

DIVERSITY OF WILD GREENS KNOWLEDGE FROM THE RURAL HOUSEHOLDS OF ANANTAPUR DISTRICT, A.P

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ABSTRACT

Anantapur district is having the second lowest rainfall in the country, but with rich wild green biodiversity and traditional knowledge. A wide range of wild species are used as edible plants. This traditional knowledge passed through generations, helps the rural people to maintain food security in their households. Majority of inhabitants take wild greens as a potential source of alternative food to meet their essential nutritional requirements. Wild leaf vegetables are non-cultivated, inexpensive source of food to maintain good health in the drought conditions. Hence it is very important to document the wild edible biodiversity. This unexplored information is very significant to exploit new food resources for future use.

KEYWORDS: Wild Greens, Biodiversity, Traditional Knowledge, Edible, Anantapur

INTRODUCTION

Humans have used plant biodiversity as food since time immemorial. Different types of leaves depending from the place and the season, were part of human diet since prehistoric time. Millions of people in the world suffering with the deficiency of one or more nutrients (Ogle & Grivetti 2000). Large number of rural population in India depend on wild greens to meet their nutritional requirement (Nordeide 1996). Leafy vegetables have more nutritional value than any other food (Rai et al 2004). Wild greens make up a significant source of vitamins, minerals, antioxidants (Artemis 2012) and phyto-chemicals. They are rich in fiber, extremely low in fat and carbohydrates and provide a good source of protein (Kanchanlata & veenapani 2011). Wild greens are very important food to improve disease resistance and immunity in the body.

The present study area Anantapur district is located at the southern part of Andhra Pradesh, between 14.68 northern latitude and 77.6 eastern longitude with a geographical area of 19,134.91 Sq.Km. Being located in the rain shadow region of peninsular India with an average rain fall of 520 mm per annum. Since it is a drought prone area, total forest coverage is less than 5% of the total area. The forests are classified into two types viz, Dry tropical south Indian dry mixed deciduous forests and southern catch thorn forest (Champion & Seth 1968).

Agriculture is the main occupation of the inhabitants. They are having sound knowledge about plant uses, so this region is well explored for medicinal plant lore by many botanists (Reddy et al 1989). But little attention is paid to document the wild edible leafy vegetables. It becomes necessary to record the useful wild biodiversity knowledge before it comes to an end. Documentation of such information is going all over India, (Misra et al 2008), since this knowledge is rapidly eroding, (Prashanth Kumar & Shiddamallayya 2014).

METHODOLOGY

Biodiversity Information of wild greens was recorded through personal interviews and discussions with the local villagers, shepherds, cowboys, farmers, house wives and agriculture labourers.

Old age people are repositories of traditional knowledge, hence with the help of these people authentic formation about wild greens were collected and documented along with their vernacular names, parts used and cooking methods.

RESULTS

The study provided the rich knowledge about the wild edible greens. In this present survey information about 54 plants belonging to 29 families and 44 genera were presented with botanical name, local name, family and mode of consumption. A maximum no of 11 plants from Amaranthaceae. All the Information is tabulated and presented here (Table 1).

Table 1: Wild Greens of Anantapur District

Sl. No	Botanical Name	Family	Local Name	Mode of Consumption
1.	<i>Acacia concinna</i> (Willd). DC.	Mimosaceae	Shikaya	Young leaves are ground to course paste along with red chillies and salt to make chutney.
2.	<i>Achyranthes aspera</i> Linn.	Amaranthaceae	Uttareni	Leaves cooked as curry.
3.	<i>Aerva lanata</i> (Linn.) Juss.	Amaranthaceae	Kondapindi aaku	Leaves cooked as curry.
4.	<i>Allmania nodiflora</i> (Linn.)R. Br. ex. Wight.	Amaranthaceae	Yerrabaddi aaku	Leaves cooked as curry.
5.	<i>Alternanthera sessilis</i> (L.) R. Br ex Dc.	Amaranthaceae	Ponnaganti aaku	Leaves cooked as curry.
6.	<i>Amaranthus graecizans</i> L.	Amaranthaceae	Chirraaku	Leaves cooked as curry.
7.	<i>Amaranthus spinous</i> L.	Amaranthaceae	Mulla thotakoora	Leaves cooked as curry.
8.	<i>Amaranthus tricolor</i> Linn.	Amaranthaceae	Tella thotakoora	Leaves cooked as curry.
9.	<i>Amaranthus viridis</i> L.	Amaranthaceae	Chilaka thotakoora	Leaves cooked as curry
10.	<i>Argemone mexicana</i> Linn.	Papaveraceae	Brahmadandi	Very young leaves cooked along with red gram.
11.	<i>Bauhinia racemosa</i> Lam.	Caesalpiniaceae	Are	Young leaves cooked as curry
12.	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Atika mamidi	Leaves and young parts cooked as curry.
13.	<i>Cadaba fruticosa</i> (Linn.)Druce	Capparaceae	Chagarthi koora	Leaves and young parts cooked as curry
14.	<i>Caralluma adscendens</i> Haw. var <i>fimbriata</i> (wall.)Grav.&Mayur.	Asclepidaceae	Kundeti kummulu	Eaten raw
15.	<i>Cassia auriculata</i> Linn.	Caesalpiniaceae	Thangedu	Young leaves and young fruits cooked as curry
16.	<i>Cassia fistula</i> Linn.	Caesalpiniaceae	Rela	Young leaves and flowers are cooked as curry.
17.	<i>Cassia occidentalis</i> Linn.	Caesalpiniaceae	kasinda	Young leaves and young frits cooked as curry
18.	<i>Cassia tora</i> Linn.	Caesalpiniaceae	Tantepi	Young leaves cooked as curry
19.	<i>Celosia argentea</i> L.	Amaranthaceae	Gurugaaku	Young leaves cooked as curry
20.	<i>Celosia argentea</i> var <i>cristata</i> Kuntze	Amaranthaceae	Kodijuttu	Young leaves cooked as curry
21.	<i>Centella asiatica</i> (L.) Urban	Apiaceae	Saraswathi	Leaves used in making rothi
22.	<i>Chenopodium album</i> L.	Chenopodiaceae	Chakravarthi koora	Cooked as curry.

Table 1: Contd.,

23.	<i>Cissus quadrangularis</i> Linn.	Vitaceae	Nalleru	Young parts are ground to course paste along with chillies and salt to make chutney.
24.	<i>Cleome gynandra</i> Linn.	Cleomaceae	Vaminta	Leaves cooked as curry
25.	<i>Cocculus hirsutus</i> (Linn.) Diels	menispermaceae	Doosari teega	Leaves cooked as curry
26.	<i>Corchorus aestuans</i> Linn.	Tiliaceae	Kasala kura	Leaves cooked as curry
27.	<i>Corchorus olitorius</i> Linn.	Tiliaceae	Perinta kura	Leaves cooked as curry
28.	<i>Cynodon dactylon</i> (Linn.)Pers.	Poaceae	Durvalu	Young parts roasted and ground to course paste along with chillies and salt to make chutney
29.	<i>Digera muricata</i> (Linn.) Mart.	Amaranthaceae	Chenchala koorra	Whole plant is cooked as curry
30.	<i>Eclipta prostrate</i> (Linn.) Linn.	Asteraceae	Guntakalagara	Young parts roasted and ground to course paste along with chillies and salt to make chutney
31.	<i>Erythroxylon monogynum</i> Roxb.	Erythroxylaceae	Gedara aaku	Leaves cooked as curry
32.	<i>Gisekia pharmaceoides</i> Linn.	Aizoaceae	Isukadaari koorra	Leaves cooked as curry
33.	<i>Glinus lotoides</i> Linn.	Aizoaceae	Chadaraasi koorra	Whole plant is cooked as curry.
34.	<i>Glinus oppositifolius</i> (Linn.) DC.	Aizoaceae	santhraasi	Whole plant is cooked as curry
35.	<i>Hygrophila auriculata</i> (Schum.)Heine	Acanthaceae	Mudigubba aaku	Leaves cooked as curry
36.	<i>Ipomoea aquatica</i> Forssk.	Convolvulaceae	Toothi koorra	Leaves cooked as curry
37.	<i>Kedrostis rostrata</i> (Rottler) cogn.	Cucurbitaceae	Sandulaaku	Leaves cooked as curry
38.	<i>Leptadenia reticulate</i> (Retz.)Wight & Arn.	Asclepiadaceae	Paala teega	Leaves cooked as curry
39.	<i>Leucas aspera</i> (Willd.)Link	Lamiaceae	Thummi	Young parts roasted and ground to course paste along with chillies and salt to make chutney
40.	<i>Marasilea quadrifolia</i> Linn.	Marsileaceae	Chikilantha koorra	Whole plant is cooked as curry.
41.	<i>Merremia emarginata</i> (Burm. f.) Hallier f.	Convolvulaceae	Yelaka chevi krra	Whole plant is cooked as curry.
42.	<i>Monochoria vaginalis</i> (Brum f.)C. Presl ex kunth	Pontederiaceae	Neera kancha	Leaves cooked as curry
43.	<i>Pergularia daemia</i> (Forssk.) Chiov.	Asclepiadaceae	Jittava	Flowers boiled in water, squeezed and cooked with red gram
44.	<i>Phyllanthus amarus</i> Schumach &Thonn.	Euphorbiaceae	Nela usiri	Young parts Cooked with red gram
45.	<i>Pistia stratiotes</i> L.	Araceae	Antara ganneru	Cooked with red gram
46.	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Chitramoolam	Leaved cooked with tamarind pulp
47.	<i>Portulaca oleracea</i> L.	Portulacaceae	Pedda payala aaku	Cooked with red gram
48.	<i>Portulaca quadrifida</i> L.	Portulacaceae	Chinna paayala aaku	Cooked with red gram
49.	<i>Solanum americalum</i> Mill.	Solanaceae	Kamanchi	Leaves cooked as curry
50.	<i>Tamarindus indica</i> L.	Caesalpinaceae	Chinta	Cooked with red gram
51.	<i>Tinospora cordifolia</i> (Willd.) Meirs	Menispermaceae	Thippa teega	Leaves cooked as curry
52.	<i>Trianthema portulacastrum</i> L.	Aizoaceae	Galijeru	Whole plant cooked as curry
53.	<i>Tribulus terrestris</i> Linn.	Zygophyllaceae	Palleru	Young shoots, Leaves cooked as curry.
54.	<i>Zaleya decandra</i> (L.)Burm. f.	Aizoaceae	Yerra galijeru	Whole plant cooked as curry

CONCLUSIONS

The study revealed the rich wild green biodiversity of this area. Still a large number of rural inhabitants depend on wild greens as a source of rich nutrition. (Aberoumand & Deokul 2009). This knowledge about edible wild greens playing a significant role in rural area to overcome drought conditions. With the change in climatic conditions and due to the developmental activities, wild green diversity is eroding along with the traditional knowledge. Since, biodiversity is the soul of traditional knowledge. So documentation of traditional knowledge is essential to maintain sustainable development (Uprety et al 2012) in the field of food plant wealth for future generations.

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