

an 80 mm square mesh panel in the extension and last tapered section with a 4-panel codend to improve trawl selectivity

AIM

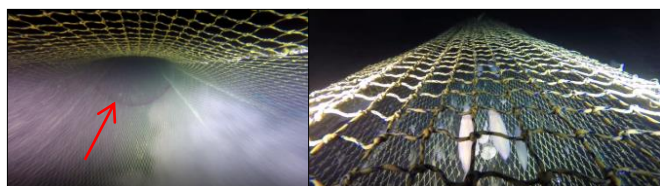
To use a square mesh panel (smp) in the tapered section and extension of a demersal trawl with a 4-panel extension and codend to reduce catches of mackerel, horse mackerel and undersized haddock and whiting.

TARGET SPECIES

whiting, haddock, monkfish, squid, cuttlefish and red mullet

AREA, VESSEL

46 pairs of alternate hauls were carried out from January to March 2017 on board 20-24 m bottom trawlers fishing in the Western Channel.



Visualisation of the beginning of the extension in four sides (after the red arrow) and of the square mesh on the top of the netting (on the left). Squids under the 80 mm square mesh panel (right) (L'ECUME DES JOURS)

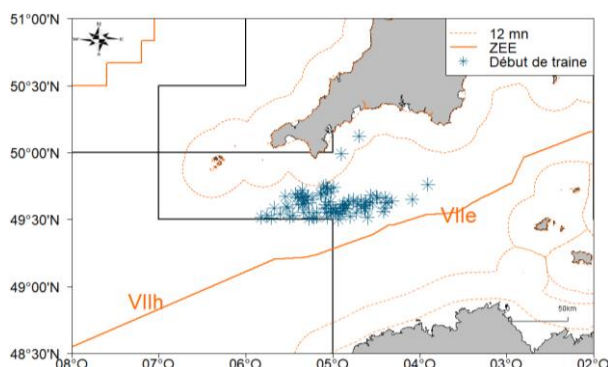
RESULTS

There are decreases of catches of undersized haddock and of mackerel and horse mackerel. There are also reductions of catches of marketable whiting and red mullet which are estimated to represent a 17% decrease in whiting turnover and 6% decrease of overall turnover.

It was thought that the 4-panel codend and extension would increase the vertical opening of the extension and limit squid contact with the smp. However, there was not enough video footage to confirm this hypothesis.

FURTHER INFORMATION

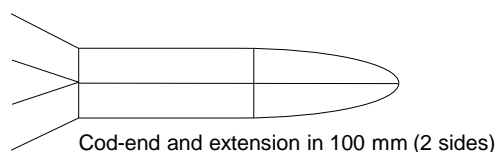
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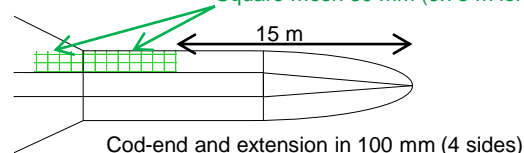
GEAR MODIFICATION

A trawl with a 2-panel 100 mm mesh size codend and extension was compared with a test trawl that had a 4-panel 100 mm codend and extension and an 80 mm smp in the last tapered section and extension.

Standard trawl net



Selective trawl net



Species	Variation in weight caught by commercial grade between selective and standard gears				
	Undersized	40	30	20	10
Monkfish			=		
Horse mackerel			-65% (all rejected)		
Haddock	<30 cm	30-34 cm	35-40 cm	41-48 cm	> 48 cm
	-35%	-13%	?	?	=
Squids			?		
Mackerel			-78% (all rejected)		
Whiting	<27 cm	27-32 cm	33-36 cm	37-40 cm	> 40 cm
	?	-71%	-39%	=	=
Red mullet			-46% (all landed)		
Cuttlefish			-		

