Movement range and behavior characteristics of *Sebastes schlegelii* in Byeonsan Peninsula, Korea

In order to collect basic information of migration of rockfish (*Sebastes schlegelii*), the behaviors of rockfish during summer in Byeonsan Peninsular located at the coastal of yellow sea, Korea were investigated. Three cultured rockfishes CR1 to CR3 [total length (TL) 33.0±1.0 cm; body weight 493±32 g] were tagged with the acoustic tag. CR1 and CR2 were tagged externally with the acoustic tag. CR3 was tagged with an acoustic tag internally by surgical method. The movement routes of the tagged fish were tracked within 2 hours approximately using VR100 receiver and a directional hydrophone. Three tagged fishes (CR1, CR2 and CR3) were individually released on the sea surface far away about 500 m from a construction site of wind power on the sea in the coastal of Byeonsan Peninsular on 9 May, 21 May and 18 August 2017, respectively. CR1 and CR2 were moved so fast and lost the signal from the acoustic tags within 8 and 12 minutes, respectively, after release. CR2 was released during piling work on 21 May 2017. CR1 and CR2 were moved during without piling work. The water depth of the sea bed on the route of CR1 and CR2 were commonly 9.8 to 11.0 m. CR3 was moved about 4.32 km with average swimming speed of 0.58 m/s (1.69 TL/s) during 2.1 hours. The mean angle of the movement direction of RC2 was 291°, and the water depth on the route, 10.0 to 12.0 m. There was no significant correlationship (Pearson correlation, p=0.447, p>=0.05) between the tidal current direction and the movement direction of CR3.

Biography

Hyeon-Ok Shin has completed his PhD from Tokyo University of Marine Science and Technology of Fisheries Science. He is the Professor of the Division of Marine Production System Management, Pukyong National University. He has published more than 76 papers in reputed journals and has been serving as an Editorial Board Member of repute.