Session: Melissopalynology and Floral Phenology

Pollen analysis of honey collected from Western ghat regions of Karnataka, India with particular emphasis on bee foraging on mangroves

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Apiary industry is flourishing in the Western ghat forested area of costal Karnataka, India on account of rich vegetation available for bee foraging. Large tracts of coastal Karnataka, particularly Kundapura, Udyavara, Udupi and Nada are known for luxurious growth of mangroves. In order to exploit the bee foraging potential of mangroves, bee colonies were maintained by installing bee boxes in various localities.

100 honey produced by Apis cerana deposited in the bee boxes were subjected to pollen analysis by adopting routine methodology recommended by International Commission for Bee Botany (Louveaux et al. 1978). More than 138 pollen types distributed in 60 plant families were recovered from honey samples. They were characterized into 57 unifloral, 42 multifloral and one bifloral types. Pollen of families such as Myrtaceae, Aracaceae and Sapindaceae were more frequent in the honey samples.

In addition, pollen of mangroves such as Rhizophora mucronata, Kandelia kandel, Avicennia sp. And Sonneratia caseolaris were also recorded from honey samples of Nada and Udupi centers. In view of the rich occurrence of various pollen types including mangrove pollen in the honey samples, it is advisable to intensify apiculture activities in this region, a suggestion supported by melissopalynological research carried out so far (Agashe 2006, Agashe & Rangaswamy 2002).

References: