

A group of beekeepers from south provinces of Iran

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The dwarf honey bee, *Apis florea* F. is one of the two species of honey bees in Iran which is found in southern, southeastern and western provinces. The purpose of the current project was to implement the legal duty of registration, monitoring and protection of the dwarf honey bee, which was carried out in the framework of the national plan for the registration and monitoring of indigenous populations of the country and jointly by the Animal Science Research Institute and the Breeding Center of Iran. For this purpose, 1050 worker bees were collected from 35 colonies from 7 provinces in 2021-2023. Then, 17 morphological characteristics were measured and 17850 data were obtained. Analysis of variance of morphometric characters showed that characteristic of hind metatarsus width had the lowest diversity. However, length of half loop over the third and fourth dorsal abdominal segments, length of hind leg and tongue had the highest diversity as the most distinctive morphological characteristics throughout the Iranian dwarf honey bee. The number of right wing hooks were more than left wing hooks. So, it is suggested to count just the number of right hooks. There was a significant positive correlation between the width of the third and fourth dorsal abdominal segments, length and width of the front wing and length of hind leg. There was also a significant negative correlation between the length of tongue and length of fore wing and cubital index. Besides, there was a significant positive correlation within specification of the third and fourth dorsal abdominal segments, length and width of the front wings, and length of legs in dwarf bees with latitude, elevation and annual rainfall. Results indicated that bees from highlands are larger and also confirmed that wing of honey bees in elevated and high rainfall areas has less hook numbers. Based on the results from the investigation of the biological characteristics, the average honey production, calmness, aggressiveness, brood rearing, colony area and number of queen cells were 1.35 kg, 1.79, 1.7, 619.25 cm³, 907.31 cm³ and 2.34 numbers, respectively.