craniometric factor analysis and correlation coefficient. Body growth had markedly great influence on the craniometric values, except in the case of four parameters, projection of premaxillaries beyond maxillaries, length of left orbit, greatest width of internal nares and greatest length of left pterygoid, pointed out by craniometric factor analysis. Variations in the case of projection of premaxillaries beyond maxillaries might be explained by minor damages of skulls during the preparation, while the variations in remaining three parameters could reflect very interesting individual differences.

(85)

Snježana Ćurković[1], Korana Stipetić[1], Zoran Pišl[2], Snježana Vuković[1], Darinka Škrtić[1], Hrvoje Gomerčić[1]

[1]Zavod za anatomiju histologiju i embriologiju, Veterinarski fakultet Sveučilišta u Zagrebu, Heinzelova 55, 10000 Zagreb, Hrvatska
[2]"Živa priroda", Brezovačka 3a, 10410 Novo Čiće, Hrvatska

Međuodnos veličine prvih kralježaka i dužine tijela u usporedbi s veličinom lubanje jadranskog dobrog dupina (*Tursiops truncatus*, Montagu 1821.)

U ovom istraživanju su korišteni dijelovi kostura osam jedinki dobrog dupina (*Tursiops truncatus*, Montagu 1821.), prikupljenih iz Jadranskog mora u razdoblju od 1990. godine do danas. S ciljem utvrđivanja međusobnog odnosa veličine kralježaka i veličine tijela te njihove povezanosti s kraniometrijskim vrijednostima, pomičnim mjerilom mjereni su točno određeni parametri prvog i drugog kralješka, koji u dobrog dupina predstavljaju jedinstvenu kost. Mjerne podatke obradili smo deskriptivnim statističkim metodama te cluster analizom. Srednja vrijednost najveće širine zglobne površine atlasa iznosi 105 mm sa standardnom devijacijom (SD) 5,7. Prosječna visina atlasa je 68 mm (SD=4,7), dok dužina poprečnog izdanka iznosi 32 mm (SD=2,9). Srednja visina trnastog izdanka atlasa je 56 mm (SD=16,0), a poprečnog izdanka epistrofeja 36 mm (SD=8,4). Cluster analiza pokazuje da rast veličine kralježaka linearno prati porast veličine tijela te da je veličina kralježaka u vrlo visokoj međuzavisnosti s kraniometrijskim podacima.

Correlation between size of the first vertebrae and the body compared with the size of the skull in the Adriatic bottlenose dolphin (*Tursiops truncatus*, Montagu 1821)

In this investigation we have used skeleton pieces from eight individuals of the bottlenose dolphin (*Tursiops truncatus*, Montagu 1821), collected from the Adriatic Sea during the period since 1990. Using caliper we measured exactly determined parameters of atlas and epistropheus, which are forming one bone in the bottlenose dolphin. With the scope to reveal a relationship between the size of vertebrae and the size of the body we also wanted to explore the link between those parameters and craniometric values. Measured data were examined by standard descriptive methods and by cluster analysis. The mean value of the greatest width of articulating surface of atlas was 105 mm with standard deviation (SD) 5.7, the average height of atlas was 68 mm (SD=4.7), while

length of transversal process of atlas was 33 mm (SD=2.9). The mean of the greatest length of spinous process of atlas was 56 mm (SD=16) and left transverse process of the axis was 36 mm (SD=8.4). The cluster analysis pointed out that the growth of vertebrae was followed by the growth of the size of the body. The size of vertebrae was in very high correlation with craniometric values.

---

(86)

Damir Mihelić[1], Alen Slavica[2], Vesna Gjurčević-Kantura[1], Krešimir Babić[1], Goran Bačić[2]

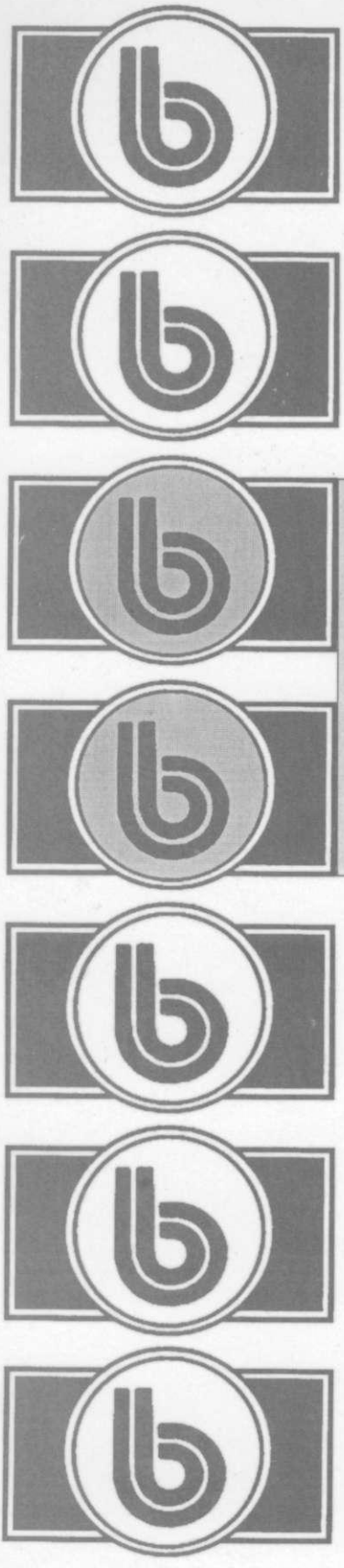
[1]Zavod za anatomiju, histologiju i embriologiju, Veterinarski fakultet Sveučilišta u Zagrebu, Heinzelova 55, 10000 Zagreb, Hrvatska
[2]Zavod za porodništvo, sterilitet i U.O., Veterinarski fakultet Sveučilišta u Zagrebu, Heinzelova 55, 10000 Zagreb, Hrvatska

Utjecaj zagađenosti mora na histoenzimsku aktivnost u nekim tkivima cipla (*Mugil cephalus*)

Poznato je kako anorganske i organske tvari štetno utječu na žive organizme. U moru luka i pristaništa uz organska znatna su i anorganska zagađenja. Unatoč zagađenosti mora često se nalaze pojedine vrste riba, posebice cipal (*Mugil cephalus*) koji ovdje ima obilje hrane, a ponekad se nalazi i na tržnicama kao konzumna riba. U našem istraživanju nastojali smo istražiti kakav je utjecaj zagađenosti mora na pojedina tkiva cipla. Stoga smo istražili neke hidrolitske i oksidativne enzime u tkivu škrga, koži, hepatopankreasu, probavnom sustavu i spolnim organima, koji su najizloženiji odnosno najosjetljiviji na organska i anorganska zagađenja. Unatoč mogućnosti preživljavanja i života u više ili manje zaleđenom moru uočene su razlike u aktivnosti oksidativnih i hidrolitskih enzima u istraživanim tkivima. Dobiveni rezultati upućuju na potrebu poduzimanja odgovarajućih mjera u sprečavanju daljnjeg zagađivanja mora te plasmana takove ribe na tržište u što bi se aktivnije trebali uključiti nadležni organi Uprave (veterinarska i sanitarna inspekcija).

Impact of sea pollution on histoenzyme activities of some striped mullet tissues (*Mugil cephalus*)

It is known that inorganic and organic substances have a negative impact on livings organisms. In sea parts and piers besides organic pollution there is a considerable inorganic one. In spite of the polluted sea, some species of fish can be frequently found, in particular the striped mullet (*Mugil cephalus*) which has the abundance of food there, and is sometimes sold as consumer goods on markets. In our research we have tried to explore the impact of sea pollution on some tissues of striped mullets. So, we have examined some hydrolytic and oxidative enzymes in gill tissues, in skin, hepatopancreas, digestive and reproduction organs which are exposed the most and which are the most sensitive to organic and inorganic pollution. In spite of a possibility to survive and the life in the more or less polluted sea, differences have been observed in activities of oxidative and hydrolytic enzymes of the examined tissues.



Hrvatsko biološko društvo
Croatian Biological Society

ŠESTI KONGRES BIOLOGA HRVATSKE

s međunarodnim sudjelovanjem

Opatija, Hrvatska, 22.-26. rujna 1997.

THE SIXTH CONGRESS OF CROATIAN BIOLOGISTS

with international participation

Opatija, Croatia, 22-26 September 1997

ZBORNIK SAŽETAKA PRIOPĆENJA

PROCEEDINGS OF ABSTRACTS

Zagreb, 1997.

ZBORNIK SAŽETAKA PRIOPĆENJA ŠESTOG KONGRESA BIOLOGA HRVATSKE

PROCEEDINGS OF ABSTRACTS OF THE PAPERS OF THE SIXTH CONGRESS OF CROATIAN BIOLOGISTS

Uredio:
(Edited by:)
Đuro Huber

Tehnički urednik:
(Technical editor:)
Josip Kusak

Hrvatsko biološko društvo

Zagreb, 1997.