Kajian biologi ikan kembung lelaki (Rastrelliger kanagurta) terkait dengan faktor fisika dan kimia daerah penangkapan ikan (fishing ground) di perairan Kabupaten Pandeglang, Provinsi Banten = Study of indian mackerel (Rastrelliger kanagurta) biology in relation to physical and chemical aspects of the fishing grounds in Pandeglang Regency, Banten Province

Asep Sutiana, author

Abstrak

Penelitian ini bertujuan mengkaji aspek biologi panjang, bobot ikan, dan tingkat kematangan gonad ikan kembung lelaki terkait dengan parameter fisika suhu permukaan laut, kecerahan, dan arus dan kimia salinitas serta kesuburan perairan klorofil-a pada daerah penangkapan/fishing ground dalam upaya pengelolaan penangkapan ikan kembung di Kabupaten Pandeglang. Penelitian dilaksanakan dari bulan Desember 2016-April 2017. Pengambilan sampel dilakukan di tiga titik fishing ground yaitu Batu Hideung, Sumur dan Panaitan. Pengukuran panjang, berat ikan, pembedahan untuk mengamati tingkat kematangan gonad serta pengukuran parameter fisika kimia perairan dilakukan secara in situ. Suhu permukaan laut pada lokasi penelitian berkisar antara 28.20-29.700C, Kecepatan arus 0.6-0.8 m/det, kecerahan 6-9 m, dan salinitas 30-32g/l. Nilai klorofil-a bulan Desember 0.13 mg/m3 kondisi fishing ground kurang subur, Februari-April nilai klorofil-a 0.9-2.0 mg/m3 yang mengindikasikan bahwa area fishing ground Batu Hideung dan Sumur dalam kondisi subur. Ikan kembung lelaki yang tertangkap dengan jaring rampus diperoleh nilai fork length antara 14-22 cm modus 18.3 cm. Ukuran ikan pertama kali tertangkap Lc adalah 17.17 cm. Hasil analisis hubungan panjang berat diperoleh nilai slope b ikan kembung jantan dalam kategori allometrik negatif dan ikan betina allometrik positif. Ukuran panjang pertama kali ikan matang gonad Lm sebesar 17.91 cm. Hasil analisis nilai Lc lebih rendah dibanding nilai Lm, hal ini berdampak negatif bagi kelestarian ikan kembung. Upaya pengelolaan sumberdaya ikan kembung perlu dilakukan dengan cara mengatur dan mengawasi operasi penangkapan berdasarkan siklus pola pemijahan ikan kembung.

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The aim of this research was to study the relationship between biological aspects length, weight and gonad maturity level of Indian Mackerel and physical sea surface temperature, transparency, and current velocity , chemical parameters salinity and chlorophyll a of the fishing grounds in Pandeglang regency. The research was conducted from December 2016 to April 2017. Samplings were taken at three sites within the fishing grounds in Batu Hideung, Sumur and Panaitan. The measurement of length, weight, and surgery for gonad maturity level observation as well as physical chemical waters parameters measurement were conducted in situ. The sea surface temperature at the study site ranged from 28.20 29.700C, current velocity 0.6 0.8 m s, transparency 6 9 m, and salinity 30 32 g l. While the value of chlorophyll a in December was 0.13 mg m3, at which the fishing ground conditions were less fertile, the chlorophyll a value in February April ranged from 0.9 to 2.0 mg m3, indicating that the fishing grounds within Batu Hideung and Sumur were in fertile condition. The fork length Indian mackerel caught by a bottom gillnet was about 14 22 cm mode 18.3cm. The length of fish at first capture Lc was 17.17 cm. The value of slope b in the length weight relationship revealed that male Indian mackerel was in negative allometric while female Indian mackerel was still

positive. Length at first maturity Lm was 17.91 cm. The value of Lc is lower than Lm, revealed that the fishing activity has negative impacts on sustainability of Indian mackerel. Efforts including arrangement and supervision of fishing operations based on the spawning patterns are needed to manage Indian mackerel resources.