

Molecular markers discriminating Greek from Serbian honey bees.

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Abstract

Preliminary sequence data from three mtDNA segments of honey bee populations from two locations from N. Greece and two locations from Serbia (3 colonies / location) were used to find out molecular markers discriminating Greek from Serbian honey bees.

The mtDNA segments analyzed was a portion of COI, 16srDNA and ND5, amplified using PCR after the extraction of total DNA. A total of about 940bp, 780bp and 630bp respectively were obtained by sequencing the above mentioned segments. CLUSTAL package was used for the alignment of these sequences. Nucleotide divergence was calculated using MEGA package and cladogram was constructed with various phylogenetic packages.

The results of this preliminary investigation show that Greek from Serbian honey bees are discriminating as concerning the 16srDNA gene segment.