

HONEYBEE MITES “ A THREAT TO THE DEVELOPMENT OF BEEKEEPING IN NEPAL”

ABSTRACT

A study was done to identify the honeybee mites and their population levels on *Apis mellifera*, *A. cerana* and *A. dorsata* honeybee species from June to May 2003 at Chitwan, Nepal. The mite *Tropilaelaps clareae* was identified as the major pest of mellifera and dorsata bees and *Varroa jacobsoni* as the major pest of cerana bees. The varroa mite of cerana colonies did not infest the mellifera and dorsata bees. Similarly, the tropilaelaps from mellifera and dorsata colonies did not infest the cerana bees when kept together for the whole year. The presence of these two mite species was found regular throughout the year with significantly higher number during peak brood rearing periods. The economic loss caused by these mites is higher in Nepal and therefore needs to develop an appropriate control method(s). The source of mite infestation to dorsata colonies is not known, as they are migratory bees and is the field of future study.

Key Words: Mite, Mellifera, Cerana

NESTING BEHAVIOR OF GIANT HONEY BEES (APIS DORSATA)

ABSTRACT

A study was carried out to investigate the nesting behavior of giant honeybee *Apis dorsata* at Chitwan district, Nepal from 20001 to 2003. The bees preferred more to build the nest on tall and safe buildings followed by

on trees and rarely on rocks. They gave highest preference to the strong-cemented water tank and then to residential buildings having flat slab made out of bricks and cement for making their nests. In absence of such buildings, the bees built the nests on the strong live big branches of simal (*Bombax spp*) trees. They never built the nests on old and weak buildings and dead trees which were not strong enough to support the load of the nest. The bees built the nests at an elevation of 2m to 50 m from ground level at the sunny, open and undisturbed area . Highest preference was given to the same spot of previous year's nest to rebuild their nest. The bees never rebuilt their nests on the spot of previous nest if it was burnt on fire or treated with chemical. Small swarms of the same place shared the space of the same buildings or trees for making their nests. Several colonies friendly lived together very close sometime touching each other's nest and did not rub for honey and pollen. The size of the nest varied from 2cm to 30cm in breadth and 10cm to 130cm in length with a shape variation of round to elliptical. Honey and pollen was stored at one of the corner of the nest providing more area for brood production. The bees built the nest vertically with the honey and pollen store at the uppers most corner when the nesting place was extended vertically to give the proper balance.

Key words: Nest, Behavior, Building, Tree

