

## ABSTRAK

### PENGARUH PEMBERIAN PAKAN KEONG MAS TERHADAP PERTUMBUHAN KEPITING BAKAU *Scylla serrata* DI TAMBAK TRADISIONAL, CILACAP JAWA TENGAH

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Kepiting bakau *Scylla serrata* merupakan salah satu komoditas perikanan yang bernilai ekonomis tinggi, baik di pasaran dalam negeri maupun luar negeri karena mengandung berbagai nutrisi penting seperti mineral dan asam lemak omega-3. Dalam budidaya kepiting bakau pada umumnya para petani tambak melakukan usaha pembesaran dengan cara tradisional, yaitu dengan cara tebar langsung pada tambak secara massal, sehingga terjadi kanibalisme tinggi terutama pada saat kepiting bakau sedang *moulting* yang berakibat pada rendahnya kesintasan kepiting. Budidaya kepiting bakau secara individual menggunakan teknik tabung dengan pemberian pakan terbatas (kepiting hanya diberi pakan 3 hari dalam 10 hari) jauh lebih menguntungkan dan mengurangi tingkat kematian kepiting bakau. Dalam pemeliharaan secara intensif menuntut penyediaan pakan dalam jumlah dan kualitas baik, murah, tepat waktu, berkesinambungan dan memberikan nilai produksi tinggi. Salah satu yang dijadikan pakan bagi pertumbuhan kepiting bakau *Scylla serrata* adalah keong mas *Pomacea canaliculata* yang diketahui memiliki kandungan protein mencapai 51%. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian pakan keong mas terhadap pertumbuhan kepiting bakau di tambak tradisional, Cilacap – Jawa Tengah. Pada penelitian ini terdiri dari 12 perlakuan pakan keong mas basah dan kering, dengan jenis kelamin kepiting jantan dan betina (3%, 5% dan 7%), selama 60 hari pemeliharaan dengan 6 ulangan. Pengujian dilakukan pada kepiting bakau dengan berat awal antara 35–75 gram, panjang karapas 3,4 – 5,3 cm, lebar karapas 4,7 – 7,5 cm. Parameter yang diukur selama pemeliharaan meliputi penambahan berat, panjang dan lebar karapas, laju pertumbuhan harian, rasio konversi pakan (FCR), kesintasan, dan kondisi kualitas air (suhu, salinitas, pH, DO, kecerahan, kedalaman air). Hasil penelitian menunjukkan, laju pertumbuhan tertinggi dijumpai pada perlakuan pakan 5% kering jantan sebesar  $1,59 \pm 0,75$  g/hari, sedangkan laju pertumbuhan terendah dijumpai pada perlakuan pakan 3% kering betina sebesar  $0,68 \pm 0,07$  g/hari. FCR terendah terdapat pada perlakuan pakan 5% kering jantan dengan perbandingan 0,84 : 1. Tidak terdapat perbedaan kesintasan pada setiap perlakuan pakan, dengan kesintasan tertinggi sebesar  $100 \pm 0,00$  %. Selama penelitian, parameter fisika dan kimia pada semua perlakuan masih dalam batas rentang untuk pertumbuhan kepiting bakau.

Kata kunci : *Scylla serrata*, keong mas, pertumbuhan, teknik tabung, FCR

## ABSTRACT

### THE EFFECT OF GOLDEN SNAIL FEED FOR GROWING THE MUD CRAB *Scylla serrata* IN THE TRADITIONAL CULTURE POND, CILACAP CENTRAL JAVA

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The mud crab *Scylla serrata* is one of aquacultural commodities which highly economic value, both in domestic and overseas market, because of high nutritional contents, such as minerals and omega-3 fatty acid. Most of the farmers used the traditional mud crab cultivation by direct stocking of the crab seeds into the ponds. This method could not be avoided by a high cannibalism impact especially when the mud crab in moulting stage, so that eventually causes a low survival rate. A culture method for mud crab by individual tube technique with a limited feeding application (the crabs fed three times in ten days) have more advantages and reduced the mortality rate of mud crabs. For the intensive crab culture it needs a high quality food, and considered cheap in price and highly available in sources, this will support for the sustainable crab production. As an alternative feed for growing the crab *Scylla serrata* was chosen the golden snail *Pomacea canaliculata*, because this snail has a high protein content, 51 %. The purpose of this study was to know the effect of golden snail as feed for the mud crab growth in the traditional culture pond, Cilacap Central Java. This study was designed with twelve treatments ie. wet and dried golden snail feed (3%, 5% and 7% feed concentration based on the crab weight); sex: male and female; and with six replications in a sixty days cultural period. The initial sizes of the tested crabs were a range body weight of 35 – 75 gram, length and width of carapace 3,4 – 5,3 cm and 4.7 – 7.5 cm, respectively. Parameters measured in this study were body weight, length and width of carapace, daily growth rate, FCR, survival number, water quality (temperature, salinity, pH, DO, Sechii Disc transparency). The results of this study showed that the highest daily growth rate ( $1.59 \pm 0.75$  g/day) was found in treatment of 5 % dry feed, on male, the lowest daily growth rate was  $0.68 \pm 0.07$  g/day found in treatment of 3% dry feed on female. The lowest FCR (0.84:1) was found in treatment of 3% dry feed male. There was not significantly different on survival rate for all treatments. The highest survival rate was 100%. The chemical and physical quality parameters in all treatments were still in a range of good condition for the mud crabs to grow.

Keyword : *Scylla serrata*, golden snail, growth, individual tube technique, FCR.