

Cranial characters of the bottlenose dolphin (*Tursiops truncatus*) from the Adriatic Sea

Duras Gomerčić, Martina¹; Gomerčić, Tomislav²; Gomerčić, Hrvoje¹; Galov, Ana³; Lucić, Hrvoje¹; Vuković, Snježana¹

(1) *Department of Anatomy, Histology and Embryology, Faculty of Veterinary Medicine, University of Zagreb, Heinzelova 55, 10000 Zagreb, Croatia*

(2) *Department of Biology, Faculty of Veterinary Medicine, University of Zagreb, Heinzelova 55, 10000 Zagreb, Croatia*

(3) *Department of Animal Physiology, Faculty of Science, University of Zagreb, Rooseveltov trg 6, 10000 Zagreb, Croatia*

martina.duras@vz.htnet.hr

The bottlenose dolphin (*Tursiops truncatus*) is a widely spread cetacean species with significant morphological differences between the populations. The Adriatic Sea, a semi closed area in the eastern basin of the Mediterranean Sea, inhabits a bottlenose dolphin population which morphological characters have not been described yet. Out of 87 bottlenose dolphins found dead in the Croatian part of the Adriatic Sea in the period from September 1995 till December 2004, we analyzed 21 dolphins (14 females and 7 males) that were physically mature based on the criterion of fused epiphyses on all vertebrae. We present their body mass, total body length, age and 47 craniometric values and meristics. The main craniometric values and meristics of the bottlenose dolphins from the Adriatic Sea are as follows: condylobasal length: 51.06 ± 1.64 cm, length of rostrum: 29.01 ± 0.89 cm, width of rostrum at base: 13.45 ± 0.49 cm, width of rostrum at midlength: 8.95 ± 0.44 cm, least supraorbital width: 22.94 ± 0.73 cm, greatest width across zygomatic processes of squamosal: 26.43 ± 0.72 cm, greatest parietal width: 20.57 ± 0.80 cm, vertical external height of braincase: 15.00 ± 0.39 cm, greatest width of internal nares: 7.62 ± 0.42 cm, number of teeth-upper left: 20.89 ± 1.88 , number of teeth-lower left: 20.11 ± 1.13 . The skulls of the Adriatic bottlenose dolphins are longer and wider with a longer and wider rostrum than the skulls of bottlenose dolphins from eastern Florida. Bottlenose dolphins from north-west Africa, North Sea, coastal eastern Pacific, South African and British shores have significantly longer skulls than Adriatic specimens. When compared to Adriatic bottlenose dolphins all above named populations have higher number of teeth in each jaw. Considering condylobasal length and skull width, rostrum length and width Adriatic bottlenose dolphins are the most similar to the specimens from the seas around China, but those animals have up to seven teeth more in each jaw.

Contents

Plenary

Oral

Poster

Contributors

Legal Notices

Help

Exit

