



## Documentation of Sociocultural significance of wild plant taxa used by Bodo Tribes of Assam: A Traditional Bitter–Sour Mixed Vegetable Curry Associated with Bwisagu (Bohag Bihu)

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### Abstract

Wild edible plants form a vital part of the cultural identity and nutritional practices of indigenous groups in Assam. Among the Bodo tribe, the festival of Bwisagu (coinciding with *Bohag Bihu*, the Assamese New Year in April) is marked by the preparation of a bitter–sour curry using varieties wild plants, symbolizing regeneration and defense for the year ahead. This study documents a total of 112 wild edible plants under 96 genera and 109 families consumed on the beginning day of Bwisagu, highlighting their culinary and therapeutic roles. The conclusions emphasize the value of preserving indigenous ecological knowledge as a vital resource for cultural continuity and sustainable living.

**Keywords:** *Bwisagu, wild edible plants, Assam*

### Introduction

Assam, situated in the Northeastern region of India and is home to a diverse group of indigenous communities, each distinguished by unique culture and tradition traditions, languages and ecological knowledge. Among these, the Bodo tribe is one of the largest scheduled tribes of Assam which celebrates Bwisagu in mid-April, coinciding with Bohag Bihu (Assamese New Year and spring festival). These festivals mark agrarian regeneration, community harmony and cultural continuity and are celebrated

with vibrant songs, dances, and rituals. A characteristic cooking tradition related with these celebrations is the preparation of Xaak (a curry of 101 wild leafy vegetables during Bihu which reflects Assam's agricultural heritage and cultural values. This practice represents conservation of diverse plants, traditional knowledge and seasonal harmony, blending diverse flavors and nutrients that strengthen health while reinforcing community bonds with nature.

Ethnobotanical studies have long highlighted the significance of traditional ecological knowledge in supporting biodiversity with food security. In Assam, the indigenous groups consuming wild edible plants since long before and cultural fabric of indigenous communities. The people of Bodo tribe have preserved a rich source of knowledge associated to the use of wild plants for food and medicine. Previous studies have documented the use of wild vegetables in districts such as Baksa and Udalguri (Basumatary et al., 2025 & Saharia & Yasmin, 2016). Similar traditions are common practice among all other ethnic groups in Assam, including the preparation of *Ekho-Ek Bidh Xaak* (101 types of wild leafy vegetable) by the Assamese community (Roy U., 2025). These traditional practices not only reflect cooking diversity but also serve as strategies for biodiversity conservation and culture of Assamese. Supporting this, ethnobotanical surveys in Kokrajhar district have highlighted the medicinal and dietary roles of wild plants among the Bodo community (Basumatary et al., 2024), while studies in Lakhimpur district emphasized the medicinal values of plant species (Neog & Borkataki, 2025). Around 122 species with 89 genera under 52 families and two varieties of fern were described from adjoining villages of the Poba Reserve Forest in Jonai, Dhemaji district of Assam which is dominated by the Mishing tribe (Pegu et al., 2013). Together, these findings emphasize the interconnectedness of food, culture, conservation of plant diversity and identity of indigenous group across the Assam.

## Materials and Methods

The study was conducted during the periods of 2023 - 2025 in Bodo-dominated districts of the Bodoland Territorial Region of Kokrajhar, Baksa, Chirang, Udalguri, Tamulpur and in some parts of Upper Assam including Lakhimpur, Dhemaji, Tinsukia, and Dibrugarh districts. Ethnobotanical surveys were carried out using semi-structured interviews with aged persons, and women's, complemented by participant observation during Bwisagu celebration. Plant specimens were collected from forests, wetlands, fallow lands, and home gardens, and identified through experts and online sources. The methodology of Jain and Rao (1977) were used during the collection of data. Documentation included local names (Bodo and Assamese), habit and habitats, plant parts used, seasons of availability of recorded samples. Voucher plant specimens were deposited in the Department of Botany, Tinsukia College, Assam for future references.

**Table1:** List of Districts of Assam surveyed in investigations of Traditional Bitter–Sour Mixed Vegetable Curry Associated with Bwisagu (Bohag Bihu) in Assam.

Sl. No.	District	No. villages surveyed	Name of villages surveyed
1.	Bajali	3	Baghmara, Dhumarpathar, Madhapur
2.	Baksa	4	Kumguri, Lahapara, Salbari, Rupahi, Bhuyapara
3.	Chirang	3	Abdaguri, Amlaiguri, Koila Moila
4.	Dhemaji	3	Gogamukh, Simen Chapori, Sissibargaon
5.	Golaghat	4	Ghoramara Balipara, Mohomaai, Mising Gaon
6.	Kokrajhar	3	Gourangajhar, Kachugaon, Serfanguri
7.	Nalbari	3	Barbhag, Barpipalia, Dhamdhama
8.	Tamulpur	3	Ambari, Arangajuli, Bahbari
9.	Tinsukia	2	Sonali Gaon, Bishnupur
10.	Udalguri	3	Bhairabkunda Bhergaon, Garkash Harisinga

## Results

The present investigation documented a total of 112 wild edible plants under 96 genera and 109 families consumed during Bwisagu celebration. Out of documented species, angiosperms represent 109 taxa and 3 species were pteridophyte. During this study, no single edible species of gymnosperm was recorded. Among the documented plants, 22 monocot and 87 were dicot; where numbers of herb, shrub and trees are 67, 28, 17 respectively. The documented plants are mainly used in a traditional bitter–sour curry prepared on the 7<sup>th</sup> day of the festival and the knowledge on the use of plant transmitting from generation to generation. The wild plant species being documented have varieties of tastes includes bitter, slightly bitter, acrid, pungent, spicy, hot aromatic, sour, acidic, tangy, sweet, mildly sweet, earthy, astringent, resinous, salty, fishy, strong odor, mixed complex type.

The documented plants were collected from diverse habitat such as forest area, forest margin, open area, open fields, grassland roadsides, wastelands, cultivated fields, homesteads gardens, wetland, moist and shady soils and crop fields. The plants serve nutritional, ethnomedicinal with economic and link to own culture and tradition. The main mode of cooking is boiling, with minimal use of oil and spices, sometimes they never used any kinds of oil and spices except salt. The below Table 2: summarizes key ethnobotanical information of wild plant species consumed during celebration Bwisagu.

**Table- 2:** Enumeration of wild edible plants in Bwisagu festival (Bohag Bihu in Assamese) of Bodo community in Assam

Sl. No.	Scientific name	Local name (Bodo)	Habit	Habitat	Parts use	Raw/Roasted Taste	Season of Availability
1.	<i>Acmella paniculata</i> (Wall. ex-DC.) R.K. Jansen ( <b>Asteraceae</b> )	Jari	Herb	Open area, Crop Filed	Young shoot & Inflorescence	pungent & acrid taste	Oct.- Apr.
2.	<i>Aeschynomene americana</i> L. ( <b>Fabaceae</b> )	Boslai	Shrub	Forest Area	Young shoot	mild	Mar-Jun
3.	<i>Allium sativum</i> L. ( <b>Amaryllidaceae</b> )	Sambram gufur	Herb	Cultivated	Young shoot & bulb	pungent, spicy & sharp	Nov.-Apr.
4.	<i>Alpinia nigra</i> (Gaertn.) Burtt. ( <b>Zingiberaceae</b> )	Tharai	Herb	Forest Area, open area	Young shoot	spicy, aromatic, slightly bitter	Jan–May
5.	<i>Alternanthera philoxeroides</i> (Mart.) Griseb. ( <b>Amaranthaceae</b> )	Herb	Herb	Forest Area, open area	Young shoot	mild, slightly bitter	Nov.- April
6.	<i>Alternanthera sessilis</i> (L.) DC. ( <b>Amaranthaceae</b> )	Herb	Herb	Forest Area, open area	Young shoot	mild, earthy	Throughout the year
7.	<i>Amaranthus spinosus</i> L. ( <b>Amaranthaceae</b> )	Khuduna	Herb	Forest Area, open area	Young shoot	slightly bitter, earthy	Apr.–Sept
8.	<i>Amaranthus viridis</i> L. ( <b>Amaranthaceae</b> )	Khuduna	Herb	Forest Area, open area	Young shoot	slightly bitter, earthy	Apr.–Sept
9.	<i>Andrographis paniculata</i> (Burm.f.) Wall. ex Nees. ( <b>Acanthaceae</b> )	chiratta	Herb	Forest Area, open area	Young shoot	Bitter	Apr.-June
10.	<i>Antidesma acidum</i> Retz. ( <b>Phyllanthaceae</b> )	Lafa Saikho	Shrub	Forest Area, open area	Young shoot	acidic/sour	Throughout the year
11.	<i>Antidesma ghaesembilla</i> Gaertn.	Lafa Saikho	Shrub	Forest areas	Young shoot	acidic/sour	Throughout the year

	<b>(Phyllanthaceae)</b>						
12.	<i>Asparagus racemosus</i> Willd. <b>(Asparagaceae)</b>	Satmul	Climber	Forest Area, open area	Young shoot	slightly bitter & sweet	Apr.–Sept
13.	<i>Azadirachta indica</i> A.Juss. <b>(Meliaceae)</b>	Neeem	Tree	Cultivated, forest margins	Young leaves	intensely bitter	Throughout the year
14.	<i>Bacopa monnieri</i> (L.) Wettst. <b>(Plantaginaceae)</b>	Brahmi	Herb	Wetlands, marshy areas	Young shoot	bitter	Year-round in wetlands
15.	<i>Basella alba</i> L. <b>(Basellaceae)</b>	Mwfrai	Climber	Cultivated, moist areas Climber	Young shoot & leaves	Mild & Earthy	Apr.–Sept.
16.	<i>Bergera koenigii</i> L. <b>(Rutaceae)</b>	Nwrsing	Shrub	Home gardens, forest edges	Young shoot	Aromatic & earthy	Year-round in homesteads
17.	<i>Bidens pilosa</i> L. <b>(Asteraceae)</b>	Deumeubai.	Herb	Roadsides, open areas	Young shoot	slightly bitter flavor	Jun.–Apr.
18.	<i>Bischofia javanica</i> Blume <b>(Phyllanthaceae)</b>	Uriaum	Tree	Forest area	Young shoot	acidic/sour	Throughout the year
19.	<i>Blumea balsamifera</i> (L.) DC. <b>(Asteraceae)</b>	Jwnglaori	Shrub	Home gardens, forest edges	Young shoot & leaves	Pungent & slightly bitter	Throughout the year
20.	<i>Blumea lanceolaria</i> (Roxb.) Druce <b>(Asteraceae)</b>	Jwnglaori	Shrub	Home gardens, forest edges	Young shoot & leaves	Pungent & slightly bitter	Throughout the year
21.	<i>Calamus erectus</i> Roxb. <b>(Arecaceae)</b>	Raidwng	Shrub	Forest area, moist slopes	Young shoot	Bitter	Throughout the year
22.	<i>Calamus tenuis</i> Roxb. <b>(Arecaceae)</b>	Raidwng	Shrub	Forest area, moist slopes	Young shoot	Bitter	Throughout the year
23.	<i>Camonea umbellata</i> (L.) A.R. Simões & Staples <b>(Convolvulaceae)</b>	Goria loti	Climber	Forest edges, thickets	Young shoot	Slightly bitter	Apr-October
24.	<i>Cardiospermum halicacabum</i> L. <b>(Sapindaceae)</b>	Kapaal Phuta	Climber	wastelands, forest margins	Young shoot & leaves	bitter & astringent	Apr-October
25.	<i>Carica papaya</i> L. <b>(Caricaceae)</b>	Mwithru	Tree	Cultivated	Inflorescence	bitter & resinous	Year-round

26.	<i>Celosia argentea</i> L. ( <b>Amaranthaceae</b> )	Daola khungur.	Shrub	Open fields	Young shoot	Mild & slightly earthy	Apr.–Sept.
27.	<i>Centella asiatica</i> (L.) Urb. ( <b>Apiaceae</b> )	Manimuni gederjhar	Herb	Moist areas, wetlands, paddy bunds	Whole plants	slightly bitter & pungent	Year-round
28.	<i>Centipeda minima</i> (L.) A. Braun & Asch. ( <b>Asteraceae</b> )	Hasiu biphang	Herb	Damp soils, marshy areas	Whole plants	Bitter & aromatic	Apr.–Oct.
29.	<i>Chenopodium album</i> L. ( <b>Amaranthaceae</b> )	Buthua	Herb	Cultivated fields, wastelands	Whole plants	Mild & earthy	Nov.–Apr.
30.	<i>Cissus quadrangularis</i> L. ( <b>Vitaceae</b> )	Harjora	Climber	Dry rocky areas, forest margins	Young shoot	sour & astringent	Year-round
31.	<i>Clerodendrum colebrookeanum</i> Walp. ( <b>Lamiaceae</b> )	Lukhna biphang	Shrub	Forest edges, thickets	Young shoot	strongly bitter	Mar.–Oct.
					Inflorescence	Mild & earthy	
32.	<i>Clerodendrum indicum</i> (L.) Kuntze ( <b>Lamiaceae</b> )	Eklabir	Shrub	Forest edges, thickets	Young shoot	strongly bitter	Mar.–Oct.
					Inflorescence	Mild & earthy	
33.	<i>Coccinia grandis</i> (L.) Voigt ( <b>Cucurbitaceae</b> )	Kunduli	Climber	Homestead garden & forest edges	Young shoot	slightly bitter	Year-round
34.	<i>Commelina benghalensis</i> L. ( <b>Commelinaceae</b> )	Kona Simolu	Herb	Moist soils & crop fields	Young shoot	Mild, sweet, & slightly bitter taste	Apr.–Oct.
35.	<i>Corchorus capsularis</i> L. ( <b>Malvaceae</b> )	Fathw	Shrub	Cultivated	Young shoot	Bitter & pungent taste	Apr.–Sept.
36.	<i>Dendrocnide sinuata</i> (Blume) Chew ( <b>Urticaceae</b> )	Khoma	Shrub	Forest & moist areas	Young shoot	slightly bitter & pungent	Apr.–Oct.
					Inflorescence	Mild & earthy	
37.	<i>Diplazium esculentum</i> (Retz.) Sw. ( <b>Aspleniaceae</b> )	Dingkhia	Herb	Moist shady areas & stream banks	Young shoot	Mild & slightly earthy,	Apr.–Sept.

38.	<i>Drymaria cordata</i> (L.) Willd. ex Schult. <b>(Caryophyllaceae)</b>	Laijabri	Herb	Shaded moist soils	Whole plants	pungent & slightly bitter	Dec.–Oct.
39.	<i>Enydra fluctuans</i> Lour. <b>(Asteraceae)</b>	Helangshi	Herb	Wetlands, aquatic margins	Young shoot	Bitter	Year-round
40.	<i>Eryngium foetidum</i> L. <b>(Apiaceae)</b>	Gongar Dhunia	Herb	Cultivated plots & open areas	Young shoot	slightly sour & aromatic	Year-round
41.	<i>Euphorbia hirta</i> L. <b>(Euphorbiaceae)</b>	Nasraikhora	Herb	Roadsides, open fields	Young shoot	Bitter & acrid	Apr.–Dec.
42.	<i>Fagopyrum cymosum</i> (Trevir.) Meisn. <b>(Polygonaceae)</b>	Mwtha-Sikhla	Herb	Open fields & forest margins	Young shoot	slightly bitter & earthy	Apr.–Nov.
43.	<i>Gonostegia hirta</i> (Blume) Miq. <b>(Urticaceae)</b>	Sum-louthe	Herb	Open fields & forest margins	Young shoot	Mildly sour & astringent	Mar.–Sept.
44.	<i>Hellenia speciosa</i> (J.Koenig) S.R.Dutta <b>(Zingiberaceae)</b>	Burhi thokon	Herb	Open area & forest margins	Young shoot	Sightly sour, pungent & slightly bitter	Mar.–Sept.
45.	<i>Hemidesmus indicus</i> (L.) R.Br. <b>(Apocynaceae)</b>	Anantamul	Twining shrub/climber	Dry open forests	Young shoot	Bitter	Apr.–Sept.
46.	<i>Hibiscus cannabinus</i> L. <b>(Malvaceae)</b>	Mwtha Bangal	Shrub	Cultivated fields	Young shoot & leaves	slightly sour & bitter	Apr.–Nov.
47.	<i>Hibiscus sabdariffa</i> L. <b>(Malvaceae)</b>	Mwitha	Shrub	Cultivated & homesteads	Young shoot & leaves	sour	Apr.–Dec.
48.	<i>Hibiscus surattensis</i> L. <b>(Malvaceae)</b>	Mwtha Bangal	Shrub	Forest margins & Cultivated	Young shoot & leaves	slightly sour & bitter	Apr.–Nov.
49.	<i>Hibiscus × rosa-sinensis</i> L. <b>(Malvaceae)</b>	Joba Bibar	Shrub	Home gardens	Young shoot & leaves	Mild & slightly sweet	Year-round
50.	<i>Homalomena aromatica</i> (Spreng.) Schott <b>(Araceae)</b>	Thaso-Mwdwmnai	Herb	Wetlands, shaded moist areas	Young shoot	aromatic, spicy & slightly bitter	Year-round

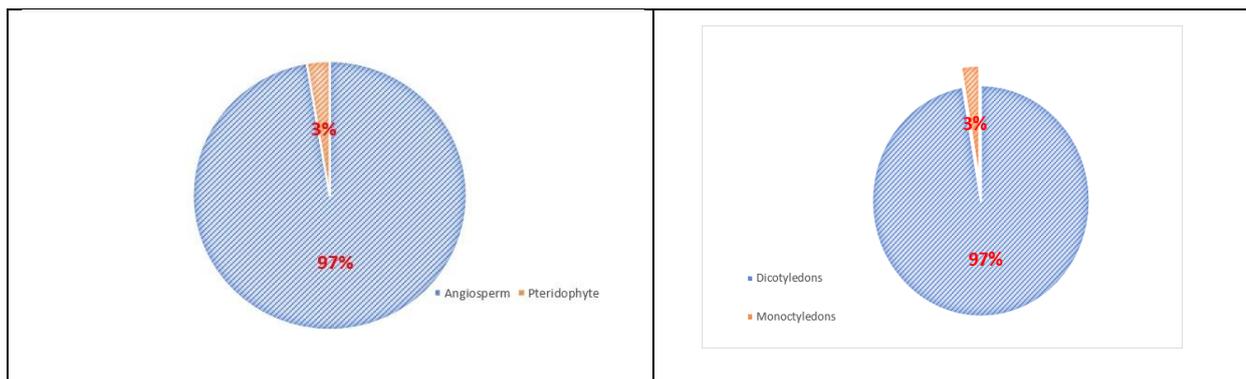
51.	<i>Houttuynia cordata</i> Thunb. ( <b>Saururaceae</b> )	Mosundori	Herb	Wetlands, moist shady areas	Whole plants	strongly aromatic, fishy, pungent	Apr.–Sept.
52.	<i>Hydrocotyle sibthorpioides</i> Lam. ( <b>Apiaceae</b> )	Manimuni Gidir Jahar	Herb	Moist soils, paddy bunds	Whole plants	slightly bitter & pungent	Year-round
53.	<i>Hypericum japonicum</i> Thunb. ( <b>Hypericaceae</b> )	Rupha-Fuli	Herb	Open moist areas	Whole plants	bitter & astringent	Apr.–Oct.
54.	<i>Justicia adhatoda</i> L. ( <b>Acanthaceae</b> )	Basigi Gugur	Shrub	Forest edges, homesteads	Young shoot	Bitter	Year-round
55.	<i>Kaemferia galanga</i> L. ( <b>Zingiberaceae</b> )	Sonfwira	Herb	Forest area & moist soils	Young shoot & leaves	spicy, pungent & slightly sweet,	Mar.–Sept.
56.	<i>Lasia spinosa</i> (L.) Thwaites ( <b>Araceae</b> )	Sibru	Herb	Marshes & wetlands	Young shoot	Pungent & slightly acrid	Mar. -Sept.
57.	<i>Leucas aspera</i> (Willd.) Link ( <b>Lamiaceae</b> )	Khangsisa	Herb	Roadsides, open fields	Young shoot	Pungent & bitter	Oct-Apr.
58.	<i>Malvastrum coromandelianum</i> (L.) Garcke ( <b>Malvaceae</b> )	Dhondra laifang	Herb	Wastelands, roadsides	Young shoot	mild, slightly bitter,	Apr.–Sept.
59.	<i>Malvaviscus arboreus</i> Dill. ex Cav. ( <b>Malvaceae</b> )	Joba -aloubifang	Shrub	Gardens, forest edges	Young shoot	mildly sweet	Year-round
60.	<i>Melia azedarach</i> L. ( <b>Meliaceae</b> )	Nwmwsitha/ Ghora neem	Tree	Open Forest	Young shoot & leaves	Bitter	Mar.–Jul.
61.	<i>Meliosma simplicifolia</i> (Roxb.) Walp. ( <b>Sabiaceae</b> )	Thouthuwa/loru- bondha	Tree	Forest areas	Young shoot	slightly bitter & astringent	Year-round
62.	<i>Melochia corchorifolia</i> L. ( <b>Malvaceae</b> )	Dhondra Laifang	Herb	Open fields, forest margins	Young shoot & leaves	Mild & earthy	Year-round
63.	<i>Mikania micrantha</i> Kunth ( <b>Asteraceae</b> )	Leo-aa bendwng	Climber	Forest edges, wastelands	Young shoot	bitter & resinous	Year-round

64.	<i>Mimosa pudica</i> L. ( <b>Fabaceae</b> )	Daosa-Mwkhreb	Herb	Roadsides, open fields	Young shoot	slightly bitter & acrid	Apr.–Sept.
65.	<i>Momordica charantia</i> subsp. <i>Charantia</i> ( <b>Cucurbitaceae</b> )	Udasi/kerelagwkha	Climber	Forest edges, homesteads	Young shoot & leaves	Bitter	Apr.–Sept.
					fruit	Bitter	
66.	<i>Momordica dioica</i> Roxb. ex Willd. ( <b>Cucurbitaceae</b> )	Khangkhlor	Climber	Cultivated	Young shoot & leaves	Bitter	Apr.–Sept.
67.	<i>Moringa oleifera</i> Lam. ( <b>Moringaceae</b> )	Sojina	Tree	Cultivated fields & Open areas	Young shoot	slightly bitter & pungent	Year-round
68.	<i>Musa balbisiana</i> Colla ( <b>Musaceae</b> )	Athiya Thalir	Herb	Forest margins, cultivated	Young Pseudostem	mild, sweet-tart & slightly bitter	Year-round
69.	<i>Musa velutina</i> H.Wendl. & Drude ( <b>Musaceae</b> )	Hagrani Thailir	Herb	Forest margins, gardens	Young Pseudostem	mild, sweet-tart & slightly bitter	Year-round
70.	<i>Nyctanthes arbor-tristis</i> L. ( <b>Oleaceae</b> )	Sefali	Tree	Homesteads, gardens	Young shoot	bitter	Year-round
71.	<i>Oenanthe javanica</i> (Blume) DC. ( <b>Apiaceae</b> )	Dao-fenda	Herb	Wetlands, paddy fields	Young shoot	Aromatic & pungent,	Mar.–Sept.
72.	<i>Oldenlandia corymbosa</i> L. ( <b>Rubiaceae</b> )	Sonafuli	Herb	Open moist areas	Whole plants	bitter & astringent	Mar.-Nov.
73.	<i>Oroxylum indicum</i> (L.) Kurz ( <b>Bignoniaceae</b> )	Kharong-khandai	Tree	Forest patches	Flower	Bitter	Mar.–Dec.
74.	<i>Oxalis corniculata</i> L. ( <b>Oxalidaceae</b> )	Sengri-Mwkhhi	Herb	Moist soils, gardens	Whole plants	Sour & tangy	Year-round
75.	<i>Paederia foetida</i> L. ( <b>Rubiaceae</b> )	Khefi-bendwng	Climber	Forest edges	Young shoot & leaves	pungent, strong odor & slightly bitter	Year-round
76.	<i>Parthenocissus quinquefolia</i> (L.) Planch. ( <b>Vitaceae</b> )	Dousrem	Climber	Forest margins	Young shoot	sour & astringent	Apr.–Sept.

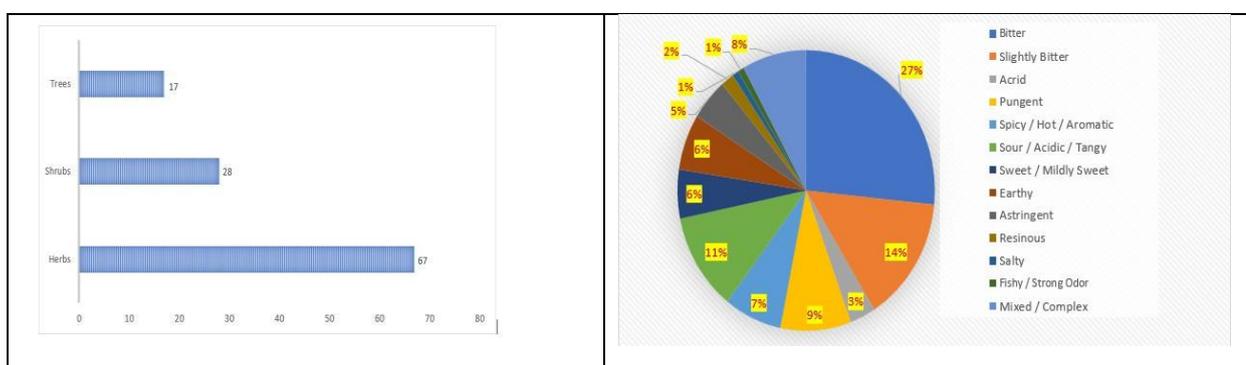
77.	<i>Passiflora edulis</i> Sims ( <b>Passifloraceae</b> )	Lota-bel	Climber	Cultivated/ gardens	Young shoot & leaves	sweet-sour, aromatic & tangy	Year-round
78.	<i>Peperomia pellucida</i> (L.) Kunth ( <b>Piperaceae</b> )	Bilai- gojong	Herb	Moist shady areas	Young shoot	Mild & Earthy	Mar.–Sept.
79.	<i>Persicaria chinensis</i> (L.) H. Gross ( <b>Polygonaceae</b> )	Madhu soleng	Herb	Forest margins	Young shoot	slightly bitter & astringent	Mar.–Nov.
80.	<i>Persicaria perfoliata</i> (L.) H. Gross ( <b>Polygonaceae</b> )	Mwitha-Sikhala	Climber	Forest edges	Young shoot	sour & astringent	Mar.–Sept.
81.	<i>Phlogacanthus thyrsiformis</i> (Roxb. ex Hardw.) Mabb. ( <b>Acanthaceae</b> )	Basigi-bibar	Shrub	Forest edges & homesteads	Young shoot	Bitter	Nov.–Apr.
					Inflorescence	Bitter	
82.	<i>Phyllanthus emblica</i> L. ( <b>Phyllanthaceae</b> )	Amlokhi/ amblai	Tree	Forest edges & homesteads	Fruit	Sour, astringent & bitter	Nov.-Apr.
83.	<i>Phyllanthus niruri</i> L. ( <b>Phyllanthaceae</b> )	Hagrani amblai	Herb	Open moist areas	Young shoot	bitter	Year-round
84.	<i>Piper longum</i> L. ( <b>Piperaceae</b> )	Simfri	Climber	Forest margins & homesteads	Young shoot	Pungent, spicy & hot	Mar.–Sept.
					Fruit	Pungent, spicy & hot	
85.	<i>Portulaca oleracea</i> L. ( <b>Portulacaceae</b> )	Hangsw-affa	Herb	Open fields & gardens	Young shoot	slightly sour and salty	Jun.–Sept.
86.	<i>Pouzolzia zeylanica</i> (L.) Benn. ( <b>Urticaceae</b> )	Sam-laothi	Herb	Moist forest areas	Young shoot	mild, slightly bitter	Mar.–Oct.
87.	<i>Premna herbacea</i> Roxb. ( <b>Lamiaceae</b> )	Keradapini/ Mathigaldab	Shrub	Forest edges	Young shoot	bitter & pungent	Mar.–Aug.
88.	<i>Rothea serrata</i> (L.) Steane & Mabb. ( <b>Lamiaceae</b> )	Khunkha Raja	Shrub	Forest margins	Young shoot	Bitter	Throughout the year
89.	<i>Sarcochlamys pulcherrima</i> (Roxb.) Gaudich. ( <b>Urticaceae</b> )	Adumbra/ Mechaki	Shrub	Forest patches	Young shoot	Mild & slightly astringent	Throughout the year

90.	<i>Scleromitron diffusum</i> (Willd.) R.J. Wang <b>(Rubiaceae)</b>	Daosri-aithing	Herb	Open moist areas	Young shoot	bitter & acrid	Mar. – Oct.
91.	<i>Scoparia dulcis</i> L. <b>(Lamiaceae)</b>	Bongfhang Rakheb	Herb	Open areas	Young shoot	bitter	Mar. – Oct.
92.	<i>Sesbania grandiflora</i> (L.) Poir. <b>(Fabaceae)</b>	Bok Phul	Small tree	Homesteads, gardens	Young shoot Flower	Mildly sweet Mildly sweet	Year-round
93.	<i>Smilax perfoliata</i> Lour. <b>(Smilacaceae)</b>	Sila -Asugur	Climber	Forest thickets	Young shoot	mildly bitter	Year-round
94.	<i>Solanum nigrum</i> L. <b>(Solanaceae)</b>	Mwisung	Herb	Roadsides, open fields	Young shoot	Bitter	Apr.–Sept.
95.	<i>Solanum torvum</i> Sw. <b>(Solanaceae)</b>	Khunthai	Shrub	Forest margins, homesteads	Young shoot Fruit	Bitter Bitter	Mar.–Oct.
96.	<i>Solanum violaceum</i> Ortega <b>(Solanaceae)</b>	Khunthai	Shrub	Wastelands, forest edges	Young shoot Fruit	Bitter Bitter	Mar.–Oct.
97.	<i>Solanum virginianum</i> L. <b>(Solanaceae)</b>	Khunthai	Shrub	Dry open areas, forest margins	Young shoot Fruit	Bitter Bitter	Mar.–Oct.
98.	<i>Solena amplexicaulis</i> (Lam.) Gandhi <b>(Cucurbitaceae)</b>	Lwnthi	Climber	Forest patches	Young shoot Fruit	Mildly bitter Mildly bitter	Feb.–Oct.
99.	<i>Spondias pinnata</i> (L.f.) Kurz <b>(Anacardiaceae)</b>	Thaisuri	Tree	Moist shady soils	Young shoot Fruit	Sour & tangy sour	Feb.–Nov.
100.	<i>Stellaria media</i> (L.) Vill. <b>(Caryophyllaceae)</b>	Nabiki	Herb	Moist shady areas	Young shoot	Mild & slightly sweet	Nov.–Apr.
101.	<i>Stellaria wallichiana</i> Haines <b>(Caryophyllaceae)</b>	Thunthuni	Herb	Forest area & moist soils	Young shoot	Mild & slightly sweet	Nov.–Apr.
102.	<i>Talinum fruticosum</i> (L.) Juss. <b>(Talinaceae)</b>	Phaleng	Herb	Cultivated gardens & open fields	Young shoot	sour & mucilaginous	Apr.–Sept.

103.	<i>Tamarindus indica</i> L. <b>(Fabaceae)</b>	Thingkhlang	Tree	Forest area	Young shoot	Sour	Oct.- Apr.
					Fruit	Tangy	
104.	<i>Tephrosia candida</i> DC. <b>(Fabaceae)</b>	Jabwsri	Shrub	Grassland & open areas	Young shoot	bitter & acrid	Mar.–Oct.
					Flower	Mild	
105.	<i>Thelypteris parasitica</i> (L.) Tardieu (Thelypteridaceae)	Dingkhia	Herb	Moist shady areas	Young shoot	Mild & earthy	Feb.–Sept.
106.	<i>Thunbergia grandiflora</i> Roxb. <b>(Acanthaceae)</b>	Dengkhaklu	Climber	Forest edges	Young shoot	Bitter	Feb.–Oct.
107.	<i>Trichosanthes costata</i> Blume <b>(Cucurbitaceae)</b>	Khaila	Climber	Forest thickets	Young shoot	Bitter	Mar.- Oct.
					Fruit	Bitter	
108.	<i>Trichosanthes dioica</i> Roxb. <b>(Cucurbitaceae)</b>	Potol	Climber	Cultivated	Young shoot	Bitter	Apr.–Sept.
					Fruit	sweet, mild & slightly bitter	
109.	<i>Vitex negundo</i> L. <b>(Lamiaceae)</b>	Posotia	Shrub	Forest edges	Young shoot	Bitter	Year-round
110.	<i>Zanthoxylum oxyphyllum</i> Edgew. <b>(Rutaceae)</b>	Jabraing	Medium-sized tree	Forest patches	Young shoot & leaves	pungent, spicy & tingling	Mar.–Nov.
					Fruit	Pungent & spicy	
111.	<i>Zingiber officinale</i> Roscoe <b>(Zingiberaceae)</b>	Haijeng	Herb	Cultivated	Young shoot & leaves	spicy, pungent & aromatic	Year-round,
					Rhizome	spicy, pungent & aromatic	
112.	<i>Ziziphus jujuba</i> Mill <b>(Rhamnaceae)</b>	Bwigri	Tree	Cultivated	Fruit	sweet & tangy	Year round



**Fig:1:** Pie diagram of the percentage contribution of different members in recorded species



**Fig:2:** Bar chart showing the habitat of recorded species and a pie diagram showing the quality and taste of the recorded species.

**Discussion**

Preparation of special dish using wild edible plants during Bwisagu reflects a deep-rooted cultural and ecological tradition among the people of Bodo tribe. The bitter–sour curry represents the transition from the old year to the new, with bitterness representing past hardships and sourness signifying regeneration. These cooking and consuming traditions are not only nutritionally beneficial but also strengthen identity of the community and ecological stewardship. Besides, they believe that they can be healthy and strong for the whole years to do hard agricultural activities. Supporting this study, A documentation work done in Tinsukia district of Assam where 96 wild plant species recorded, of which 56% were used as vegetables, 30% as edible fruits, and 7% as masticatory or spices (Saikia *et al.*, 2025), The reliance on diverse habitats for plant collection demonstrates sustainable use of local biodiversity. Moreover, the oral transmission of knowledge ensures intergenerational continuity and resilience of traditional food systems. Comparative analysis with other ethnic groups in Assam reveals both shared and unique practices, underscoring the region’s rich ethnobotanical heritage. These traditional knowledge of wild plant consumption linked with socio-culture is largely transmitted orally across generations, remain under-documented despite their ethnobotanical importance (Endle, 1990 & Brahma, 2011).



**Fig:3:** (a) *Alpinia nigra* (Gaertn.) Burtt; (b) *Antidesma acidum* Retz.; (c) *Antidesma ghaesembilla* Gaertn.; (d) *Cissus quadrangularis* L.; (e) *Parthenocissus quinquefolia* (L.) Planch.; (f) *Phlogacanthus thyriformis* (Roxb. ex Hardw.) Mabb.; (g) *Premna herbacea* Roxb.; (h) image of Bodo women collecting wild edible plants for Traditional Bitter–Sour Mixed Vegetable Curry

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## Conclusion

The present investigation highlights the sociocultural significance of wild edible plants used by the Bodo tribe during Bwisagu celebration. Record of 112 wild edible plant species proves the Bodo community linked to deep ethnobotanical knowledge and its role in sustaining conservation of plant resources, alternative nutrition and their cultural uniqueness. Conserving these traditional practices is vital for encouraging sustainable food systems and safeguarding imperceptible socio-cultural heritage of the community. Further research can be found out more valuable information such as exact nutritional and phytochemical content, conservation methods and addition of traditional knowledge into policy frameworks.

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## Declaration

**Conflict of Interest:** The authors declare that they have no conflict of interest.

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