

RINGKASAN

ANTON MONE. Praktek Kerja Lapang tentang Isolasi *Skeletonema costatum* Dengan Metode Pipet Kapiler di Balai Besar Pengembangan Budidaya Air Payau Desa Bulu Kecamatan Jepara Kabupaten Jepara Propinsi Jawa Tengah. Dosen Pembimbing Ir. WORO HASTUTI S., M.Si.

Skeletonema costatum merupakan diatom uniseluler yang banyak dimanfaatkan sebagai pakan alami bagi larva ikan maupun udang. Ketersediaan bibit *Skeletonema costatum* yang murni tanpa adanya kontaminasi dari jenis fitoplankton lain sangat diperlukan guna memenuhi kebutuhan gizi bagi larva ikan maupun udang yang mengkonsumsinya.

Tujuan dari Praktek Kerja Lapang ini adalah untuk mengetahui cara isolasi *Skeletonema costatum* dengan metode pipet kapiler, cara penyimpanan kultur murni *Skeletonema costatum* hasil isolasi metode pipet kapiler serta hambatan dalam memperoleh bibit *Skeletonema costatum*. Praktek Kerja Lapang ini dilaksanakan di Balai Besar Pengembangan Budidaya air Payau Desa Bulu Kecamatan Jepara Kabupaten Jepara Propinsi Jawa Timur pada tanggal 26 Juli – 26 Agustus 2005.

Metode kerja yang digunakan dalam Praktek Kerja Lapang ini adalah metode diskriptif dengan teknik pengambilan data meliputi data primer dan data sekunder. Pengambilan data dilakukan dengan cara partisipasi aktif, observasi, wawancara dan studi pustaka.

Isolasi *Skeletonema costatum* dengan metode pipet kapiler dilakukan pada obyek glass yang telah ditetesi air sampel dengan menggunakan pipet kapiler dan mikroskop dengan perbesaran 40 x. Isolasi dilakukan dalam keadaan steril dan aseptik. Perbanyakkan sel *Skeletonema costatum* yang telah diisolasi dilakukan dalam media cair 10 ml dan selanjutnya dikultur secara bertahap dalam volume 50 ml, 100 ml, 200 ml dan 400 ml dan 2 liter. Penyimpanan bibit murni *Skeletonema costatum* hasil isolasi dilakukan di dalam refrigerator dengan suhu 4 – 6°C yang bertujuan untuk menghambat pertumbuhan selnya. Kendala utama yang dihadapi pada kegiatan isolasi adalah sulitnya memperoleh bibit murni dari alam yang berkualitas baik serta kontaminasi *Nitzschia* sp.

SUMMARY

ANTON MONE. Field Job Practice about Isolated *Skeletonema costatum* Using Micropipet Method at Brackishwater Development Center Jepara, Central Java. Academic Adviser : Ir. WORO HASTUTI S., M.Si.

Skeletonema costatum is unicellular diatom that much used as natural feed for fish and shrimp larva. The supply of *Skeletonema costatum* starter without contamination from the other phytoplankton was needed to support nutrient need by fish and shrimp larva that consumed.

The purpose of the Field Job Practice was to get knowledge about isolated *Skeletonema costatum* using micropipet method, storage of pure *Skeletonema costatum*, and the problem to get *Skeletonema costatum* starter. The Field Job Practice was done in Brackishwater Development Center, Bulu Village, Jepara Subdistrict, Jepara Regency, and Province of Central Java at 26th July to 26th August 2005.

Work method that used in Field Job Practice was descriptive method where data intake techniques include primary and secondary data. Primary data were conducted by observation, interview and direct participation in *Skeletonema costatum* isolation. Secondary data were conducted by recovering data in the location, report and literature related to work job practice

Skeletonema costatum Isolated by Micropipet Method was done in object glass that had dropped with water sample by micropipet and observed under microscope 40X enlarge. These activities had to be done in aseptic condition. *Skeletonema costatum* cells which had been isolated, were cultured in test tube 10 ml, 50 ml, then in flask 100 ml, 200 ml, 400 ml, and also in bottle 2 litres. The pure starter of *Skeletonema costatum* had been storage in refrigerator at temperature 4 - 6° C. The purpose was to delay the *Skeletonema costatum* growth. The main problem of Isolated *Skeletonema costatum* were difficulty to get the pure starter from nature that have good quality and also contamination from the other diatom called *Nitzschia* sp.