

# fitting square mesh panels to improve bottom trawl selectivity on the Mediterranean continental slope

## TARGET SPECIES

red shrimp

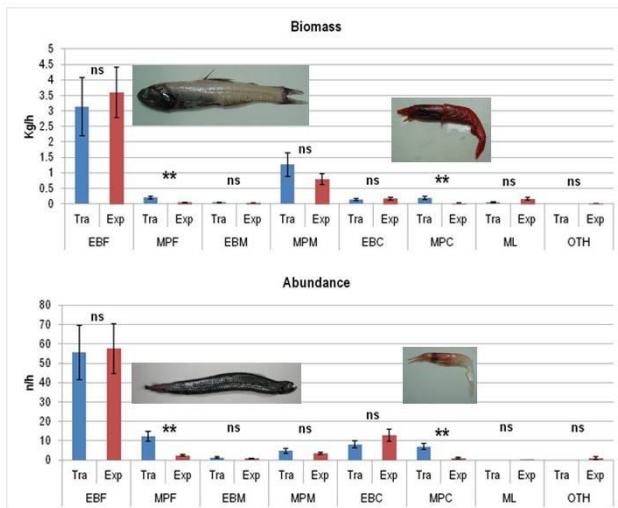
## AREA, VESSEL

10 pairs of hauls were carried out in the Balearic Islands bottom trawl fishery on the FV Nueva Joven Josefina (21 m, 150 HP) at depths between 600 – 700 m.



## GEAR MODIFICATION

The traditional four-panel bottom trawl net which is fished with semi-pelagic Thyborøn type 15VFS doors, was fitted with 10 square mesh panels. 4 in the upper section (58, 40, 17 and 9 m<sup>2</sup>) and 3 in each lateral section (16, 5 and 1 m<sup>2</sup>). The square mesh panels were made from 54 mm knotless Dyneema netting (1.2 mm twine thickness). The codend was made from 40 mm square mesh netting of 3 mm twine thickness



Student t-test: (ns) not significant; (\*) <0.05; (\*\*) <0.01

EBF: epi-benthic fishes; MPF: meso-pelagic fishes; EBM: epi-benthic molluscs; MPM: meso-pelagic molluscs; EBC: epi-benthic crustaceans; MPC: meso-pelagic crustaceans; ML: marine litter; OTH: others

## RESULTS

There was no loss of target species in the trawl with the square mesh panels.

Discards of non-commercial meso-pelagic crustaceans and fish reduced significantly.

Fuel consumption was reduced by up to 10%.

It was concluded that the incorporation of square mesh netting panels could be a plausible additional measure to improve the selectivity of the 40 mm square mesh codend currently in force.

**FURTHER INFORMATION** [enric.massuti@ba.ieo.es](mailto:enric.massuti@ba.ieo.es); DISCATCH project (DG MARE Contract N° MARE/2012/24 Lot 2) Final Report: <http://en.med-ac.eu/progetti.php>

