Growth and food consumption of whiting Merlangius merlangus

In the western Baltic Sea (WBS), whiting Merlangius merlangus is the main piscivorous fish together with cod Gadus morhua. In the present study, we investigate the growth and food consumption rates of WBS M. merlangus and compare the growth rates of males and females with those of M. merlangus in the North Sea (NS). Food consumption rates are estimated directly from sampled stomach contents in the WBS using a gastric evacuation rate model and indirectly by using a static energy-budget model together with the growth rates. The results indicate that male and female M. merlangus in the WBS have similar feeding and growth strategies, while in the NS M. merlangus show more pronounced differences in food consumption and growth dynamics between the sexes. Female WBS M. merlangus grow significantly slower than their conspecifics in the NS, but there is no significant difference for males. Sexual size dimorphism is seen in both areas, but for M. merlangus in the WBS the difference is less pronounced. Food consumption rates in the WBS differ between seasons, with the lowest food intake in the first 2 quarters of the year and the highest in the 3rd quarter. No differences in consumption rates were seen between males and females, which could be related to the more similar growth pattern seen for M. merlangus in the WBS.