

Dinamika populasi dan tingkat pemanfaatan sumberdaya udang jerbung (*penaeus merguensis*) di perairan Cilacap dan sekitarnya = Dynamics population and utilization rate of banana prawn (*penaeus merguensis*) in Cilacap and surrounding waters

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Abstrak

[ABSTRAK

Perairan Cilacap dan sekitarnya merupakan salah satu daerah penangkapan udang jerbung yang sangat potensial di perairan pantai selatan Jawa. Trend indeks kelimpahan stok udang jerbung di perairan Cilacap dan sekitarnya cenderung menurun pada periode tahun 2004-2010. Hal ini sangat mengkhawatirkan terhadap keberlanjutan produksi udang jerbung apabila tidak ada pengelolaan dan pemanfaatan sumberdaya udang tersebut dengan baik. Penelitian ini dilaksanakan di Cilacap dan sentra perikanan udang lainnya di Kabupaten Cilacap pada Januari sampai dengan November 2013. Data dikumpulkan melalui metode survey dan wawancara. Metode analisis terdiri dari metode analitik menggunakan Program FiSAT II, dan model surplus produksi. Udang jerbung yang tertangkap dominan pada mid length 31 mm, 33 mm, dan 35 mm, dan umumnya belum dewasa. Nilai faktor kondisi udang jerbung betina dan jantan masing-masing berkisar 37,36-648,87 dan 15,55-319,05. Laju pertumbuhan (K) udang jerbung betina 1,10 per tahun dan udang jerbung jantan 1,00 per tahun. Laju eksploitasi (E) udang jerbung betina 0,36 per tahun dan udang jerbung jantan 0,56 per tahun. Laju mortalitas total (Z) udang jerbung betina 1,69 per tahun dan udang jerbung jantan 2,46 per tahun. Pola rekrutmennya menunjukkan 2 modus dalam satu tahun, dengan puncak terjadi pada periode Maret-April dan periode Juli-Agustus. Estimasi potensi lestari (MSY) dan f-opt udang jerbung di perairan Cilacap 326 ton/tahun dan effort optimum (f-opt) 231 trip serta tingkat pemanfaatan sudah berada pada tahap overfishing.

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ABSTRACT

Cilacap and surrounding waters is one of the potential fishing ground of banana prawn in south of Java sea. Abundance stock index of banana prawn in Cilacap and surrounding waters tend to decline in 2004-2010. It was apprehension for the banana prawn sustainability, when no appropriate management and utilization for this species. This research conducted in Cilacap and other shrimp fisheries centers in Cilacap District begin from January until November 2013. Data collected through a survey and interview methods. The method of analysis consists of : an analytical method by FiSAT II program, and surplus production models. Most of Banana prawn caught dominantly in the mid length 31 mm, 33 mm, and 35 mm, and generally immature. Value factor condition banana prawn females and males respectively ranged from 37.36-648.87 and 15.55-319.05. Growth rate (K) of banana prawn female was 1.10 per year and banana prawn male was 1.00 per year. The exploitation rate (E) of banana prawn female was 0.36 per year and banana prawn male was 0.56 per year. Total mortality rate (Z) of banana prawn female was 1.69 per year and banana prawn male was 2.46 per year. The pattern of recruitment showed two models in one year, with the peak season occur in the period of March-April and July-August. Estimation of the Maximum Sustainable Yield (MSY) and f-opt banana prawn in Cilacap waters about 326 tons/year and optimum effort (f-opt) about 231 trips, and the

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