

**PRELIMINARY RESULTS OF THE LL-SKARKS PROJECT: A  
COMPARISON OF WIRE *VERSUS* MONOFILAMENT LEADERS IN THE  
PORTUGUESE PELAGIC SWORDFISH FISHERY IN THE SOUTHWESTERN  
INDIAN OCEAN**

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*SUMMARY*

The effects of traditional nylon monofilament versus wire leaders in a commercial longline fishery targeting swordfish (*Xiphias gladius*) in the South West Indian Ocean were compared, based on total of 82 longline experimental sets conducted on a commercial vessel that deployed equal number of nylon monofilament and wire leaders (total of 82,656 hooks baited with squid). A higher number of taxa were caught on wire leaders, which also showed higher (13%) catch rates in number for sharks and particularly for the blue shark (*Prionace glauca*). In contrast, nylon monofilament leaders showed higher bite-offs rates (389%) than wire leaders. These results are probably due to the fact that species with sharp teeth could escape the longline by biting through the nylon leaders. The total retained catch value per unit of effort (VPUE) did not change between leader materials. Thus, banning wire leaders could be an effective way of reducing bycatch, particularly of sharks, that fishers may be keen to adopt. However, these results seem to be fishery specific and VPUEs are highly dependent on market fluctuations. Therefore, more studies are required for a thorough assessment of this shark bycatch mitigation measure.

*KEYWORDS: Pelagic longline fishery; nylon monofilament vs. wire leaders; catch-rates; sharks; mitigation measures.*

**NOTE**

A full version of this paper has recently been submitted by the authors to a peer review journal for publication. As major results have been presented during the 10<sup>th</sup> meeting of the WPEB, particularly regarding sharks, only the abstract is included here as a Rev\_2. However, the authors are available to provide additional information on the results of this study by request.