

Assessment of European anchovy (*Engraulis encrasicolus* - ANE) from 07 - Gulf of Lions. BIGOT J.L., D.ROOS

Description of fishery: In the gulf of Lion, pelagic fisheries are targeted on sardine and anchovy. Fishing effort depends on market fluctuations. A mean of 50 trawler boats in the last years are targeting these pelagic species. There is also 14 purse seiners in the south of gulf of Lion that catch also these species. Some purse seine boats from Spain come in the area to fish mainly sardine.

Source of management advice: The stocks of the main species of small pelagics in the gulf of the Lion are evaluated annually. The objective is to provide some advices to administrations and the profession on the state of resources in view of a durable exploitation. The pelagic species studied are anchovy and sardine in priority but also mackerels, horse mackerels, sardinella and sprat when present. The different species don't have the same biology and behaviour (life span, reproduction period, habitat,...). Also, the catches data and specific fishing effort collected by producer organisations are not sufficiently precise to permit an indirect approach of the stock assessments.

The solution chosen in the gulf of Lion is to use direct assessment method of stocks by echo - integration while completing them with indicators of the fishing activity. At this end, PELMED surveys are performed at daytime in July. Transects are prospected, perpendicular to the coast at a speed of 8 knots,

Exploitation rate: Moderate fishing mortality

Stock abundance: Low abundance

Comments: The assessment provided here is entirely dependent on the assumption of Acoustic biomass providing unbiased estimates of the absolute level of biomass at sea. In support of the catchability assumption it is worthwhile mentioning however that a DEPM carried out in June 2007 on the Gulf of lion by Palomera et al (2007) gave a spawning biomass of about 21000 t, a value very close to the acoustic biomass estimate provided by PELMED for that year.

Nevertheless the perception of moderate fishing mortality is based on the assumption of unbiased estimates of biomass by acoustic. For that reason current results should be taken with caution and the

Management advice and recommendation: Given the low levels of biomass for the last 4 years in comparison with the series of acoustic biomass available, the WG recommends not to allow any increase in fishing effort.

Advice for scientific research:

