

Effectiveness of using square mesh windows and tortoise mesh on shrimp's trawl in Samar Sea, Philippines

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The study was conducted to determine and evaluate the effectiveness of square and tortoise type windows on shrimp trawl with an aim to minimize and regulate the bycatch within shrimp trawlers in Samar Sea. Results showed that, there is no statistically significant difference in escapement or bycatch reduction using square mesh and tortoise shaped windows in the cod end ($P \leq 0.05$). Bycatch forms an average 24% of the total catch at a relative fishing efficiency of 4.7 kg per hour of towing. Dominant species exploited was from the family

Leiognathidae (slip mouths), forming 71% of the total catch when using the two window types. Although statistically not significant, we recommend using the tortoise shaped window which has a higher mean length escapement compared to the square mesh window. Its tortoise shaped mesh opening favors escapement of deep bodied fishes such as slip mouth. It could as well increase fish survival after escapement due to its shape that reduces contact to the window as fish escapes.