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## Biometric studies on different species of honeybees in Manipur region

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Study on biometric studies on some species of honeybees in Manipur were carried out during 2017-18 under AICRP on Honeybees and Pollinators, Imphal centre, Department of Entomology College of Agriculture, Central Agricultural University, Imphal.During the study it was found that the longest mean tongue length was found in A. dorsata (Imphal) with a mean length of  $4.19\pm0.07$  mm followed by A. mellifera  $(3.87\pm0.12 \text{ mm})$  and shortest tongue length was found in A. florea with a mean length of 2.14±0.05mm. The length & breadth of forewing was longest in A. dorsata with a mean length of (12.5±0.00 mm) & (4.32 ±0.12 mm) respectively followed by A. mellifera (8.89±0.14 mm) & (3.15 ±0.06 mm) and the shortest length and breadth of forewing was found in A.florea with a mean length of (6.94±0.28 mm)& (2.40±0.06mm)respectively. The longest cubital index was found in A. dorsata with a mean length of (2.88±0.08 mm) followed by A. mellifera (2.80 ±0.05mm) & the shortest cubital index was found in A. florea (2.87±0.09mm). The length & breadth of hind wing was longest in A. dorsata with a mean length of (8.74±0.08mm)& (2.57±.0.06mm)respectively followed by A. mellifera (7.87±0.08mm) & (2.57±0.12mm) respectively & the shortest length & breadth was found in A. florea with a mean length of  $(4.77 \pm 0.13 \text{ mm}) \& (1.46 \pm 0.07 \text{ mm})$  respectively. The number of wing hooks was highest in A. dorsata with a mean no. of (27±0.06) followed by A. mellifera (20±1.25) & the minimum no. of wing hooks was found in A. florea (11±1.06). The length & breadth of metatarsus was found maximum in A.dorsata with length of (1.39±0.10)& (0.5±0.00mm) respectively followed by A. mellifera (1.22 ±1.05 mm) & (0.37 ±0.00mm) and the minimum length & breadth of metatarsus was found in A. florea with a mean length of (0.72±0.05mm)& (0.25 ±0.00mm) respectively. The width of 3<sup>rd</sup> & 4<sup>th</sup> tergite was found maximum in A. dorsata with a (2.72±0.10mm)and (2.79±0.06mm)and minimum width was found in A. florea with mean width of (1.49±0.10mm) and (1.40±0.06mm) respectively. The length of 3<sup>rd</sup> sternite was maximum in A. dorsata with mean length of  $(5.40\pm0.13$ mm) and minimum in A. florea  $(2.69\pm0.07$ mm).

Keywords: Apis, Tongue, Wing, Hooks.



