

# EVALUATION OF THE MORPHO-METRIC INDICES OF LOCAL BEES FROM THE QUEEN REPRODUCTION APIARY

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## **Abstract**

*The purpose of the research is to evaluate the morphometric indices of local bees, select the most relevant genotypes adaptable to natural conditions and form the brood batch from maternal and paternal families for queen reproduction. It was evaluated that the morphometric indices of worker bees from maternal colonies constitute on average: proboscis length – 6.41 mm, the size between the protrusions of tergite-3 – 4.44 mm, tergite-3 length – 2.13 mm, sternite-3 width – 3.87 mm, sternite-3 length – 2.59 mm, length of the cerci mirrors of sternite-3 – 2.23 mm, width of the cerci mirrors of sternite-3 – 1.50 mm, length of the right greater wing – 8.73 mm, width of the right greater wing – 2.95 mm, cubital index – 34.94%, tarsus length – 1.89 mm, tarsus width – 1.04 mm and positive discoidal dislocation – 82.65% and neutral – 17.35%. Larvae aged 8-12 hours were collected from the maternal colonies for transfer to the queens' reproduction. It was revealed that the amount of honey extracted from a colony of bees using pastoral beehives is 63.3-73.8 kg. It was found that local bees are better adapted and resistant to the Varroa mite than Carpathian bees imported from abroad.*

**Key words:** local Carpathian bee colonies, morphometric, morpho-productive indices