Summary

Owing to their specific biological peculiarities, bees furnish people with such important products as honey, bees wax, pollen, comb cell pollen, propolis, queen bee milk, bee poison.

It is impossible to obtain the increase of the productivity of bee families without studying morfo/metrical characters and biological peculiarities of bees, as any technology should be based on biological studies of the subject. Therefore in order to evaluate bee families, a number of biochemical, biophysical and so on tests have been proposed.

Both the effectuation of breeding works and the study of morfo/metrical characters give the possibility to keep material in the limits of pure race, to select and ameliorate the families of high productivity which meet the requirements of our conditions.

In order to study morfo/metrical characters of working bees from Republic of Moldova the samples of 30 bees from the South of the republic, 36 bee families from the Central zone and 26 from the North have been taken.

The measurement of exterior characters has been effectuated with the help of the microscope MBS-9.

Linear measurements realized through the division of the decrease of the ocular, have been transformed in millimeters.

During the process of selection and amelioration great importance is given to the exterior characters of individuals of bee families.

It has been found that working bees from the Republic of Moldova have the length of the trunk – 6,01-6,58 mm, the dimensions between prominent parts of tergite – 3 are 4,28 – 4,43 mm, the length of the tergite – 3 are 4,28 – 4,43 mm, the length of territory is 1,97-2,10 mm, the length of the inferior segment of the abdomen – 3 is 3,77-4,33 mm, its breadth 2,41-2,61 mm, wax glands have the length of 2,06-2,40 mm, their breadth is 1,46-1,55 mm, the big right area has the length of the tarsus is of 1,95-2,02 mm, its breadth is 1,10-1,15 mm and the hive index is 43,4-49,8%.

It is recommended to select the families of bees that correspond to the standard for the reproduction of queen bees, the others should be used to obtain apicultural products and to pollinate crops.