

**Reproductive characteristics of the black scabbardfish *Aphanopus carbo*
(Trichiuridae) in the Canary Islands**

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In the frame of the INTERREG III B projects PESCPROF1-3, the main reproductive aspects for black scabbardfish *Aphanopus carbo* Lowe, 1839 off the Canary Islands were studied. Fish (n=368) were caught at depths ranging from 800 to 2300 m between June 2004 and October 2006. The sex proportion differed significantly from the 1:1 ratio, being clearly unbalanced in favour of females. The sex ratio according to depth clearly showed the presence of male and female individuals in all the studied strata. The Canary Islands can be considered to be a reproduction site for the black scabbardfish, since samples showing all stages of maturity were observed. The gonadosomatic index showed that the mean values were higher in the third and fourth quarters of the year. The index values clearly allowed the differentiation of the individuals in resting or in spent stages from individuals in ripe or in ripe and running stages, indicating that index levels higher than 2 were typical of maturation followed by spawning process. Size at 50% maturity was reached at 1095 and 1144 mm total length by males and females, respectively. Size at 95% maturity was reached at 1114 mm total length by males and at 1175mm by females. There was no significant difference in the size at 50% maturity between sexes (t-test $t=0.24$, $P=0.850$), but there was in size at 95% maturity.