SKULL BIOMORPHOLOGY OF SOME FOX KIND REPRESENTATIVES

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In foxes the most variable data is the total length of the skull, variability index of which is ±5,1, in Palestinian fox it is equal ±1,3. In Fennec it is less variable, but the total length of the skull is also high variable, index of variability is equal ±0,9. The length of the bony palate and the length of the mandible are slightly smaller, but also high variable among the values of length in foxes, indicators of which are respectively ±3,7 and ±4,5. In the Palestinian fox these values are slightly smaller, but also high variable and almost amounting to one another and are respectively ±0,8 and ±0,7. In measurements of the studied specimens of Fennec skulls these figures are highly variable and are equal in respect to one another and are respectively ±1,1 and ±1,1. The width of the skull at the level of the zygomatic arches is also variable in the studied specimens of the fox's skull, the variability index of which is ±1,9, while in Palestinian foxes variability index is ±0,3, but in Fennec - ±0,4. Some variability of the width of the skull at the level of zygomatic processes of the frontal bone should be noted (a1), the value of which is equal to ±3,9 in fox; in Palestinian fox it is equal to ±0,9, in Fennec - ±0,7. The width of the occipital bone behind zygomatic hole should also be noted in fox, which is also equally variable and amounts to ±4,0, in Fennec it is equal to ±0,9, in Palestinian fox - ±0,8. But the most variable value in foxes is the anatomical front axle, the value of which is equal to ± 7,8, in Palestinian fox it is ±1,3, while in Fennec it is only ±1,1. The variability in the length of the nasal bones should also be noted, the value in foxes is equal to ±1,9, in the Palestinian fox and Fennec - equal to ±0,8, despite the significant difference in size of the skull and respectively facial part. It is important to note the zero value of sagittal crest height of Fennec, while in fox it is equal to ±0,7 and in the Palestinian fox ±0,2. The variability of other measurements is significantly lower because ranges from ±0,3 to ±3,2 in foxes, from ±0,2 to ±0,8 in the Palestinian fox, and in Fennec ranges from ±0,3 to ±0,7.

The length of the bony palate in foxes, Palestinian fox and Fennec is actually a half of the total length of the skull (49.7 %, 51.7 % and 47.4 % respectively). However, the length of the maxillary part of the bony palate and the length of the dental row are almost identical and are respectively 38.0 % and 38.9 % in foxes, in the Palestinian fox they have a little difference - 41.1 % and 36.5 % respectively, but in Fennec they are almost the same and are equal to 37.9 % and 36.7 % respectively relative to the total length of the skull. However, the total length of the mandible is only 20 % smaller/bigger than the total length of the skull. The length of the dental row of mandible in foxes is only slightly more than a half of the total length of the mandible (56.8 %), and the height of the caudal end of the lower jaw relative to its length is slightly less (33.5 %). In the Palestinian foxes, these values are equal to 54.7 % and 35.5 % respectively and in Fennec - 61.4 % and 30.6 % respectively. It should be noted that the length of the sagittal crest is 29 % in foxes, 13 % in Palestinian foxes and only 8 % in Fennec of the total length of the skull. However, anatomical facial axis is slightly more than a half of the total length of the skull (66.6 % in foxes, 78.9 % in the Palestinian foxes and 65.7 % in Fennec). The length of the brain part of the skull in foxes is only 45.0 %, in the Palestinian fox - 40.9 % and 47.7 % in Fennec of the total length of the skull. It should be noted that the length of the nasal bones in studied foxes is 37.7 %, in the Palestinian foxes - 36.5 % and 29.6 % in Fennec. Certain features are observed in the ratio of the width of the various structures of the skull of the genus Vulpes of Canidae family. Thus, the width of the skull at the level of the zygomatic arches relative to its overall length is quite significant (54.2 %, 54.1 %, 54.3 % - respectively in fox, Palestinian fox and Fennec). The width of the skull at the area of zygomatic processes of the frontal bones relative to its greatest width is 45.8 %, 48.4 %, 49.7 % respectively to representatives. However, the width of the bone palate at the level of the first premolar relative to the greatest width of the skull is actually twice lower (19.2 %, 25.9 %, 25.8 % respectively of representatives). The maximum

width of the bone palate relative to the greatest width of the skull is something greater (41.5 %, 42.8 % and 43.45 respectively fox, Palestinian fox and Fennec). However, the maximum width of the bone palate at the level of the last molar is much lower (25.6 %, 22.0 %, 23.7 % respectively of representatives). The width of choanae at the level of caudal edge of the palatine bone is even smaller (16.8 %, 17.6 %, 17.3 % respectively of representatives) and the width of choanae at the level of processus pterygoidens of os sphenoidale is the lowest (12.8 %, 12.7 %, 12.7 % respectively). However, the width of the occipital bone behind the zygomatic arches relative to the greatest width of the skull is significantly higher (50.4 %, 57.6 %, 65.4 % respectively of representatives). The height of the brain part of the skull regarding its overall height is 20.5 % and 22.6 % in fox and the Palestinian fox, but in Fennec it is equal to 0. This shows that the sagittal crest has weak development and is 10 % relative to the total height of the skull in fox and Palestinian fox, while in Fennec it is not sufficiently developed or poorly developed. This in turn suggests not very powerful development of masticatory muscles and muscular system in Fennec is generally poorly developed.

Biomorphology, fox, fox skull, Fenech, skull Fenech, Palestinian fox, skull Palestinian foxes