



Current Trends and Advancements in Species

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AWARDS

Among 20,000 bee species globally, honey bees are the well-known taxa because of their apicultural use and effective pollinating agents. Ten extant species, the dwarf, the giant and the cavity nesting honey bees including the imported European honey bee, *Apis mellifera*, are found in Asia. Four species each in India and Thailand, five species each in China and Indonesia, are reported besides *A. mellifera*. Only recently, *Apis indica*, the Plains Honey Bee of south India and *A. breviligula*, the Giant Philippine Honey Bee, are recognized as valid species. Many works had been done on the honey bees nevertheless, there is no report on the indigenous honey bee species of Bhutan although *Apis laboriosa*, *A. dorsata* and *A. florae* are regarded as native to Bhutan without any authentic study. This paper reports five indigenous species and *A. mellifera*, which is imported from India in 1986 (National Biodiversity Strategies and Action Plan, 2014) Specimens were collected with swift net and killed with Ethyl Acetate. Photographs were taken with Nikon D5100 with attached AF-S Micro Nikkor 40 mm macro lens. Measurements were taken with digital Vernier caliper nearest to 0.01 mm. Measurement refers to the total length (TL = Head + Mesosoma + Metasoma) unless mentioned. Identifications were based on the keys and descriptions provided by Engel. The pinned and dried specimens were deposited in Zoology Museum, Sherubtse College, Royal University of Bhutan. Altitude (Alt.) is provided in meters (m). Latitudes and longitudes were provided in decimal degrees. It is very similar to *A. laboriosa* in size however differs in its lower altitudinal distribution and in having tergum I-III/IV wholly bright orange

yellow. As the altitude increases, very less *A. dorsata* is found with clear indication of altitudinal separation of the two species though their feeding ground overlaps. This species nests on rocks, buildings and the tree branch like *A. laboriosa*. Measurements: 4♀: 16-18.12 mm.

This species is common in higher altitudes of Bhutan. It is similar to *A. dorsata* however, differs in its higher altitudinal distribution and in having all abdominal tergites black, long body hairs and unraised ocelli.

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