





Figure 1. a, Winter scenario of Deepar Beel. b, Visit of the migratory birds to the wetland (Photograph: UB PHOTOS). c, Ipomoea carnea Jacq. sub. sp. fistulosa (Mart. ex Choisy) D. Austin, is among one of the invasive alien species posing serious threat to the native species in the wetland.

effective management of the wetland it is imperative that the core area be protected by prohibiting fishing, imposing restrictions for cultivation in the buffer zone and other kinds of human interference. It is also necessary to educate the local inhabitants about the importance of the Beel and the far-reaching consequences they may face if the area becomes degraded. The Beel can serve as a unique site to boost ecotourism. A joint management policy maybe worked out by the

Forest Department and NGOs for conservation of biodiversity of the area, with the NGOs serving as a link between the Government agencies and the local community.

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## **Boerhaavia diffusa:** An over-exploited plant of medicinal importance in eastern Uttar Pradesh

Boerhaavia diffusa is a herbaceous plant species growing prostrate or ascending upward in habitats like grasslands, agricultural fields, fallow lands, wastelands and residential compounds. It belongs to the family Nyctaginaceae of Agiosperms. The plant is mentioned in the Atharvaveda with the name 'Punarnava', because the top of the plant dries up during the summer season and regenerates again during the rainy season. Thus the plant generally perennates through the roots in the soil. According to Atharvaveda, the plant is digestive, diuretic, anti-inflammatory and is effective in jaundice and stomach ailments. Besides, it provides relief from cough, serves as a potent anti-poison and is also effective against insect bites.

In eastern Uttar Pradesh it is generally known as 'Gajpunna'. Medicinal attributes of the plant are found in its root, which is stout, fusiform and penetrating deep in the soil. Roots of the plant are used to cure jaundice in rural areas of the region, as an indigenous system of disease treatment.

In eastern Uttar Pradesh, which is one of the most backward regions of the state, especially in the districts of Varanasi, Ghazipur, Chandauli, Mirzapur, Bhadohi, Sonebhadra, Gorakhpur, Basti, Deoria, Ballia, Mau and Azamgarh, this plant species is under intense exploitation by rural communities for the cure of jaundice; in the modern system of disease treatment (allopathy), there is no medicine available against the disease. Due to drinking of contaminated water, jaundice has become a major health problem in recent days in the region. In addition, pharmaceutical companies are investing for purchase of the roots of *B. diffusa*.

The Banaras Hindu University, Varanasi has a protected, verdant campus spreading over 1300 acres of land area. The villagers nearby are seen frequently

collecting roots of *B. diffusa* in the campus for medicinal needs and for sale. The university administration has now put complete ban on collection or extraction of the roots of *B. diffusa* as well as other medicinal plants and their parts. However, pilferage of this important medicinal plant is still going on in the university campus.

If the present level of exploitation continues, then within a decade this valuable plant species will vanish from the region. It is the need of the hour to lay special emphasis on conservation of this plant species of medicinal value in eastern Uttar Pradesh.

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