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## CATCH COMPOSITION AND BIODIVERSITY FISH COMMUNITY FROM TRAWL FISHERY CATCHES IN THE CENTRAL MEDITERRANEAN SEA

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During the Spring 2001 a survey was carried out in the Central Mediterranean Sea to estimate total commercial catches, discarded catches and the biodiversity indices of fishes (bony fish, elasmobranchs). The study area is a very important fishing ground of the Central Mediterranean Sea. This area was divided into 7 sub areas. Discard and commercial catch samples were collected by 14 sample boats (two samples for each area). The target commercial bony fish species were: *Merluccius merluccius*, *Mullus barbatus*, *Mullus surmuletus*, *Pagellus erythrinus*. The total discard bony fish and elasmobranchs catch in the whole season were: 1.643 grams specimens/hours (gr/h) (CV=63%) and 14.7 gr/h (CV=50%), respectively. The abundance index was estimated: 1.865 gr/h, 356 gr/h, 649 gr/h and 458 gr/h for *Merluccius merluccius*, *Mullus barbatus*, *Mullus surmuletus*, and *Pagellus erythrinus*, respectively. The results showed that *Merluccius merluccius* is the most important component of the total commercial catch, representing 58.5% of the target commercial bony fish species. The most common measures of biodiversity were used: Richness (S), Simpson's index (D), Shannon-Wiener's index (H). The values of the biodiversity indices per bony fish and elasmobranchs in the Central Mediterranean Sea were: S=82; D=0.19; H=2.49 and S=13; D=0.25; H=1.71; respectively. The differences in catch between bony fish and elasmobranchs is due, probably, to the fishing effects on demersal fish communities through selective removal of target species.

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## CONSIDERATIONS ABOUT *Ucides cordatus cordatus* FISHING IN THE PARNAÍBA RIVER DELTA REGION, BRAZIL

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The Uçá-crab, *Ucides cordatus cordatus*, is distinguished as one of the most explored fishery resources in Brazil. The Parnaíba River Delta region, located between the states of Piauí and Maranhão, has the greatest concentration of crab catcher in the entire country. Evidence of over-exploitation highlights the need of better control over crab fishing activities in this region. The present work has as objective to determine the Uçá-crab Capture per Effort Unit (CPUE) in the Parnaíba River Delta, in order to supply subsidies for the fishery management of this resource. Fishery data collection was carried out during 1999 throughout 2002, between the latitudes 2°40' and 2°45' and the longitudes 41°51' and 42°05'. The CPUE was determined as the number of crabs captured by catcher per day. The total monthly capture was esteemed considering the average between all years and the number of 4.500 operating catchers in the region. The average CPUE values varied between 14.6 and 22.6 crabs per catcher per day. The total monthly capture varied between 1.314.000 and 2.034.000 crabs, in the months of minimum and maximum CPUE, respectively. In the period of one year, about 21 million crabs are captured. The obtained results, added to the over-fishing indications, bring to the conclusion that the collapse of crab fishing is a question of time in the region of the Parnaíba River Delta if the appropriate measures for adequate managing of the resource.