

**Proceedings of the Summer Institute in Recent Advances  
on the Study of Marine Fish Eggs and Larvae**

**14 JUNE to 3 JULY, 1989**



**CENTRAL MARINE FISHERIES RESEARCH INSTITUTE**

**Dr. SALIM ALI ROAD**

**COCHIN - 682 031.**

CMFRI/SI/1989/Pr.IX

DRAWING OF LIVE AND PRESERVED FISH EGGS AND LARVAE

By

P. Bensam, K.C. George, M. Kumaran  
Principal Scientists

and

S.G. Vincent  
Technical Officer

(Central Marine Fisheries Research Institute, Cochin)

- (A) Aim: To familiarise with the microscopic drawing of fish eggs and larvae.
- (B) Materials: In addition to the materials listed in Practicals No.VII, the following:
- (i) Camera lucida and their attachments.
  - (ii) Good quality white paper.
  - (iii) A good pencil, eraser and pencil sharpener.
- (C) Methods:
- (i) Isolate the particular specimen for drawing with the aid of needles or brushes or pipettes.
  - (ii) While dealing with live eggs, ensure that the glassware used are free from formalin.
  - (iii) Mount the eggs/larva in the live/preserved condition in a cavity slide in the required Position.
  - (iv) Ensure that no air bubble(s) are locked up anywhere under the cover slip.
  - (v) Fix the camera lucida in position.

- (vi) Place the white paper alongside the microscope on the table, below the mirror, determine the extent of the figure on the paper and sketch the outline of the various characters including the overall profile of the specimen and pigmentation.
- (vii) Record the magnification of the specimen in the drawing sheet by checking up the magnification of each MMD under the particular combination of eye piece and objective used, vide Practicals No.VII, (B), (i) to (vi).
- (viii) After fully drawing the specimen take out an Indian Ink tracing of it at the time required.
- (ix) For drawing specimens which are very much longer (larger) than the viewing area of the microscope under the particular combination, use eye pieces or objectives of lesser magnifications.
- (x) If the size of the specimen is only slightly longer than the viewing area of the microscope, draw the figure in two parts and join them to get the whole figure.