Broodstock development of greasy grouper *Epinephelus tauvina* (Forsskal, 1775)

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Development of grouper aquaculture is one of the most important aquaculture targets in the tropics. The non- availability of sufficient quantity of seeds from the natural grounds at the right time for farming purpose is the major constraint in culture of groupers. Disease free healthy brood stock

is the most important prerequisite for successful production of seeds of any finfish or shellfish in a hatchery. The availability of high quality spawners of both the sexes in sufficient numbers and in good condition is a primary concern in broodstock development and maintenance. This involves development of male brooders and improvement of the quality of female brooders.

Attempts were made at the Visakhapatnam Regional Centre of CMFRI for broodstock development of the wild collected adult groupers (2.0 -5.0 kg). Groupers when hauled up from their habitat, gulp in air and usually are landed in a bloated condition due to the air filled in bladders. After reaching the hatchery the fishes were degassed and given prophylactic treatment with 200 ppm formalin for 30 minutes and freshwater dip for 5 minutes and then transferred to HDPE cages

moored off Visakhapatnam (Fig 1). The fishes were PIT tagged and history of individual fish was maintained. The fish were fed twice a day with squid and trash fish fortified with Vitamin E, Vit-Min mix *etc*. Maturity stages of female broodstock were examined (Fig. 2) every month by intra-ovarian biopsy (IOB) and those with ova diameter >450 μ (Fig. 3) were used for induced spawning.

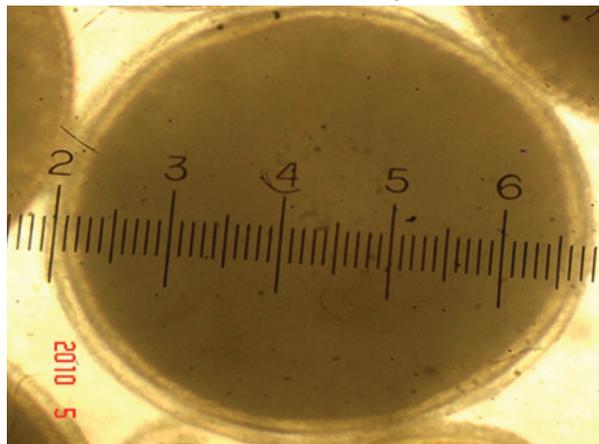Fig. 2. Intra-ovarian biopsy (cannulation) of *Epinephelus tauvina* to assess the maturity

Fig. 3. Female fish with intra- ovarian ova of diameter > 450μ (10 x)

Fig. 1. Female broodstock of *Epinephelus tauvina* in cage