

North-East Regional Centre, Itanagar 791 113 Arunachal Pradesh



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Prof. (Dr.) Padma Raj Gajurel is a distinguished Professor in the in Department of Forestry, North Eastern Regional Institute of Science and Technology, Nirjuli, Arunachal Pradesh. He has a Doctor of Science in Botany (Taxonomy) from North-Eastern Hill University, Shillong. He has more than 27 years of teaching and research experience. Prof. Gajurel is an eminent botanist specializing in plant diversity, taxonomy, ethno-botany, medicinal plants, and biodiversity conservation. Prof. Gajurel has received several prestigious awards, including the Singapore Flora Fellowship, Singapore Botanic Garden Research Fellowships, Badal Dutta Award in Ethno-botany, and fellowships from DST, Govt. of India, and the Indian Association of Angiosperm Taxonomy. He has also received recognition for his work, with two plant species named after him: Crotalaria gajureliana and Ophiorrhiza gajureliana. Prof. Gajurel holds leadership positions, including executive member of the Indian Association of Angiosperm Taxonomy, member of the State Biodiversity Board, Govt. of Arunachal Pradesh, and member of research advisory committees. His expertise has taken him to several countries, including the USA, UK, South Africa, Australia, Malaysia, Thailand, Nepal, and Singapore, for conferences and research.

He has also made significant contributions to the field, publishing over 110 research articles, authoring 2 books, and guiding 16 Ph.D. students. Prof. Gajurel has completed 15 research projects and presented papers in 35 conferences (15 international, 20 national). He has delivered over 30 invited talks and organized 9 workshops/seminars.

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North-East Regional Centre, Itanagar 791 113 Arunachal Pradesh



Diversity of Wild Edible Plants in Eastern Himalayan region - Management and Conservation Priorities for Sustainable Development

Introduction

Food and nutrition are fundamental requirements for the survival and healthy development of all organisms. Every organism can select and utilize the available food sources in nature. However, humans, as the most advanced species on Earth, have developed self-sufficiency in cultivating, synthesizing, and utilizing food and nutrition for their survival and growth. People constantly seek out and pursue various food items, not only to meet their basic needs but also to satisfy personal desires and socio-cultural demands. Today, we rely on a wide array of food items, encompassing both natural and synthetic origins. These sources may be derived from plants, animals, or microbes. Regardless of their diversity and origins, regular foods are preferred for their nutritional value.

Almost all the indigenous communities worldwide have their specific food preferences, but they are mostly from a natural and organic base. In tribal and indigenous rural communities around the world, the use and consumption of wild plants is an integral part of tradition and culture (Samant and Dhar 1997). Wild resources, such as wild edible plants, still constitute an integral and major part of the tribal food basket. Wild plants are preferred to fulfil the routine nutritional, taste, and cultural demands of the majority of the indigenous communities. Tribal communities are still mostly dependent on wild edible plants, and hence, tribal foods are entirely organic. Wild edible plants (WEPs) can play a significant role as an essential component of people's diets in some regions of the world and provide greater dietary diversity for those who rely on them (Motti 2022). Many of these wild edible plants are also found to be nutritionally superior compared to some conventional foods. The nutritional and other phytochemical superiority of these wild plants has lately grabbed global attention in their utilization in health and disease management. The promotion of the use of WEPs could play a key role in the 2030 United Nations' Agenda for Sustainable Development. Wild foods can contribute to strengthening food security and should be promoted through research, education, interventions, and policy changes (Smith et al. 2019).

India is blessed with a remarkable diversity of flora, hosting approximately

18,000 recorded flowering plant species. The country is also home to a significant number of endemic species. Notably, the four biodiversity hotspots— the Himalayas, the Western Ghats, the Indo-Burma region, and the Sundaland (including the Nicobar Islands) —represent the most vital areas for species diversity and speciation. These regions harbour the most valuable forest resources of the countries, including the WEPs. As per recent reports, the tribal communities of India use about 1400 types of wild edible plants belonging to 184 families (Ray et al. 2020). The collection and use of wild plants have been livelihood options for many tribal and indigenous communities. Eating wild edibles is a customary practice in many communities, closely linked to every facet of their socio-cultural, religious, and physical well-being (Khan et al. 2017).

The Northeast of India, particularly the Eastern Himalayan state of Arunachal Pradesh, holds global significance due to the extensive use of forest resources by its indigenous communities. More than 250 tribal or indigenous groups reside in the region, who mostly gathers their food from the wild (Mao and Roy 2016). Numerous studies have already highlighted that the tribes in northeast region rely on wild plants for their daily needs and the consumption of a wide variety of wild plants for nutritional requirements (Sundriyal and Sundriyal 2004, Kar and Borthakur 2007, Pfoze et al. 2012). While comprehensive data is lacking, it is estimated that over 1,000 species of plants are traditionally utilized by various ethnic communities, with nearly 800 of those identified as wild edibles. The wild edible plants (WEPs) gathered and consumed by these indigenous groups are integral to their livelihoods, meeting crucial food and nutritional needs. However, many of these resources have become rare and increasingly difficult to collect and utilize. Among the array of forest resources accessed by indigenous communities, edible plants are the most frequently and consistently employed to satisfy food, nutritional, and medicinal requirements. To enhance their use, it is essential to promote the identification, selection, and sustainable management practices associated with these plants.

To fully understand the, health economic, and cultural value of WEPs, it is essential to understand their diversity status, livelihood potential, and management priorities in the Eastern Himalayan region. In this context, I would like to focus specifically on Arunachal Pradesh.

Diversity of WEPs in Arunachal Himalaya and its utilization

The state of Arunachal Pradesh covers an area of 83,743 km² and is located in the transition region of Eastern Himalaya and Indo-Burma Biodiversity hotspots. The state is blessed with large forest areas spanning from tropical to alpine, having a great floral variety, with over 5,000 recorded flowering species with large numbers of taxa endemic to the region (Das and Singh 2017). The forests, rich in diverse flora, are home to numerous valuable plants that have significant socio-cultural values. Additionally, the state supports a variety of ethnic groups, comprising 26 major tribes and 110 sub tribes. For many rural residents, wild forest resources serve as their primary source of income. The tribal communities within the state possess a rich Traditional Knowledge System regarding the utilization and management of natural resources. Living in remote forested regions, these communities heavily rely on wild edibles to meet their daily food and nutritional needs. A wide array of wild edible plants is utilized by various communities in forms such as fresh vegetables, including leaves, flowers, roots, tubers, rhizomes, and fruits; dried vegetables; spices and condiments; and medicinal fruits. The use of wild plants is deeply woven into their cultural and traditional systems and represents a vital strategy for sustenance, underpinned by their extensive traditional knowledge of these resources.

According to a recent review work on WEP of Arunachal Pradesh by Gajurel et al. (2022), a total of 662 different species have been documented hitherto for their usage by different ethnic groups from various regions of the state. Angiosperms with 632 species (95.47%) are the highly utilized followed by 24 species of Pteridophytes (3.62%) and 6 species of Gymnosperms (0.91%). In species categorized as Angiosperms, the number of dicots is found to be extremely higher (78.24%) compared to monocots in food. When the Angiosperms are put under APG IV classification, it has been found that almost all the major clades are being represented by the species.

In terms of species number, Asteraceae (Aster family) with 36 species represented the dominant taxa followed by Urticaceae (35 species), Rosaceae (34 species), Moraceae (29 species), Lamiaceae (23 species). Pteridophytes are represented by 17 genera belonging to 12 families where Thelypteridaceae (5 species), Cyatheaceae (3 species), Selaginellaceae, Ophioglossaceae, Dennstaedtiaceae, Pteridaceae, Athyriaceae and Nephrolepidaceae common. Gymnosperms were found to be less utilized with only 3 genera belonging to

3 families viz. Taxaceae (1 species), Pinaceae (3 species) and Gnetaceae (2 species). Genera wise, Ficus (20 species) are represented by the highest number of species followed by Rubus (18 species), Dioscorea (17 species), Piper (11 species), Solanum (10 species), Calamus (10 species), etc. whereas, 212 genera such as Actinidia, Arenga, Boea, Clausena, Docynia, Gonostegia, Lycianthes, Oreocnide, Pollia, Silene, Streblus, Turpinia etc. are represented only by the single species. In terms of the analysis of life forms of wild edibles being utilized by the communities of the state, results revealed herbs as the highest in number with 219 species (33.08%) followed by 166 species (25.08%) of trees, shrubs (156 species), climbers (68 species), fern and fern allies (21 species), rattan and palms (18 species), bamboo and grasses (15 species) and epiphyte (1 species).

Wild edible plants are primarily utilized in the form of vegetables, fruits, spices, and condiments, with occasional applications such as masticatory uses. Many wild edible plants also serve as ethnomedicine, fulfilling dual purposes. An analysis of their utilization patterns indicates that 443 species are exclusively used for food, while 219 species are employed for various other purposes, including medicine, construction, handicrafts, hunting tools, fodder, fibers, and rituals. The use of wild plants for food and a range of other applications has long been an integral part of the traditional practices and culture of the tribal communities in the region. For example, *Centella asiatica, Houttuynia cordata, Illicium griffithii, Litsea cubeba, Zanthoxylum armatum*, etc. are well recognized and also found globally significant for their medicinal properties. Plant parts such as fruits, leaves, bark, flowers, tubers, stems, or the whole plants are being consumed by the local people.

Table 1: Some socioeconomically commonly preferred WEP species of Arunachal Pradesh (Source: Gajurel et al. 2022)

Sl. no.	High priority species	Edible parts	Habits
1.	Acmella paniculata (Wall. ex DC.) R.K. Jansen	Leaves, inflorescence	Herb
2.	Allium hookeri Thwaites	Whole plant, leaves, bulb, flowers	Herb
3.	Alpinia nigra (Gaertn.) Burtt	Pseudostem, fruits, flowers	Herb

4.	Amaranthus spinosus L.	Leaves, tender shoots	Herb
5	Amaranthus viridis Linn.	Leaves, tender shoots, flowers	Herb
6.	Amomum dealbatum Roxb.	Seed, young sprouts, piths	Herb
7.	Angiopteris evecta (Forst.) Hoffm.	Rhizome, young fronds	Shrub
8.	Cardamine hirsute L.	Whole plant, tender shoots	Herb
9.	Castanopsis hystrix A. DC.	Fruits	Tree
10.	Castanopsis indica (Roxb. ex Lindl.) A.DC.	Fruits, leaves	Tree
11.	Centella asiatica L.	Leaves, flowers, tender shoots	Herb
12.	Choerospondias axillaris (Roxb.) Burtt & Hill	Fruits	Tree
13.	Clerodendrum glandulosum Lindl.	Flowers, leaves, tender shoots	Shrub
14.	Colocasia esculenta (L.) Schott	Young shoots, petiole, rhizomes	Herb
15.	Crassocephalum crepidioides (Benth.) S.Moore	Leaves, young shoots, flowers	Herb
16.	<i>Dendrocalamus hamiltonii</i> Nees & Arn. ex Munro	Young shoots	Herb
17.	Dillenia indica L.	Young flowers, fruits	Tree
18.	Dioscorea alata L.	Tubers	Climber
19.	Dioscorea bulbifera L.	Tubers, bulbils	Climber
20.	Diplazium esculentum (Retz.) Sw.	Young fronds	Herb
21.	Elatostema platyphyllum Wedd.	Leaves, tender shoots, flowers	Herb
22.	Elatostema sessile J.R.Forst. & G.Forst.	Leaves, tender shoots	Herb
23.	Elsholtzia blanda Benth.	Seeds	Shrub
24.	Eryngium foetidum L.	Leaves	Herb
25.	Fagopyrum esculentum Moench	Leaves, fruits, tender shoots	Herb
26.	Garcinia cowa Roxb.	Fruits	Tree

27.	Garcinia pedunculata Roxb. ex BuchHam.	Fruits	Tree
28.	Gynura cusimbua (D.Don) S.Moore	Tender stem, leaves, flower	Herb
29.	Homalomena aromatic Schott	Rhizome	Herb
30.	Houttuynia cordata Thunb.	Tender shoots, leaves, roots	Herb
31.	Illicium griffithii Hook. f. & Thomson	Seed, flower, fruits	Tree
32.	Litsea cubeba (Lour.) Pers.	Fruits, seeds	Tree
33.	Musa acuminata Colla	Fruits, inflorescence	Herb
34.	Musa velutina	Fruits, inflorescence, stems	Herb
35.	<i>Myrica esculenta</i> BuchHam. ex D. Don	Fruits	Tree
36.	Oenanthe javanica (Blume) DC.	Whole plant	Herb
37.	Perilla frutescens (L.) Britton	Seeds	Herb
38.	Phoebe cooperiana P.C.Kanjilal& Das	Fruits	Tree
39.	Phyllostachys bambusoides Siebold &Zucc.	Young shoots	Herb
40.	Piper pedicellatum C. DC.	Leaves, young shoots	Herb
41.	Plantago major L.	Leaves	Herb
42.	Pouzolzia hirta Blume ex Hassk.	Leaves, tender shoots	Herb
43.	Solanum americanum Mill.	Leaves, young fruits, flowers	Herb
44.	Solanum torvum Sw.	Fruits, tender leaves	Shrub
45.	Spilanthes acmella (L.) L.	Tender leaves, young shoots	Herb
46.	Spondias pinnata (L. f.) Kurz	Fruits, young leaves	Tree
47.	Terminalia chebula Retz.	Fruits	Tree
48.	Zanthoxylum acanthopodium DC.	Fruits, leaves	Shrub
49.	Zanthoxylum armatum DC.	Leaves, fruits, seeds	Tree
50.	Zanthoxylum rhetsa DC.	Tender leaves, fruits, seeds	Tree

WEPs as a potential source for Livelihood improvement

Utilization of wild plants is an integral part of their strong traditional and cultural systems. It is a necessary strategy adopted by the locals for sustenance, as they are endowed with vast traditional knowledge concerning the use of these plants. Apart from fulfilling the nutritional needs, extracting and selling off wild edibles provides supplementary employment and income to a huge population, especially the poor, vulnerable, and agrarian sections of the rural communities. Because of the heavy local and market demands, these species have become sources of income generation for many households. So they are found as good options for livelihood improvement. Because of the heavy local and market demand, these species have become a source of income generation for many households. Many of the wild edible plant species, like Centella asiatica, Houttuynia cordata, Illicium griffithii, Litsea cubeba, Zanthoxylum armatum, etc., are well recognized and also found globally significant for their medicinal properties. The majority of the species are used as leafy vegetables and are sold in the local markets in high quantities. Among the most preferred vegetables, the leafy shoots of Piper pedicellatum are being used extensively, and the local markets are flooded by the plants except during the winter. Likewise, the leafy aromatic shoots of Zanthoxylum rhetsa, which are being used as a condiment, have been preferred by all the tribes both in the state and in the entire northeast region. The fruits of species like Litsea cubeba and Phoebe cooperiana are sold in some specific seasons in fresh conditions with very high prices, as their local demands are very high as a spice and condiment. On the other hand, the fruits of Illicium griffithii, commonly known as 'star anise', and Zanthoxylum armatum, known as 'prickly ash', are sold in the dried form for a good amount and price. In recent years, the inflorescence of a wild banana, namely Musa itinerans has been found as one of the highly preferred and demanded vegetables. The prices for leafy vegetables, which are consumed and marketed heavily, range from Rs. 100/kg to Rs 200/kg. On the other hand, the fruits of Phoebe cooperiana, Zanthoxylum armatum and Z. rhetsa, which are used as spices and condiments, are sold above Rs 600/kg, indicating their high demand in the local market. Because of the higher demands and preferences of the locals, they are being sold at a higher price. For example, the price of Piper pedicellatum ranges from Rs. 160/- to Rs. 180/- per kg depending on the lean and peak season. Similarly, the fruits of Phoebe cooperiana have been sold at the rate of Rs. 800/- to Rs. 1000/- per kg. The fruits of Solanum

species and the tubers of *Dioscorea* are also commonly sold in the market at good prices. Species like *Dioscorea bulbifera, Fagopyrum esculentum, Illicium griffithii, Litsea cubeba, Piper longum, Zanthoxylum armatum,* etc., also have high national and international market demands. Hence, such species need management priorities for better revenue generation for the socio-economic upliftment of the state as a whole. Marketing of WEPs, besides providing a steady income source to primary collectors/producers, also has provisions for the local vendors.

A table listing 50 socio-economically significant plant species that are widely consumed is provided. However, research indicates that over 100 wild edibles, collected and utilized by tribal communities in various regions, possess considerable socio-cultural importance and commercial potential. The selection of these 50 species is based on their common availability, sociocultural significance, high market demand, and acknowledged nutritional values. Most of the chosen species are utilized as leafy vegetables and are sold in large quantities in local markets.

Management and Conservation Priority

Similar to other regions of the country, Arunachal Pradesh faces significant challenges related to forest habitat and biodiversity loss, primarily driven by various developmental activities, particularly urbanization and infrastructural development. Almost all threats to biodiversity also affect wild edible plants (WEPs). Key threats include habitat destruction due to developmental activities, the establishment of new townships, the expansion of agricultural land, overharvesting, the introduction of invasive exotic species, and natural calamities such as land erosion, summer floods, and prolonged winter droughts. These factors can be identified as the primary threats to the wild edible plant populations in the state.

Over-harvesting and unsustainable resource use are critical reasons for the rapid decline of WEP species in the region, a situation exacerbated by the increasing human population and their dependence on WEPs to meet daily nutritional needs. Beyond providing essential nutrition, WEPs also contribute to the economic well-being of local communities through sales in local markets. This has led to indiscriminate harvesting practices that deplete many resources and threaten the viability of numerous species. Furthermore, the expansion of agricultural land for commercial monoculture plantations poses a significant

threat by contributing to habitat destruction and further jeopardizing the populations of many species. Large areas of forest land are being continually cleared for the plantation of commercial crops like large cardamom (*Amomum subulatum*), rubber plants (*Heveabrasiliensis*), oil palm (*Elaeis guineensis*), etc. Although the trade of these species improves the economic well-being of the locals, unsustainable harvesting and management are found to be destructive to the area's biodiversity.

It has been found that many of the herbaceous wild vegetables like *Acmella oleracea*, *Cardamine hirsuta*, *Pouzolzia hirta*, *Pilea scripta*, *Colocasia sp.*, *Oenanthe javanica*, tend to grow in the open habitats along the forest edges and roadside, and hence are prone to habitat loss due to the major anthropogenic activities taking place in these sites.

Large areas of the state are subjected to frequent deforestation for various developmental projects. Habitat degradation due to rapid developmental activities like cutting of hills and forested areas for widening of roads and urbanization is one main cause of the ever-declining species population of the state. Besides the destruction of habitat, huge deposition of dust on the leaves of the wild edible species, particularly those along the roadside, renders them unfit for consumption. The slashing and burning practices adopted in the forest ecosystem either degrade or primary, for agricultural activities are creating heavy loss or damage to the populations of many herbaceous species like Centella asiatica, Crassocephalum crepidioides, Fagopyrum esculentum, Houttuynia cordata, Oenanthe javanica, Pouzolziahirta, Solanum americanum, etc. Conservation of these species can be achieved by protecting the natural habitat, and ensuring that the area remains free from all undesirable developments. Basically, all threats to biodiversity are in some way or the other related to our innate drive to improve economic growth.

Despite the significant reliance of local communities on wild edible plants (WEPs), there is a notable lack of effort dedicated to their sustainable management and conservation. These species are predominantly harvested from forests, often with little regard for their regeneration. Consequently, this has resulted in a rapid decline in their populations within the state. To address the loss of biodiversity, it is crucial to implement effective planning and suitable strategies that will continue to satisfy local food demands. Emphasizing the conservation and management of WEPs will not only enhance the region's biodiversity but also support the dietary and economic needs of local

communities, which are often heavily dependent on these species. Integrating wild species into agricultural systems could further safeguard biodiversity while simultaneously addressing local dietary requirements and bolstering the local economy. Initiatives for the domestication of some wild edibles are, however, observed in some regions where highly utilized species like Allium hookeri, Clerodendrum glandulosum, Curcuma caesia, Dioscorea alata, Litsea cubeba, Phoebe cooperiana, Zanthoxylum armatum, Z. rhetsa, etc. are found managed to some extent through their introduction and preservation in different agroforestry systems. However, the majority of the highly preferred species, despite their higher preference and marketability, are directly collected from the forest, and owing to their higher marketability, sustainable harvesting practices are hardly being followed.

Given that the local biodiversity is disappearing at an accelerated rate, curbing our possibilities to find new sources of food, and that most analyses do not include data on the full range of food resources consumed worldwide, it becomes imperative to evaluate the current distribution and conservation status of these resources to make science-based policy decisions. The construction of high-tech nurseries and the free provision of saplings to farmers may lessen the strain on the natural population while simultaneously improving the financial status of the poor and marginalized groups. The NMPB (National Medicinal Plant Board) under the Ministry of Ayush, Govt. of India (2021) has initiated a scheme called NAM (National Ayush Mission), wherein govt. will be providing subsidies up to 75% for the cultivation of important medicinal plants including species like Centella asiatica, Dioscorea bulbifera, Solanum nigrum, S. anguivi, Terminalia chebula, Garcinia sp., Clerodendrum sp. etc. which are also being used as WEPs. Likewise, the National Horticulture Board, the SEED division of the Department of Science & Technology, and the National Bank for Agriculture and Rural Development (NABARD) are supporting various schemes for rural and tribal welfare through which the cultivation and management of the important horticultural crops like vegetable, fruit and spices can be initiated. For the state of Arunachal Pradesh and the northeastern region as a whole, the management practices like Inclusion of some species in forest management programmes, cultivation of the high value species in the agroforestry systems; Mass propagation and distribution of seedlings or planting materials to the farming communities with extensive training and awareness programmes; Adoption of sustainable harvesting practices; creation of WEPs garden or exsitu centres for mass awareness, conservation and promotional activities need to be adopted for better utilization of the WEPs.

Conclusion

Due to the significant economic and sociocultural demand for WEPs, it is crucial to protect, manage, and conserve these species for sustainable use. An integrated approach involving all stakeholders is necessary for effective, sustainable harvesting and value addition. Developing value-added products from selected WEPs could enhance the economy of local communities and the state, while also contributing to the achievement of the United Nations' targeted Sustainable Development Goals (SDGs).

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About the Institute



G.B. Pant National Institute of Himalayan Environment (formerly known as G.B. Pant National Institute of Himalayan Environment and Sustainable Development), was established in 1988-1989, during the birth centenary year of Bharat Ratna Pt. Govind Ballabh Pant, as an autonomous Institute of the Ministry of Environment, Forest and Climate Change (MoEF&CC), Govt. of India. The Institute has been identified as a focal agency to advance scientific knowledge, to evolve integrated management strategies, demonstrate their efficacy for conservation of natural resources, and to ensure environmentally sound management in the entire Indian Himalayan Region (IHR). The Institute functions under a Society, guided by a Governing Body and Science Advisory Committee. It has a decentralized set up, with its Headquarters at Kosi-Katarmal, Almora, and at present six regional centres are operational at Srinagar (Garhwal Regional Centre), Mohal-Kullu (Himachal Regional Centre), Pangthang-Gangtok (Sikkim Regional Centre), Itanagar (North-East Regional Centre), Leh (Ladakh Regional Centre) and Mountain Division (at MoEF&CC, New Delhi). The R&D programmes of the Institute have been oriented in to four Thematic Centres, viz., Centre for Land and Water Resource Management (CLWRM), Centre for Socio-Economic Development (CSED), Centre for Biodiversity Conservation and Management (CBCM) and Centre for Environmental Assessment & Climate Change (CEA&CC). (Details: http://gbpihed.gov.in).

About The North-East Regional Centre

The North-East Regional Centre (NERC) was set up in the year 1989 and started functioning from Chuchuyimlang, Mokokchung in Nagaland. In 1997, it was shifted to Itanagar, Arunachal Pradesh and since then, the Centre has been meaningfully contributing to the cause of conservation and development of the entire NE region, which is known for its rich biological, socio-cultural, linguistic and ethnic diversity. In recent days the biodiversity and traditional knowledge and practices of the region are under threat of extinction due to modernization, conversion to unsustainable land uses, developmental activities, climate change and other natural and anthropogenic factors. To address these issues, the NERC's main R&D functions are (i) conservation of biological diversity (ii) sustainable socio-economic development and livelihood security (iii) adaptation/mitigation of climate change impacts, (iv) ecotourism (v) low-cost rural technologies and (vi) networking and collaborations with other Institutes/organizations.



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Pt. Govind Ballabh Pant Popular Lectures

(North-East Regional Centre)

I Popular Lecture (2014)

Prof. Tamo Mibang

(Vice Chancellor, Rajiv Gandhi University, Arunachal Pradesh)

Il Popular Lecture (2015)

Prof. P.K. Das

(Director, NERIST, Nirjuli, Arunachal Pradesh)

III Popular Lecture (2016)

Shri Omkar Singh, IFS

(PCCF & PS, Department of Environment & Forests, Govt. of Arunachal Pradesh)

IV Popular Lecture (2017)

Prof. R.M. Pant

(Director, NIRD&PR - NERC Guwahati, Assam)

V Popular Lecture (2018)

Prof. H.S. Yadav

(Director, North Eastern Regional Institute of Science and Technology, Nirjuli)

VI Popular Lecture (2019)

Dr. V.T. Darlong

(Vice Chancellor, Martin Luther Christian University, Shillong, Meghalaya)

VII Popular Lecture (2020)

Dr. Ashok Bhattacharyya

(Director of Research (Agri.), Assam Agricultural University, Jorhat)

VIII Popular Lecture (2021)

Dr. R.S.C. Jayaraj

(Director Rain Forest Research Institute, Jorhat, Assam)

IX Popular Lecture (2022)

Prof. U.K. Sahoo

(Professor & Director (R&D) Mizoram University, Aizawl)

XI Popular Lecture (2023)

Prof. Abhaya Prasad Das

(Professor (Retd.), North Bengal University, Siliguri)

XII Popular Lecture (2024)

Prof. Tomo Riba

(Vice-Chancellor, Arunachal Pradesh University, Pasighat)