

Indah Nastiti, 2015, Penentuan Jenis Kelamin Teripang *Phyllophorus dobsoni* di Selat Madura Periode Mei, Juni dan Juli 2013.

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui indikator penentuan jenis kelamin pada *Phyllophorus dobsoni* di Selat Madura serta rasio jenis kelamin pada bulan Mei, Juni dan Juli 2013. Indikator penentuan jenis kelamin yang digunakan meliputi warna gonad, berat basah, berat dinding, berat gonad, struktur *inner epithelium* tiap tahap kematangan gonad, tebal dinding dan diameter lumen tubulus gonad. *Phyllophorus dobsoni* sebanyak 25 individu diambil setiap bulan pengamatan. Sampel diukur secara berturut-turut yaitu berat basah, berat gonad, berat dinding tubuh lalu diamati warna gonad. Pembuatan sediaan histologi gonad dilakukan dengan mengambil sampel lima tubulus gonad dan dibuat sayatan melintang dan membujur dengan metode paraffin dengan ketebalan irisan 4 μm . Pada penampang histologi gonad diamati struktur *inner epithelium*, pengukuran tebal dinding dan diameter lumen tubulus gonad. Metode *smear* dilakukan untuk mengkonfirmasi adanya spermatozoa pada individu yang diduga hermafrodit. Hasil pengamatan menunjukkan warna gonad tidak dapat digunakan sebagai indikator untuk menentukan jenis kelamin teripang *Phyllophorus dobsoni*. Tidak ada perbedaan berat basah, berat dinding dan berat gonad pada tiap tahap kematangan gonad jantan dan betina. Tebal dinding dan diameter tubulus gonad betina lebih besar daripada tubulus gonad jantan. Rasio jenis kelamin pada bulan Mei, Juni, dan Juli 2013 antara individu jantan, betina dan hermafrodit secara berturut-turut adalah 4 : 3 : 1, 5 : 3 : 1, dan 3 : 4 : 1. Untuk hasil yang lebih akurat, disarankan untuk menggunakan metode pengamatan secara ultrastruktur dan metode immunohistokimia.

Kata kunci: *Phyllophorus dobsoni*, indikator, penentuan jenis kelamin

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ABSTRACT

*This study aimed to know the indicators of sex determination and population sex ratio of *Phyllophorus dobsoni* collected from Madura Strait on May, June and July 2013. Indicators used to determine sex including gonad color, inner epithelium structure, wall thickness and tubular lumen diameter. Samples of *Phyllophorus dobsoni* as many as 25 were taken every observation month. Total body weight, gonad weight, and body wall weight were measured. Then five gonad tubules were made into histological slides by using paraffin method. Each sample sectioned for 4 μm thickness, vertically and horizontally. From each histological section, inner epithelium structure was observed, wall thickness and tubule lumen diameter was measured. Smear method used to confirm samples suspected of hermaphrodite. Results showed that gonad color couldn't be used as indicator to determine *Phyllophorus dobsoni* sex. There was no significant difference on wet weight, gonad weight and body wall weight at each stage of maturity, both on male and female individuals. Wall thickness and lumen tubule diameter on female was larger than the male one. Sex ratio on May, June and July 2013 of male, female and hermaphrodite individuals consecutively were 4 : 3 : 1, 5 : 3 : 1, and 3 : 4 : 1. For more accurate results, it is suggested that gonads to be observed ultrastructurally and by using immunohistochemical methods.*

*Keywords : *Phyllophorus dobsoni* , indicators , determination of sex*