GROWTH CHARACTERISTICS AND DISTRIBUTIONS ON OF CARTILAGINOUS SPECIES IN THE BLACK SEA

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INTRODUCTION
The cartilaginous species contains sharks, rays, skates and chimaeras. Three species are relatively common in the Black Sea. These are thornback ray (Raja clavata), common stingray (Dasyatis pastinaca) and spiny dogfish (Squalus acantias). All cartilaginous species are caught accidentally as bycatch or discard in the fishing gears mainly bottom trawl and gillnet. They have no commercial value in the Turkish fisheries sector and two of them (R. clavata and S. acantias) were protected with legislation according to the Turkish Fisheries Circular by Ministry of Food, Agriculture and Livestock. In this paper, some growth characteristics and distribution were examined of the cartilaginous species from the experimental bottom trawl survey in the central Black Sea.

MATERIALS AND METHODS
In this research, samples were caught from the experimental bottom trawl survey with research vessel in the central Black Sea (in Samsun Bay) for demersal stock project. We used bottom trawl nets determined in MEDITS protocols. Totally, 1998 specimens were collected during the surveys and they were counted and weighed according to gender in the research vessel.

MAIN RESULTS
The length-weight relationships were calculated as W= 0.0044 L^3.191 (R=0.98) for R. clavata, W= 0.0004 L^2.741 (R=0.97) for D. pastinaca, W= 0.0071 L^2.807 (R=0.97) for S. acantias. R. clavata specimens distributed between 10-90 m, D. pastinaca between 10-50 m, S. acantias between 10-75 m. All specimens mostly found in 0-25 m (46% for R. clavata, 72% for D. pastinaca and 52% for S. acantias.

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