

SUMMARY

Apiary is gradually being paid more attention worldwide with the increasing demand of honey, pollen pellet and bee wax. Sustenance and productivity of it is very much dependent on the vegetation all around the locality, in which apiary is being practiced. Some areas in North 24 Paraganas were chosen as working sites due to the presence of a rich plant diversity, practice of apiary by many families and feasibility in regard of communicational facilities and accessibility.

Melissopalynological works were carried out with the honey samples, corbicular loads and pollens retrieved from the body surface of bees, regularly collecting samples in every month for three consecutive years. The scores of pollens made from the studies were judged in the light of the recommendation made by Louveaux *et al* (1978). On the basis of that 'predominating', 'secondary', 'important minor' and 'minor' categories of pollens were determined. The study showed altogether 56 plant species as contributors in apiary and 45 members of them as nectariferous. Amongst nectariferous plants 6 species were designated as 'predominant', 3 species as 'secondary', 19 as 'important minor' and 17 species as 'minor'. In other consideration 11 species were noted to be purely nectariferous, 18 species as purely polliniferous and 27 as both nectariferous as well as polliniferous.

Unifloral honey of six different species has been noted to be produced in nine months in a year, while three months, February, April and November, on an average, showed the production of multifloral honey. *Brassica* sp., *Ziziphus mauritiana*, *Sesamum indicum*, *Amaranthus* sp., *Trema orientalis* and *Poa gangetica* represented six different unifloral honey. Monsoon showed scarcity of nectariferous/polliniferous plants and a concomitant downfall of honey production, however, abundance of pollen of *Trema orientalis* in honey sample of this period seemed to be quite prospective.