The artisanal fishing fleet of Asturias (223 active fishing vessels in 2012) represent the 72% of the total regional fleet. Gillnets are a fishing gear frequently used by artisanal vessels in Asturias, being remarkable during the summer season the "mieten" called "red mullet gillnet" that has Mullus surmuletus L. as target species.

The current allowed minimum mesh size for this gillnet in Asturias is 50 mm, and the maximum gear height permitted is 3 m.

As gillnet is a multispecific gear, fishermen are facing the dilemma of knowing how to obtain the greater profit, combining its efficiency to capture the target species and the main by-catch species of commercial interest.

Taking this into account, there is an increasing tendency in the fishing sector to ask for the admission of a greater gear height to improve their economic yield.

With the purpose of knowing the effects of the gear height and mesh size on the discards generated, the catch composition and the selectivity and yield of the red mullet gillnet, the present study was carried out.

The definition of discards used in the present study is the adaptation that Kelleher (2005) did from the one of FAO (FAO, 1996).

The catches were classified into: commercial catches (retained for sale: RS), catches retained to be used as bait in other fisheries (retained for bait: RB) and discards (D).

There had been identified 5 reasons for discarding (Table 1):
- Insufficient catch.
- Damaged.
- No commercial value.
- Insufficient length.
- Exceeded TAC.

The RS, RB and D catch rate (Table 3) and the total catch of each category (Figure 2) for each net height and mesh size combination were analyzed.

The CPUEs in number and weight were analysed (Table 4). The 3 m height and 60 mm mesh size combination was the most efficient in weight.

The main species with commercial value captured were the objective species, the red mullet Mullus surmuletus, and the Atlantic hake Trachurus trachurus. The two species characterized as "Retained for bait", B. boops and T. trachurus, represent a high percentage in catches, both in number and biomass. As stated by the fishermen, these species could change their category and be considered as discards depending on the market. Their catch rate depends both on the net height and the mesh size, so this study will be helpful for the development of an ecological management of this artisanal fishery.

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