Plants for bees

Himalayan cherry – Prunus cerasoides

SURENDRA R JOSHI

Species: Prunus cerasoides

Family: Rosaceae

Common names: Himalayan cherry (English), painyu (Nepali)

Distribution: subtropical to temperate regions from Garhwal of India to southwest China. It is found widely distributed in mid hills of Nepal at altitudes ranging from 1200 to 2400 m above sea level

Flowering period: November

Pollen: medium sized (37.2 ± 0.9 long and 31.2 ± 3.4 broad), oval or triangular in shape and tricolporate with a granular exine sculpture³

Value to bees: provides good amount of nectar and honeydew for bees. Although the sugar concentration of its nectar is very low (13%), the plant is extensively visited by both *Apis cerana* and *Apis mellifera* bees. The total sugar content of its nectar is estimated at 0.132–0.251 mg and honey potential is 100–300 kg/ha¹

Honey: pale yellow and pleasant aroma, bees do not generally produce surplus honey from its flow because the colonies are weak during its flowering season

Other uses: the wood is used for walking sticks, timber and fuel wood. The leaves with smaller branches provide excellent quality fodder for cattle. The fruits are used for some medicinal purposes. Dry twigs are used in sacrificial ceremony *Jap* or *Havan*[•]. It is also believed that a piece of cherry wood kept in the cowshed prevents the devil's eyes towards milk cattle²

Description

Prunus cerasoides is a moderate sized deciduous tree. It has red brown, smooth bark, which peels off in thin horizontal strips. Leaves are short stalked, glossy, long and pointed, toothed, with an elliptic blade 5–8 cm and slender petiole. Flowers are paired or clustered, long stalked, white or pink in colour, borne at the ends of leafless branches or with young leaves. Petals are 1.5 cm, obovate, spreading. Fruit is fleshy outside and has one stony seeded nut, yellow or red in colour, ovoid 1.3–1.6 cm long.



Habitat

Prunus cerasoides is found in mixed or open forest in temperate Himalayan regions from Garhwal of India to Nepal, Sikkim, Bhutan and south-west China. It is also cultivated as an ornamental plant at wayside resting places and public parks or gardens.

Cultural notes

Natural reproduction is by seeds. For germination of the seeds it requires good soil moisture. The Himalayan cherry is recommended for beekeeping-oriented multipurpose plantations on marginal lands and around villages.

Association with bees

Both Apis cerana and Apis mellifera honey bees extensively visit the flowers of Himalayan cherry. As this is one of the very few plants that bloom during early winter, it is very important for the development of colonies during that season. A large number of aphids, Tinocalloides montanus are also found producing an enormous quantity of honeydew from its leaves. Honeydew samples consist 59.9% carbohydrates (6% fructose, 24.3% glucose, 12.4% sucrose and remaining 17.5% other sugars). Bees, ants and flies were found collecting honeydew from the leaf surfaces. Nectar and honeydew collected by bees from this plant is generally used for local consumption. Bees can also produce surplus

honey from its nectar and honeydew if the density of the plant in an area is high. The Himalayan cherry also produces a large amount of pollen but bees do not collect it as during its flowering season the colonies are weak and focus more on nectar collection.

Acknowledgements

I am thankful to Dr Werner Von der Ohe for the analysis of honeydew samples and to Dr Stephan Scheurer for identification of aphids.

References

- JOSHI, R N (1992) Parvarjani Madhu Makkhi Palan (Migratory beekeeping). Madhu Makkhi Palan; Dr Y S Parmar University; Solan, HP, India; pp. 65–69 (in Hindi).
- MAJPURIA, T C; JÓSHI, D P (1989) Religious and useful plants of Nepal and India. Craftman Press; Bangkok, Thailand (2nd revised edition).
- PARTAP, U (1997) Bee flora of Hindu Kush Himalayan region: inventory and management. ICIMOD; Kathmandu, Nepal.

Further reading

HOOKER, J D (1880) The flora of British India. Volume 3. Caprifoliaceae to Apocynaceae L. Reeve & Co. Ltd.; Kent, UK.

S R JOSHI

Indigenous Honeybee Project, ICIMOD, PO Box 3226, Kathmandu, Nepal

sjoshi@icimod.org.uk