metode penelitian dilakukan dengan menggunakan alat bantu ANOVA dan FISAT II. Hasil penelitian menunjukkan kelimpahan relatif (KR) Udang Regang pada bulan Januari 3.728 individu (0,027%), Februari 1.328 individu (0,075%), dan Mei 1.009 individu (0,099%). Nilai panjang dan berat allometrik negatif, dimana $b = 2,8168$ $b < 3$. Faktor kondisi (K) rata-rata $0,1154 \pm 0,1539$. Laju eksploitasi (E) sebesar 0,50 menunjukkan pemanfaatan optimal.

Kata Kunci: faktor kondisi; hubungan panjang dan berat; kelimpahan; laju eksploitasi; *Macrobrachium sintangense*.



ABSTRACT

This study is entitled “Population of *Macrobrachium sintangense* (De Man, 1898) in the PB Soedirman Reservoir, Central Java Province.” focuses on a native Indonesian freshwater shrimp from the family Palaemonidae, which is widely distributed across the country. However, specific research on its population structure in PB Soedirman Reservoir remains scarce, despite its ecological role in maintaining aquatic ecosystem balance. This research aimed to assess the abundance, length-weight relationship, condition factor, and exploitation rate of *M. sintangense*. Data analysis was conducted using ANOVA and FISAT II. The results showed that the relative abundance of *M. sintangense* was 3.728 individuals (0,027%) in January, 1.328 individuals (0,075%) in February, and 1.009 individuals (0,099%) in May. The length-weight relationship followed a negative allometric growth pattern, indicated by the value of $b = 2,8168$ (where $b < 3$). The average condition factor (K) was $0,1154 \pm 0,1539$. The exploitation rate (E) was calculated at 0,50, indicating that the current level of utilization is within the optimum range for sustainable harvest.

Keywords: abundance; condition factor; exploitation rate; length-weight relationship; *Macrobrachium sintangense*.

