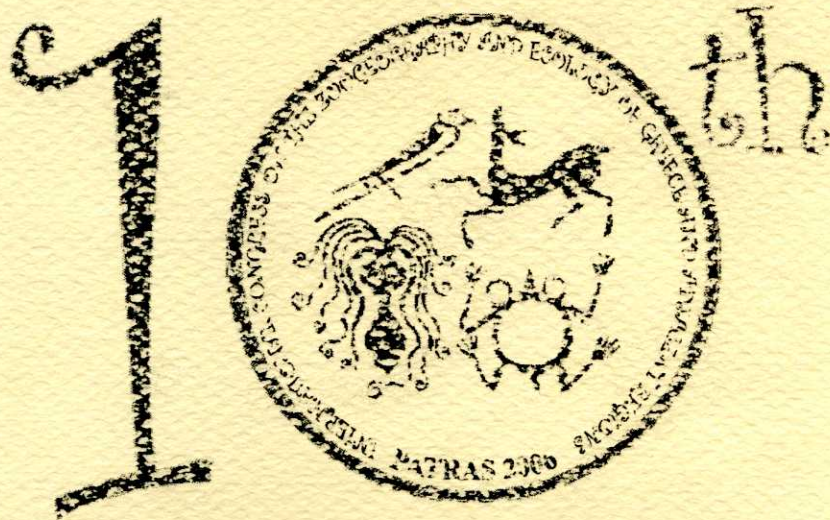


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BOOK OF ABSTRACTS



## LENGTH-WEIGHT RELATIONSHIPS FOR TEN COMMERCIAL FISH SPECIES FROM NORTHERN AEGEAN SEA, GREECE

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The study of the length-weight relationships in fish has a practical value since they make possible the conversion of length into weight and vice versa, as well as the determination of the condition factor. It is also very important for fisheries science, because they are used to raise length-frequency samples to total catch and, to estimate the biomass from underwater length observations. In the present study, length-weight relationships were established for ten fish species in Northern Aegean Sea. Samplings were performed using a commercial bottom trawler (codend mesh size 22 and 40mm) on a monthly basis during October 2004-April 2005 at depths ranging between 100 and 450m. Long lines were used for catching two large pelagic species, *Thunnus alalunga* (albacore) and *T. thynnus* (bluefin tuna), monthly sampling, from September 2003 to February 2004. Overall 2629 individuals were examined. The values of the exponent ( $b$ ) of the length-weight relationships were estimated for each species as follows: *Lepidorhombus boscii* 2.82 ( $\pm$  0.05), *Lophius budegassa* 2.96 ( $\pm$  0.05), *L. piscatorius* 2.82 ( $\pm$  0.04), *Merluccius merluccius* 2.77 ( $\pm$  0.03), *Micromesistius poutassou* 3.24 ( $\pm$  0.05), *Phycis blennoides* 2.97 ( $\pm$  0.04), *Thunnus alalunga* 2.52 ( $\pm$  0.04), *T. thynnus* 2.8 ( $\pm$  0.045), *Trachurus trachurus* 3.11 ( $\pm$  0.045) and *Zeus faber* 2.84 ( $\pm$  0.046). The mean value of  $b$  was 2.89 ( $\pm$  0.06), ranging from 2.52 for *T. alalunga* to 3.24 for *M. poutassou*. For *L. budegassa* and *P. blennoides*, the growth was isometric ( $P > 0.05$ ). For the remaining species,  $b$  values were significantly different from 3 ( $P < 0.05$ ) showing an allometric growth. The length-weight relationships were also computed for each species for three different seasons (autumn, winter and spring) and the slopes were compared for between-season differences.