

Ten major wild edible fruits of Chhattisgarh, India

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DOI: <https://doi.org/10.5281/zenodo.20525039>



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Abstract

Wild edible fruits constitute an important component of the traditional food system and livelihood of rural and tribal communities in Chhattisgarh, India. The present communication highlights ten major wild edible fruit species, namely *Phyllanthus emblica*, *Buchanania lanzan*, *Diospyros melanoxylon*, *Aegle marmelos*, *Syzygium cumini*, *Carissa spinarum*, *Cordia myxa*, *Dillenia pentagyna*, *Syzygium salicifolium* and *Flacourtia indica*. These species are widely distributed in forest ecosystems and are utilized for their nutritional, medicinal, and socioeconomic benefits. Besides serving as seasonal food resources, many of these fruits possess therapeutic properties and contribute to local household income through collection and marketing. The documentation of these wild edible fruits emphasizes their significance in food security, biodiversity conservation, and preservation of indigenous knowledge. Sustainable management and conservation of these valuable forest resources are essential to ensure their continued availability and ecological sustainability for future generations.

Keywords: Biodiversity conservation, Forest resources, Indigenous knowledge, Nutritional security, Tribal communities, Wild edible fruits

Introduction

India is endowed with a rich diversity of wild edible plants that have traditionally supported the food and nutritional requirements of indigenous and rural communities (Kapoor et al., 2022). Among these, wild edible fruits occupy a significant place owing to their availability, palatability, and nutritional value (Duguma, 2020). Forest-dependent communities have long utilized these fruits as supplementary food resources, particularly during periods of food scarcity (Fungo et al., 2016). In addition to their dietary importance, many wild fruits possess medicinal properties and contribute to local healthcare practices (Rymbai et al., 2023). Chhattisgarh, located in central India, is recognized for its extensive forest cover and rich tribal heritage (Ahirwar and Bhoi, 2025). The state harbors a diverse range of plant species, many of which provide edible fruits that are regularly collected and consumed by local inhabitants. These fruits are rich sources of vitamins, minerals, antioxidants, and other bioactive compounds that promote human health (Rahaman et al., 2023).

Despite their ecological and socioeconomic significance, many wild edible fruit species remain underutilized and inadequately documented. Rapid land-use changes, habitat degradation, and erosion of traditional knowledge pose serious threats to their sustainable utilization and conservation (Mothupi and Shackleton, 2025). Therefore, documenting important wild edible fruits is essential for preserving indigenous knowledge, promoting biodiversity conservation, and enhancing food security. The present communication highlights ten major wild edible fruit species of Chhattisgarh and emphasizes their importance in supporting the livelihood, nutrition, and cultural traditions of local communities.

Methodology

Information on major ten wild edible fruits of Chhattisgarh was enumerated through field observations and interaction with local tribal communities of selected districts (Kanker, Kondagaon, Narayanpur, Bastar, Jagdalpur, Dantewada, Bijapur, Sukma, Dhamtari, Balod, Gariyab and Raipur). Surveys were conducted in study areas to record commonly utilized wild edible fruit species during 2024-2025. Local tribal communities provided information regarding local names, uses and palatability of the fruits which are recorded using standard methods (Kumar et al., 2013; Jain, 2021; Mishra et al., 2025). Plant species were identified by the author.

Results and discussion

The present study documented ten major wild edible fruit species belonging to nine families from the study areas (Table 1). Among the recorded families, Myrtaceae was represented by two species (*Syzygium cumini* and *Syzygium salicifolium*), while the remaining families were represented by a single species each. The documented fruits are widely consumed by tribal and rural communities and play an important role in supplementing their nutritional requirements. It was observed that several species possess considerable medicinal and economic value too. *Phyllanthus emblica* (Aonla) is traditionally used to enhance immunity and digestive health. *Buchanania lanzan* (Char) is valued for its edible fruits and commercially important seeds. *Diospyros melanoxylon* (Tendu) provides edible fruits and contributes significantly to forest-based livelihoods. Similarly, *Aegle marmelos* (Bel) and *Syzygium cumini* (Jamun) are recognized for their therapeutic properties, particularly in digestive and metabolic disorders. Other species such as *Carissa spinarum*, *Cordia myxa*, *Dillenia pentagyna*, *Syzygium salicifolium*, and *Flacourtia indica* are commonly gathered from the wild and consumed either fresh or processed. These fruits serve as seasonal food resources and contribute to dietary diversity among local populations. The occurrence of these wild edible fruits highlights the rich phytodiversity of Chhattisgarh and the strong dependence of indigenous communities on forest resources. However, increasing anthropogenic pressures, habitat degradation, and declining

traditional knowledge may threaten their availability. Therefore, sustainable conservation, documentation, and promotion of these species are essential for maintaining biodiversity, food security, and traditional ethnobotanical heritage in the region.

Table 1: Ten major wild edible fruits

Name	Family	Local name
<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Aonla
<i>Buchanania lanzan</i> Spreng.	Anacardiaceae	Char
<i>Diospyros melanoxylon</i> Roxb.	Ebenaceae	Tendu
<i>Aegle marmelos</i> (L.) Corrêa (Figure 2)	Rutaceae	Bel
<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Jamun
<i>Carissa spinarum</i> L. (Figure 1)	Apocynaceae	Kari
<i>Cordia myxa</i> L.	Boraginaceae	Lasoda
<i>Dillenia pentagyna</i> Roxb.	Dilleniaceae	Kurkut
<i>Syzygium salicifolium</i> J.Graham	Myrtaceae	Jamti
<i>Flacourtia indica</i> (Burm.f.) Merr.	Salicaceae	Ramkatayi



Figure 1: Vegetative parts of *Carissa spinarum*



Figure 2: Vegetative parts of *Aegle marmelos*

Conclusion

The present communication highlights ten major wild edible fruit species of Chhattisgarh that are closely associated with the nutrition, health, and livelihoods of tribal and rural communities. These fruits not only provide valuable dietary supplements rich in vitamins, minerals, and bioactive compounds but also contribute to local economies through their collection and sale. The study emphasizes the rich phytodiversity of the region and the importance of traditional knowledge in the utilization of forest resources. Conservation of these species and their habitats is essential to ensure their sustainable availability. Further research on their nutritional composition, medicinal properties, and cultivation potential may enhance their utilization and support biodiversity conservation and food security initiatives.

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