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Maturation of Oreochromis niloticus gonads

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At hatching when fry were 5 to 6 mm, primordial germ cells (PGCs) were found to concentrate along the dorsomedian region of the peritoneal wall at the root of the developing mesentery and in places far from the appearance of testocoel and ovocoel. At 56 days posthatching, oogenic cells in the ovary had enlarged approximately 2 to 3 times their former size. The testis remained quiescent although the stromal tissues with developing efferent ducts increased distinctly in amount. Spermatogenesis occurred at three months posthatching.

Induced spawning of the mangrove red snapper, Lutjanus argentimaculatus

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Wild-caught mangrove red snapper, Lutjanus argentimaculatus, reared for a year in 4.0 m diameter by 1.5 m deep circular concrete tank spontaneously matured and were used for induced spawning trials. On 19 August 1992, a sexually mature female (4.6 kg BW) and male (3.2 kg BW) fish were given a single intramuscular injection of 1500 IU human chorionic gonadotropin (hCG)/kg BW. Spawning occurred 27 h after injection with total egg collection of 1.3 M. Hatching occurred 16 h after spawning at 28 °C and 32 ppt. On 18 March 1993, the same male and female together with a newly-caught spermiating male (6.3 kg BW) were injected intramuscularly with 100 µg luteinizing hormone-releasing hormone analogue (LHRHa)/kg BW. Spawning occurred 44 hours after injection with the total egg collection of 0.7 M. Hatching occurred 16 hours after spawning at the same temperature and salinity as the first trial. The successful spawning trials encourage further research to determine the effective minimum dose of hCG and LHRHa.