Rearing Technology For The Stingless Bees: A High Valued Honey Producer And An Efficient Crop Pollinator

The stingless bee or the dammer bee (*Tetragonula iridipennis*), like the true honey bees of genus *Apis* is a social bee living in perennial colonies with 20000-50000 worker bees and it belongs to same order and family (Hymenoptera; Apidae; Meliponinae). This stingless honey bee is widely distributed in subtropical and tropical regions of our country and its feral colonies are commonly found in cavities in the old trees and buildings. Being very small in size (<4mm), its honey production potential is lesser compared with honey bees of genus *Apis*, however, this bee species is highly valued for its medicinal honey which is in great demand and hence fetches 8-10 times more price in market compared with *Apis* honey. In north India, this stingless bee species is occurring in Punjab, Haryana, Rajasthan, Gujarat, MP, UP, Bihar, Jharkhand and Uttarakhand as wild in its natural habitats and nesting substrates from where honey harvesting is not possible without destruction of the colonies.

Rearing technique of this stingless honey bee has now developed for the first time in north India.

Advantages: In natural nesting shelters, the honey is stored in pots and kept intermingled with pollen pots and brood. In devised wooden boxes, it is possible to keep honey storage separate from other contents of the colony and hence the honey can be obtained without any damage to the brood.

- Besides production of high valued medicinal honey, other products such as pollen and propolis can also be obtained to get higher income.
- Being stingless, rearing of these bees in devised wooden boxes can be easily done by women farmers.
- The technology for rearing of stingless bees can be adopted in semi-urban areas.
- Migration of stingless bee colonies to areas having plenty bee flora for getting higher honey production, is possible in devised wooden hives.
- The stingless bees are efficient pollinators of many agricultural and horticultural crops and pollination services in target crops can be supplemented keeping colonies in fields.
- Devised technology can be employed for achieving desired pollination in high valued crops under protected cultivation (polyhouses).
- Devised rearing technique would help conservation of the valuable stingless honey bee species, maintaining biodiversity, additional direct and indirect income to the farmers, unemployed youth and women.