The effect of hook size and bait type on the fishing selectivity of long line gear

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Abstract

A longline experiment was conducted in Icelandic waters in November 1999. The main objective was to study the effect of hook and bait type on catch efficiency. Three trials (different locations) were conducted where two types of hooks (no. 7, J hooks and no.12 ,EZ hooks) and three types of baits (squid, herring and sand eel) were tested. Cod, haddock and redfish were the most common species in the study. Fishing area is the most important factor in terms of total catch and species composition of the catch. Redfish were only caught in substantial numbers in the depth set (80 m, trial 2) and the number of cod increased with increased distance from shore. In general, the size of fish within each species increased with depth. It was also observed that the mean length of cod and haddock was higher on hook no. 12 than hook no. 7. Within trials, no pattern of change in mean length of cod, haddock and redfish was observed with the three types of bait tested. Bait retention however was much large for squid than the other two bait type that become more important with increased soak time. The results in this study do not show any significant difference in terms of number of fish according to hook size.

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