

IDENTIFICATION AND MORPHOLOGICAL CHARACTERISTICS OF HONEY BEE *APIS INDICA* FROM THE REGION OF AMETHI, UTTAR PRADESH, INDIA

Saleem Ahamad Khan, Rajneesh Tripathi,

^{1,2}Jagdeesh Prasad Jhabarmal Tiberawala University, Jhunjhunu, Rajasthan, (India)

ABSTRACT

Honey bees have an important place in agriculture and also suitable for environmental monitoring. There are four species occurring in India of which *Apis indica* is predominant bees found and domesticated in India. They usually build multiple combed nest in tree hollows and manmade structures. These bees can adapt to living in purpose-made hives and cavities. For the study on identification and morphological characterization of *Apis indica*, a total of 120 samples were collected from various sampling sites of District Amethi, Uttar Pradesh, India. These samples were identified with the help of standard taxonomic keys and various morphological characteristics recorded for morphometric analysis. After that these samples were preserved in 70% formalin solution for future reference. The samples collected during various seasons revealed that many of the morphological characters such as length of flagellum, antenna, fore wing, third and sixth sternites and breadth of hind wing showed significantly higher values for the samples collected during summer and autumn seasons as compared to those collected in other seasons. The present study provides the important information on the morphological variation in Indian honey bee *Apis indica* in different seasons from the Amethi regions of Uttar Pradesh, India, which is an important parameter in racial investigation of honeybees.

Keywords: *Indian Honey Bee, Apis Indica, Identification, Morphometric Analysis, Amethi U.P.*