

FOUR POPULATIONS OF APIS MELLIFERA MELLIFERA L. IN URALS

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Apis mellifera mellifera L. is a very interesting honey bee. Its high cold endurance and high capacity for work had made it indispensable for northern beekeeping in the Urals. The climate of the the Urals is very inhospitable with long winters and short summers. The bees of the Urals are therefore special dark European bees adapted to the region. Unfortunately, many areas were hybridized by *Apis mellifera caucasica*.

In the biochemistry and insect adaptability laboratory we carry out research into these autochthonous honey bees. We use different methods for the identification of the dark european bee population. We found in the Bashkortostan republic and the Perm oblast (Russia, South and Middle Urals) four unique not hybridized populations of *Apis mellifera mellifera* by morphometrical, molecular methods. We investigated by PCR analysis of the intergenic region COI-COII; microsatellite loci 4A110, Ap243, Ap049; the locus of gene antibacterial peptide defensin; locus of 2 subunit NADH dehydrogenase (ND2). We sent sequences of the ND2 gene to GenBank. Future plans include identification of new dark european honey bees in other regions of Russia.

Our investigations will also help to restore the native gene pool of *Apis mellifera mellifera* L. in the hybridized regions. We would be glad to collaborate with other European bee researchers and beekeepers. We think, all subspecies of bees must live separately and must not be hybridized. We must save unique dark European honey bee. **Our Address for contact:** Institute of Biochemistry and Genetics. Ufa Scientific Centre of Russian Academy of Sciences. Russia, Bashkortostan, 450054, Prospekt Oktyabrya, 71. Laboratory of Ph.D. A. G. Nikolenko. E-mail: apismell@hotmail.com

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