

TEMPORAL CHANGES IN FISH ASSEMBLAGES OF SHALLOW SEAGRASS AND ALGAE BEDS IN THE NEW-CALEDONIA LAGOON.

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Between March 1996 and February 1997, the fish assemblages of 8 seagrass beds and 8 algae beds located in shallow coastal areas near Noumea (New-Caledonia), were sampled monthly using visual census in order to detect temporal changes in fish composition, density and biomass and determine if these habitats played a nursery role for lagoonal fishes. A total of 213 species representing 39 families was recorded, 140 species (31 families) were present on seagrass beds and 178 (36 families) on algae beds. Mean species richness (pooled over the year) was higher on algae beds (32 species·transect⁻¹) than on seagrass ones (20). Mean fish density was similar on both habitats (between 1.8 and 2 fish·m⁻²) but mean biomass was twice higher on algae beds (43 g·m⁻²) than on seagrass ones. However, these values fluctuated greatly over the year, especially on seagrass beds, with minimums observed in winter (0.5 fish·m⁻², 15 species·transect⁻¹ and 6 g·m⁻² on seagrass beds) and maximums in summer (7.5 fish·m⁻², 25 species·transect⁻¹ and 30 g·m⁻²). The variations were due to the arrival of large schools of juvenile fishes, mainly *Siganidae* and *Lethrinidae*, in late spring and early summer, followed by a progressive decrease in fish abundance, several species disappearing totally during the winter. Additionally, the juveniles observed on both habitat types appeared later and were generally larger on algae beds than on seagrass ones. These results suggest that some lagoonal fishes recruit on seagrass beds, move afterwards on adjacent habitat types such as algae beds and finally leave the coastal areas to colonize others parts of the lagoon.

NEW RECORDS OF RED SEA MIGRANT FISH IN THE SYRIAN WATERS: INFLUENCES OF ENVIRONMENTAL FACTORS AND MAN-MADE STRUCTURES.

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The influx of Red Sea biota into the Mediterranean Sea via the Suez Canal ("Lessepsian migration") has fascinated scientists since the end of the last century. Until the last twenty years, the study of Lessepsian fish was limited to monitoring and inventory. In order to make an environmental and systematic survey in Syrian waters, we collected fish specimens from October 1992 to November 1993 with demersal trawls all along the Syrian coast. This survey allowed to bring 4 new records for Syrian waters: *Apogon taeniatus*, *Callionymus filamentosus*, *Cynoglossus sinusarabici*, *Silhoueta aegyptia*, known from Red Sea and Indian Ocean. This migration is the result of environmental changes which happened in the eastern basin of the Mediterranean Sea, whose water characteristics became close to those of the Red Sea.

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