

# Produktivitas Biomassa Copepoda di Perairan Demak

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## ***Abstrak***

Copepoda sebagai konsumen primer, merupakan biomassa yang dapat dikuantifikasi dengan pendekatan morfometri, dengan output volume tubuh copepoda sebagai landasan penghitungan transfer energi. Penelitian ini bertujuan untuk mengetahui produktivitas biomassa copepoda di perairan Demak. Penelitian ini dilaksanakan dari Mei hingga Oktober 2005 pada 6 stasiun di perairan Demak. Sampling dilakukan sebulan sekali dengan menggunakan planktonnet. Sampel copepoda yang diperoleh diklasifikasi berdasarkan ukuran tubuh untuk analisis morfometri sehingga didapatkan biomassa volumetrik. Pengukuran parameter kualitas air (suhu, salinitas, pH, arus, dan kecerahan) dilakukan secara bersamaan dengan sampling copepoda. Hasil pengamatan menunjukkan kelimpahan copepoda total pada 6 stasiun di perairan Demak 741-2094 ind/l. Hasil analisis morfometri ordo Calanoida Genus Acartia sp. berkisar 400-950  $\mu\text{m}^3$ ; Calanus sp. 400-1900  $\mu\text{m}^3$ ; Eucalanus sp. 400-925  $\mu\text{m}^3$ ; Pseudocalanus sp. 400-1200  $\mu\text{m}^3$ ; Paracalanus sp. 400-1200  $\mu\text{m}^3$  dan Centmpages sp. 400-1900  $\mu\text{m}^3$ . Ordo Cyclopoida, Genus Oithona sp. berkisar 450-1100  $\mu\text{m}^3$  dan Ordo Harpacticoida, Genus Euterpinasp. berkisar 500-1050  $\mu\text{m}^3$ .

**Kata kunci:** Copepoda, Morfometri, Biomassa, Demak

## ***Abstract***

The copepod is primary consumer, could be quantified using the morphometry approach, and produce the body volume as the base of energy transfer. The aim of the research is to know copepods biomass productivity of Demak waters base on the morphometrical approach. The research was conducted from May to October 2005. There were six stations established as the research site area. The monthly samplings were done during the research. Copepod were collected using the 45 fm plankton net, by filtering total of 1 m<sup>3</sup> sea wafer vertically into 1 liter water sample. The samples were preserved with formalin 4%. The morphometrical approach was done to determine the copepod biomass as the volumetric variable. The water quality such as temperature, salinity, pH, current and transparancy, were measured in the same time. The total copepods abundance from 6 station was shown between 741-2094 ind. / L. The biomass of copepods show that the *Acartia* sp. biomass range 400-950 µm<sup>3</sup>; *Calanus* sp. 400-1900 µm<sup>3</sup>; *Eucalanus* sp. 400-925 µm<sup>3</sup>; *Pseudocalanus* sp. 400-1200 µm<sup>3</sup>; *Paracalanus* sp. 400-1200 µm<sup>3</sup> and *Centmpages* sp. 400-1900 µm<sup>3</sup>. Ordo Cyclopoida, Genus *Oithona* sp. biomass range between 450-1100 µm<sup>3</sup> and Ordo Harpacticoida, Genus *Euterpina* sp. between 500-1050 µm<sup>3</sup>.

**Key words :** Copepods, morphometric, biomass, Demak