

Annex 3/4: Outline of the Laboratory Activities

By Mrs. Penchan Laongmanee

Assistant Workshop Coordinator

Survey Area: Waters of Brunei Darussalam

Vessel: M.V. SEAFDEC 2

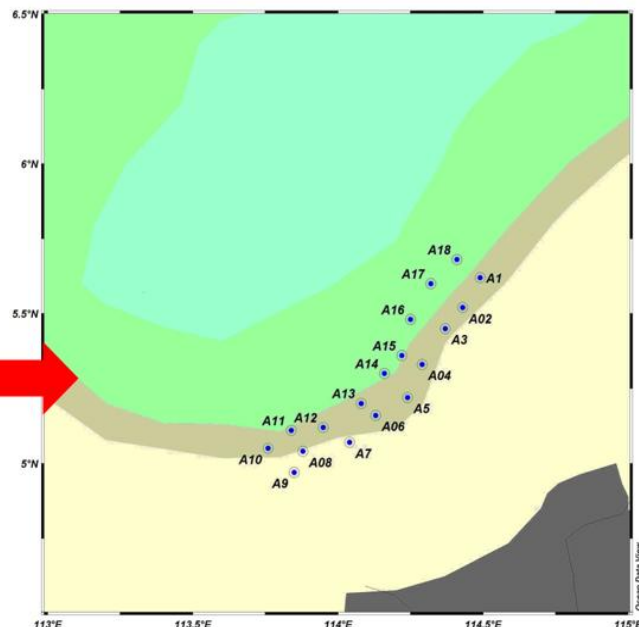
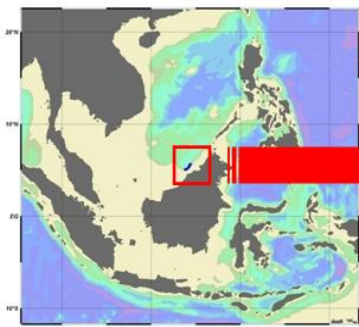
Cruise no: 29-2/2008 and 31-1/2009

Sampling gears:

Otter trawl = 18 operations

Beam trawl = 22 operations

Fishing depth: 100-374 m



Specimens using TODAY (19 January)

- **Cruise no:** 29-2/2008
- **Preserved in 70% Ethanol**
- More than 200 fishes were preliminary identified into **57 families**
- Contained in **96 bottles**
- **Cruise no:** 29-2/2008
- **Sampling gears:**
Otter trawl = 9 operations
Beam trawl = 11 operations
- **Fishing depth:** 100-374 m



Specimens using on 20-21 January

- **Cruise no:** 31-1/2009

Frozen specimens

- Frozen specimens in plastic wrap
- **Unidentified**
- **Sampling gears:**
Otter trawl = 9 operations
Beam trawl = 11 operations
- **Fishing depth:** 100-350 m



Activities Today

- **19 January (Tuesday)**
 - Practice on fish identification using preserved specimens
 - Working in pair
 - Select the family and identify to the lowest taxa
 - Share the results
 - All activities supervised by resource persons

Activities Today

20 January (Wednesday)

- Practice on fish identification using frozen specimens
- Select the specimens and identify to the lowest taxa
- Share the results
- All activities supervised by resource persons

Step of making fish specimens

1. Field work (Fishing, ...)
2. (Defrosting if freezing, in the water for 2-3 hour depend on room temp and fish size)
3. Assigning tag to specimen
4. (Taking tissue sample)
5. (Photography)
6. Tagging
7. Fixation



As fast as possible
to avoid fish
decompose



Identification

Today's step of work

- Consider that most of participants are in the field work that may not be able to bring fish back to lab.
- Have to identify fresh specimen.
- Sample from 1 fishing operation/group in plastic wrap (already defrost)

Today's step of work

1. Take one specimen, the remain fish still in ice box (to avoid fish decompose)
 2. (Cleaning mucosal fin membrane scale)
 3. Assign tag specimen (Dr. Natinee)
 4. Pre-fixation for photography: rising fins (open air), **NOT TO DRY UP FISH**
 5. Identify to family (wait for fin completely rising and photography queue)
 6. Photography (1 photo with tag)
 7. Identify to lowest taxa, record necessary information in the measurement form, label fish name in tag, **NOT TO DRY UP FISH**
 8. Fixation (in plastic bag with tag, 10% formalin)
 9. Next specimen...
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Tag

- Specimen ID
 - Ship name
 - Fishing method (Otter trawl, beam trawl)
 - Locality (Lat, Long, depth)
 - Date
 - Fish name
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