Yossi Mauretha. 2015. Biologi Reproduksi teripang *Phyllophorus dobsoni* di Selat Madura Periode Februari, Maret, dan April 2013. SKRIPSI, di bawah bimbingan Dr. Dwi Winarni, M.Si dan Dr. Alfiah Hayati, Departemen Biologi Fakultas Sains dan Teknologi. Universitas Airlangga, Surabaya.

ABSTRAK

Penelitian ini merupakan rangkaian penelitian yang dimulai pada Februari 2012 dengan tujuan mengetahui tahap kematangan gonad, rasio jenis kelamin, dan ada tidaknya masa puncak reproduksi. Penelitian ini merupakan penelitian observasional, sampel teripang diperoleh dari selat Madura dan diambil pada tanggal 11-20 bulan Jawa untuk setiap bulan (Februari, Maret, dan April 2013). Sampel selanjutnya ditimbang berat total dan berat tiris tubuh, berat dididing, dan berat gonad. Sampel gonad yang telah diambil selanjutnya disimpan dalam *neutral bufferd formalin* dan dibuat sediaan histologi yang memiliki beberapa tahapan yaitu *processing*, *embedding, sectioning*, dan *staining.* Pengambilan data meliputi berat basah, berat tiris, dan berat dinding teripang, serta berat dan warna gonad. Data yang diperoleh selanjutnya dianalisis untuk menentukan indeks gonad, persentase tahap maturitas dan rasio jenis kelamin. Indeks gonad yang diperoleh dibandingkan dengan indeks gonad antar bulan dan periode sebelumnya menggunakan *One-way Anova* (α = 0,05). Hasil penelitian menunjukkan bahwa tahap kematangan gonad pada periode penelitian ini yaitu tahap *recovery, growth, advanced growth, mature,* dan *post spawning*. Masa puncak reproduksi yang didapat dari data IG menunjukkan tidak ada beda bermakna. Adapun rasio jenis kelamin jantan, betina, dan hermafrodit bulan Februari dan Maret yaitu 3 : 1 : 2 dan pada bulan April adalah 4 : 2 : 1.

Kata kunci : Phyllophorus dobsoni, indeks gonad, tahap kematangan gonad, hermafrodit, rasio jenis kelamin,

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ABSTRACT

This study was a series of research that began in February 2012 with the purpose to know the stage of gonad maturity, sex ratio, and presence or absence of peak reproductive period. This study was an observational study, sea cucumber samples taken from Madura Strait on 11-20 Java month for each month (February, March, and April 2013). After that each sample was measured the total body and body's dry weight, wall weight, and gonad weight. The gonad samples was stored in neutral buffer formalin and made histology preparation that had several steps, they were processing, embedding, sectioning, and staining.The datas that collected were wet weight, dry weight, and, wall weight of sea cucumbers, also weight and color of the gonad. Then the datas was analyzed to determine the gonad index, the percentage of stage of maturity and sex ratio. The gonad indexes were compared with the gonad indexes between the month and the previous period studied using One-way Anova (α = 0,05). The results showed that the gonad maturity stages on this study were recovery, growth, advanced growth, mature, and post- spawning. The peak of the reproduction that taken from IG showed no significant differences. The sex ratio of males, females, and hermaphrodites in February and March were 3 : 1 : 2 and in April was 4 : 2 : 1.

Key words: Phyllophorus dobsoni, gonad index, gonad maturity stage, hermaphrodite, sex ratio,