BONES OSTEOMETRY OF BOVINE FETUSES AGED FROM 3.6 – 7.0 MONTH

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Summary. The aim of this work was to determine, the age of the most intensive growth of the forelimb and hindlimb bones and their epiphysis. When armbone (humerus), antebrachii and forecannon (metacarpus) bones measurements were made, it an even forelimb bones growth (P>0,001) was observed. The same consistent was found measuring proximal and distal epiphysis of humerus and radius (P>0,001). The data received by measuring 4.5 to 5.0 month age and 5.0 to 5.5 months of age have shown that humerus proksimal part and metacarpal epiphysis is growing slower in this period, particulary, the distal epiphysis. Older, aged (5.5 to 7.0 months) forelimb fetuses limbs measurements have shown, that armbone, radius, ulna and forecannon bones to grown more intensively in the second research period (6.5 to 7.0 months), radius grew evenly. Analyzing data of bones epiphysis width, it was observed that even and intensive epiphysys growth starts at of 4.5 to 5.0 age period and continues untill birth. But humerus proximal epiphysis growth is out of context, because it starts to grow intensively of 5.0 – 5.5 monthsthe fetus age. Measuring hindlimb tubular bones, observed an even thighbone (femur GLI – the length of the bone from lateral side, P>0.001), and tibia growth (GL – the length of the bone, P>0.001) with a slightl pause in 5.5 – 6.0 months period were observed. Thighbone inner side length (GLC – bone length from the medial side) and metatarsal bone (GL) growth slow down as seen in 4.0 – 5.0 months period. The most intensively metatarsal bone developes at 6.0 to 7.0 months period (P>0.001). Hindlimb bone epiphysis width analysis has shown., that at 4.0 to 5.0 age period hindlimb bone epiphyses developes slower. During the whole research period grew thighbone distal epiphysis (Bd – distal epiphysis width, p>0,01) and tibia proksimal epiphysis (Bp – proximal epiphysis width, P>0,001) the most intensively. A little bit slower thighbone and tibia istal epiphysis were growing (Bd, P<0,01). During the research period metatatarsal bone epiphysis was growing slower at 4.0 to 6.0 months period (P>0,001), growth was more active in the last month.

Keywords: Fetuses, cattle, osteometry, Lithuanian Black and White breed.