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Snook (*Centropomidae*) and Grouper (*Serranidae*) mariculture in the Gulf of Mexico and Caribbean Basin

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Abstract — *Centropomidae* and *Serranidae*, sometimes collectively misnamed « Sea basses », are suitable for aquaculture in pens, ponds, and raceways around the tropical and subtropical latitudes of the world. Western Atlantic Ocean species were recently considered for farming. South Florida, Mexico, Central and South America and the Antilles areas of the Caribbean Basin have extensive areas suitable for farming groupers and snook. Principal species of interest are the common snook (*Centropomus undecimalis*), the fat snook (*C. parallelus*), the Nassau grouper (*Epinephelus striatus*), Black seabass (*Centropristis striatus*), Gag (*Mycteroperca microlepis*), and jewfish (*E. itajara*). Technology for experimental culture currently exists, but pilot nor production scale information is lacking. Adult snook and grouper are collected from wild stocks, and induced to spawn with hormones. Fry are reared in tank culture or ponds. Small numbers of fingerlings were reared in tanks. One-hundred thousand common snook phase I fingerlings were reared in 3 earthen ponds of 0.5 and 1.0 ha, respectively. Controlled maturation and spawning methods are currently being developed for both snook and grouper species. Captive broodstocks of black seabass and gag were induced to spawn in tanks using photoperiod and temperature as stimuli. Fry viability ranged from 0 % in gag to 80 % for seabass. Feed conversion for snook weighing 16-725 g ranged from 0.7-1.1. Growth, in small scale grow-out experiments, is fair (450 g in 1 year). Existing aquaculture technology for grouper and snook is summarized and compared.