



A REPORT ON ECONOMIC IMPORTANCE OF HONEY AND OTHER BEE PRODUCTS.

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ABSTRACT Honey has been one of the most highly valued element in Indian culture. It has been used since ages for cooking, for its medicinal properties and as an active ingredient in beauty products. Rearing of honey bee and extracting its products such as honey and wax is proved to be very economic and income generating. Culture of honey bees is called Apiculture, which is a scientific method of rearing, breeding and managing bees. Culturing bees also helps in crop pollination. Bee keeping has been practiced in India since time immemorial. The earliest reference dates back to Vedas and Ramayana, however, the Western method of Apiculture was introduced first in India in late 19th century in Bengal and Punjab. Apiculture is already an industry in developed countries and in the developing countries, its full economic potential is yet to be realized.

KEYWORDS :

Honey bees are the subset of bees which represent a smaller fraction of bee diversity. These bees are the tiny living members of the tribal apini all in the genus *Apis* and all of which produce and store liquified sugar(honey) to some degree and construct colonial nests out of wax secreted by the worker bees in the colony. Other types of related bees produce and store honey but only members of Genus *apis* are considered as "True Honey Bee". Honey bees now live in all parts of the world except in extreme polar region. Bee adaptability to different climates and environment has proved to be genuinely amazing. As a result of specific climate conditions and peculiarities of nectariferous flora, there developed various breeds of honeybees during the course of their evolutionary history. India has all the 4 species of honey bees :

- 1) *Apis cerena indica* (Indian bee)
- 2) *Apis dorsata* (Rock bee)
- 3) *Apis mellifera* (European bee)
- 4) *Apis floreda* (Little bee)

Economic importance of honey :

Honey is used by human beings in different ways of which the most important are food and medicine.

- 1) Food value of honey
- 2) Medicine value
- 3) Bee wax
- 4) Other uses of honey.

Honey as food :

The food value of honey can be estimated by the fact that 200gms of honey provides nourishment as 11.5 litres of milk or 1.6kg of cream and 330gms of meat. 2.1gms of honey provides as much as 67K cal of energy. It contains sugars, minerals, vitamins and other vital elements that are readily absorbed by the system. Honey is used in many dishes as it adds unique flavour to the food and enhances its taste. It can be taken by both healthy man and ill person, anytime, during any season. However, excess intake of honey may cause digestive problems, increase blood sugar level and causes too much weight gain.

Honey as medicine :

Honey is the major honey bee product in terms of familiarity and profit. Since beginning, much of attention has been focused on its potential health benefits for humans. Honey is used in counter pharmaceuticals and drug preparations. It is proved to be a desirable medicinal product. Honey has been regarded as a cure for many ills from early times which is used to treat many diseases, particularly asthmas, coughs, hoarseness and tough morning phlegm have been well known for a long time. Physicians agree that honey is an excellent remedy for constipation, flatulence, colic and purages of the internal organs. Its special virtue as a laxative is also well known.

Today honey is a component of many commercially manufactured pharmaceutical products. Atleast 200 ton are used in the world annually in various types of cough mixture. It is used as a palatable sweetening agent in general pharmaceuticals. Many physicians consider that medicine that has honey is superior to the same medicine made without honey. It is commonly used as a base for ointments and honey is used by itself for treating burns. It is a non-adhesive and most

comfortable dressing than others. It is successfully used as a surgical dressing for open windows, burns and septic infections. It is used for sobering drunken patients and also against sickness resulting from radiation treatment. Honey increases the rate of metabolism of alcohol in the presence of fructose.

Honey is mildly antiseptic and sedative, generally used in ayurvedic system of medicine. It is quite helpful in building up of the blood and also used as preventive agents against cough, cold and fever. It is also used for blood purification and as causative for ulcers, tongue and alimentary canal. It has been shown that typhoid germs are killed by honey within 48 hours. Bracheo pneumonia germs can be killed within 4 days and germs of decency are killed within 50 hours.

Bee wax :

Bee wax are of 2 types : natural and artificial.

The worker bees secretes wax from the gland situated in the abdomen. Bee wax is very useful by-product of beekeeping relationship. It is yellowish to greenish brown colour and insoluble in water, and completely soluble on ether. A large quantity of wax produced and exported come from the *Apis dorsata* bees. Bee wax has been traditionally used for many purposes though there are no sufficient research to provide evidence for it. It has been used for treating fungal infections such as ringworms, high cholesterol, stomach ulcers, muscle pain and diarrhea. Bee wax is also a widely used commodity in cosmetics. Other lesser known uses of bee wax include lubricating agent, crayon making, for problem of extreme dryness of hair. There are candles made of bee wax, which illuminate brighter and gives off pleasant scent too along with purification of surrounding air.

Encyclopedia

Apiculture Manual Volume III, Apiculture by V.K Agarwal and Jawid Ahsan.

REFERENCES :

1. Abrol.D.P(1996) Bees and beekeeping in India. Kallayani Publishers, Ludhiana, India.
2. Crane.E(1990) Bees and beekeeping Science, Practice and World Resources, Heinemall Newness, Oxford, UK.
3. Graham.M.J(1993) The Hive and Honey Bee, Dadant and sons, Hamilton, Illinois.
4. McGregor.S.E(1996) Insect pollination of Cultivated crop plants. ARS, USDA, Washington, D.C.
4. Prof.Bari.S.A(2005) Zoology : Sericulture and Apiculture. Kuvempu University, Jnana Sahyadri, Shankarghatta, Shivamogga.
5. Singh.S(1962) Beekeeping in India, ICAR, New Delhi.
6. P.S Verma : A textbook of Applied Zoology in Apiculture.