

BIOMORPHOLOGY OF GRUIFORMES SHOULDER JOINT SKELETON

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The skeletal structures of the shoulder joint of birds include scapula, which has a saber form, coracoid, clavicle and humerus. Gruiformes are characterized by elongation of scapula, acromion is directed upwards. Clavicles form a fork that in the proximal part has expanded ends. Coracoid is column shaped, extended at the base. In the medial edge of coracoid in the region of its proximal part the lateral process of coracoid is placed. It should be noted that in Eurasian coot and sarus crane in the distal part of lateral surface of coracoid a distal process of coracoid is located, also another one difference of coracoid bone is that it is fused with a sternum in sarus crane. The proximal end of coracoid in studied birds is tilted laterally.

Osteometric analysis shows that the longest humerus relatively to the length of the wing is in grey crowned crane, and the lowest is in common moorhen. The base of coracoid is the broadest in sarus crane, and the narrowest in grey crowned crane. At mid-length of coracoid its width is also the largest in sarus crane, and the lowest in Eurasian coot. The width of the proximal end of coracoid is the smallest in grey crowned crane, and the largest in sarus crane. The thickness of coracoid at different levels in the studied Gruiformes is not the same. Thus, the thickness of coracoid in the middle is the biggest in sarus crane, and the lowest in Eurasian coot. In the proximal part the thickness of coracoid is the largest in grey crowned crane, and the lowest in Eurasian coot. The length of the coracoid relatively to the scapula is the largest in Eurasian coot, and the lowest in sarus crane.

The width of the scapula relatively to its overall length at the level of glenoid cavity is the smallest in Eurasian coot, and the biggest in common moorhen. Then the width of the scapula relatively to its length in investigated Gruiformes remains the largest in common moorhen, and the smallest in Eurasian coot. The longest clavicle relatively to the length of the wing is in Eurasian coot, and the shortest in grey crowned crane.

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