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Assessment Of The Therapeutic Potential Of Wild Edible Leafy Vegetables In The Rampachodavaram Agency Division, Asr District, Andhra Pradesh, India

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Abstract: *Wild edible plants play a crucial role in the livelihoods of communities residing in agency areas. In many remote regions, people continue to rely on plants available in their natural surroundings for food, medicine and shelter. A significant number of wild edible leafy vegetables possess medicinal properties and are used to treat common ailments. This paper examines the ethno-medicinal properties of 60 species of traditionally used leafy vegetables. These plants address approximately 18 disease categories including antidote, deworming, ENT disorders, fever, kidney stones, liver problems, piles, small-pox etc. Regular consumption of these vegetables may serve as an alternative source of medicinal compounds while providing nutritional benefits. The data are quantified, highlighting key species of wild leafy vegetables as both food and medicine. Conservation of these species and the indigenous knowledge associated with them is imperative. Further analysis of their bioactive constituents could facilitate their integration into routine clinical practice.*

Keywords: *Assessment of therapeutic potential, wild edible leafy vegetables, traditional medicine, Rampachodavaram agency division.*

INTRODUCTION

The utilization of wild plants as food is deeply embedded in the culture and traditions of numerous indigenous communities worldwide. In many developing countries, millions of people rely significantly on wild plant products for their subsistence and income (Jiji P. 2014; K N Reddy et al. 2007; Misra S et al. 2008; Narzary H et al. 2013; Prashanth Kumar and G M N Shiddamallayya 2014; Rekha Sinha and Valeria Lakra 2005; S. Muhammad and M. A. Shinkafi 2014; Uprety Y et al. 2012; Vaishali S et al. 2013). Wild edible plants serve as a vital component in diversifying diets and enhancing household food security for various ethnic communities. Many traditional leafy vegetables possess higher nutritional values compared to several commonly cultivated plants (Sundriyal M and Sundriyal RC 2001). Ethnobotanical research on wild food plants continues to be a dynamic field of study. Numerous studies have documented the use of wild food plants among tribal communities in regions such as central India, Tamil Nadu, Northeastern India etc. are reported from India (Jain AK and Tiwari P 2012; Rasingam L 2012; Thongam et al. 2016). A few ethnobotanical studies on ethnomedicinal plants were conducted in Rampa agency (S. B. Padal et al. 2022). However, there is limited information on wild vegetables in the Rampachodavaram (Rampa) agency division of Andhra Pradesh, despite their diverse applications. Additionally, data on the nutritional values of wild edible leafy vegetables in this region are scarce. Research and development efforts to harness these resources for economic development and sustainability have also been minimal. Many potentially edible wild species remain undocumented. The rich biodiversity of wild plants presents an opportunity to identify new vegetable sources to meet current and future needs. Therefore, compiling inventories of wild food resources and documenting ethnobotanical information on their diversity, usage and status are imperative. This study aims

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to explore the medicinal uses of traditionally consumed wild edible leafy vegetables. Specifically, it seeks to quantitatively document the local knowledge of wild leafy vegetables in the Rampachodavaram agency division, ASR district, Andhra Pradesh.

MATERIALS AND METHODS

Study area This study was conducted in the Rampachodavaram Agency Division, located in the Alluri Sitharama Raju (ASR) district of Andhra Pradesh, India. The division spans an area of approximately 6,431.63 square kilometres (Fig.1) and it is situated between latitudes 17°17′30″ N and 17°48′05″ N, and longitudes 81°44′26″ E and 82°13′10″ E. Administratively, it comprises 11 mandals: Rampachodavaram, Devipatnam, Y. Ramavaram, Addateegala, Gangavaram, Maredumilli, Rajavommangi, Nellipaka, Chinturu, Kunavaram, and Vararamachandrapuram. The region is predominantly inhabited by Scheduled Tribes, including the Konda Reddi, Konda Dora and Valmiki communities. The local economy is primarily based on agriculture (cultivation of paddy, maize, pulses, and vegetables), forest resources (such as bamboo shoots, fruits, and other non-timber forest products) and other income sources like livestock rearing, fishing and wage labour. The trade of wild vegetables, predominantly conducted by women, provides an alternative source of income. Forests account for approximately 66% of the total land area in this division. Tribal communities actively collect a diverse range of edible and other useful plants from these forests. Ethnobotanical data were systematically gathered through field surveys and interviews with local tribal informants. Information was recorded concerning the local names, modes of administration, methods of use and dosage forms of wild edible leafy vegetables traditionally utilized by the tribal communities. This comprehensive documentation aimed to preserve indigenous knowledge and assess the potential of these plants for nutritional and medicinal purposes.

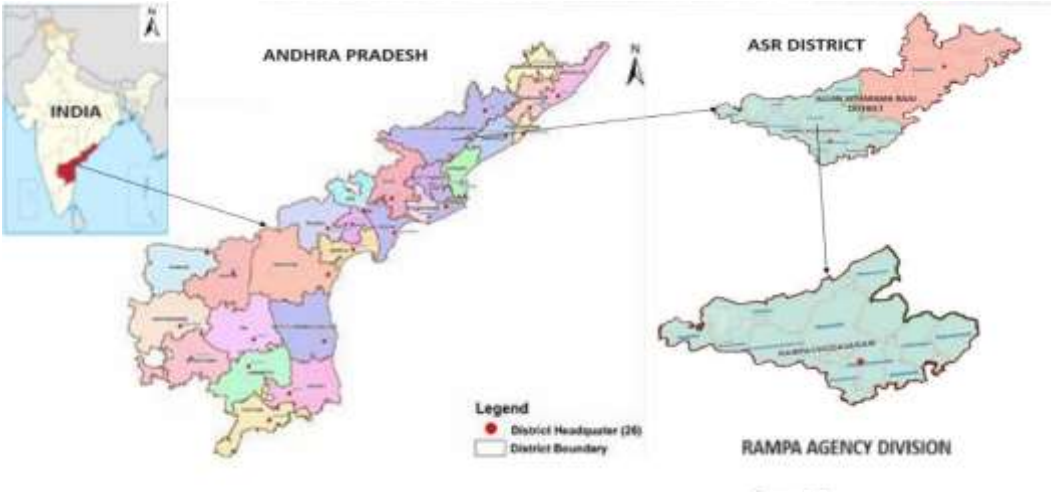

Fig. 1 Location map of study site in Rampa agency, Andhra Pradesh, India.

METHODS

Survey and data collection

This study aimed to collect baseline information on the diversity and usage of wild leafy vegetable resources traditionally utilized by the tribal communities of the Rampachodavaram Agency Division. Fieldwork was conducted across all 11 mandals of the division from August 2023 to July 2024, encompassing different seasons to capture seasonal variations in plant availability and usage. A total of 165 semi-structured interviews were conducted, involving 140 female and 25 male informants aged between 31 and 79 years. These informants were selected randomly, ensuring a diverse representation of the community. Interviews were carried out in the local language, Telugu, to facilitate effective communication and ensure accurate data collection. The interview

protocols adhered to the guidelines set forth by the International Society of Ethnobiology's Code of Ethics for ethnobiological research (International Society of Ethnobiology, 2006). The data collection employed the successive free-listing method, a widely recognized technique in ethnobotanical studies for documenting local knowledge on plant usage (Heinrich et al. 2009). This method involves asking informants to list all items they know within a given domain, which helps in identifying culturally significant plants and understanding variations in individual knowledge. The interview questionnaire included the following details: Local name of the plant, Parts used as vegetables, Method of preparation, Mode of usage, Symptoms treated (Table 1). Following the interviews, the collected plant specimens were dried and processed according to standard herbarium techniques (Jain and Rao 1977). Taxonomic identification was carried out with the assistance of relevant literature and regional floras (Gamble and Fisher 1957; Pullaiah et al. 2018). The identified herbarium specimens were deposited in the Herbarium of the Department of Botany, Sri Krishnadevaraya University, Ananthapuramu-515003, Andhra Pradesh, India.

Data analysis

The data were converted into **use-reports** following previously published methods and were grouped into illness categories. The consensus over a claim was assessed using the Informant Consensus Factor (Fic), as described by Heinrich et al. 1998, Trotter and Logan 1986. This factor is calculated using the formula: **Fic = (Nur - Nt) / (Nur - 1)** where: **Nur** is the number of use-reports from informants for a particular ailment category and **Nt** is the number of taxa (plant species) used for that ailment category by all informants. The consensus regarding the use of a species for an ailment category was determined using the Index of Agreement on Remedies (IAR), calculated as: **IAR = Nur - Nt / Nur – 1** where: **Nur** is the number of use-reports for a species and **Nt** is the total number of ailment categories treated by that species. Both Fic and IAR values range from 0 to 1, with higher values indicating a greater rate of informant consensus. The documented data on medicinal plants were grouped into 18 disease (ailment/illness) categories based on Cook 1995.

RESULTS AND DISCUSSION

Table 1 represents various traditional therapeutic uses of wild edible leafy vegetables along with detailing the plant parts used, modes of administration, methods of preparation, and dosage forms. The proportion of male healers was higher than that of female healers. Regarding educational status, only a few healers had formal schooling while the majority were uneducated. This study documented the ethnomedicinal usage of 60 species belonging to 54 genera across 36 families used in traditional formulations. Among these, the families Amaranthaceae and Fabaceae had the highest number of species, followed by Euphorbiaceae, Malvaceae and Verbenaceae (Tables 1, 2, and 3). Of the recorded species, 38 were used internally while 27 externally and 12 were employed both internally and externally. The major illness categories treated included dermatological, gastrointestinal and pulmonary ailments. Out of 98 use-reports (UR), 48 pertained to gastrointestinal ailments and 50 to dermatological conditions. Illness categories such as DW, ED, RSD, GUD, DI, Fr, OC and Ad exhibited high informant consensus factors (Fic) indicating strong agreement among informants regarding the use of specific plants for these ailments (Table 2). Notably, *Ipomoea aquatica*, *Alternanthera sessilis* and *Euphorbia hirta* had a high number of use-reports (Table 2). Species like *Abrus precatorius*, *Acalypha indica*, *Boerhavia diffusa*, *Chamaecrista mimosoides*, *Calophyllum inophyllum*, *Corchorus olitorius*, *Cycas circinalis*, *Justicia adhatoda*, *Pedalium murex*, *Vitex negundo* and *Ipomoea aquatica* exhibited high Index of Agreement on Remedies (IAR) values, reflecting consistent use across informants (Tables 1 and 3). Leaves were the predominant edible parts and were commonly consumed as cooked vegetables through boiling, steaming or frying. Communities employed various modes of consumption based on taste preferences and dietary habits. It was observed that women over the age of 45 possessed more traditional knowledge about leafy vegetables including species identification, usage and preparation methods. This may be attributed to their involvement in household activities such as cooking, marketing and nurturing. Similar findings have been reported by Upetry et al. 2012. Additionally, Phillips and Gentry 1993 noted that knowledge of wild edible plants is acquired early in life and tends to increase with age.

Table 1: Therapeutic uses of wild edible leafy vegetables of Rampachodavaram agency division

Botanical name, Family, Vernacular Name and Voucher Number	Name of ailment treated, (UR)	Method of use	Mode of Consumption	IAR
Abrus precatorius L. (Fabaceae), Guruvinda ginja, PT 45840	Burning of skin (3)	Leaf juice mixed with castor oil is applied (E)	Leaves-Cooked as stew with chick peas	1.00
Acalypha indica L. (Euphorbiaceae), Kuppintaku, PT 45871	Stomach-ache (2)	1 tablespoon of leaf juice is taken after meals twice daily for 5 days (I)	Leaves-Cooked as stew alone	1.00
Adhatoda vasica Nees. (Acanthaceae), Addasaramu, PT 45842	Dysentery (4)	Juice of 2 mature leaves is given thrice daily before meals for 3days(I)	Leaves-Cooked as stew with chick peas	1.00
Alternanthera sessilis (L.) DC., (Amaranthaceae), Ponnaganti koora, PT 45872	Eye diseases-2 Stomachache-1 Skin disease-5	Leaf juice used(E) Leaf juice used (I) Fresh leaf paste is applied (E)	Leaves-Cooked as stew with chick peas	0.72
Amaranthus spinosus L., (Amaranthaceae), Mullathota koora, PT 45843	Kidney stones (1) Indigestion (3)	Young leaves juice used (I) Decoction of fresh leaves given (I)	Leaves-Cooked as stew with fried onions in olive oil	0.66
Amaranthus viridis L. (Amaranthaceae), Kodijuttu koora, PT 45873	Scorpion sting (1) Toothache (2)	Leaf paste is used as an antidote (I) Leaves decoction used (I)	Leaves-Cooked as stew with fried onions in olive oil with garlic	0.50
Basella alba L. (Basellaceae), Bachalli kura, PT 45844	Piles (1) Headache (3)	Leaf paste applied (E) Leaf paste applied (E)	Leaves-Cooked as stew with chick peas	0.66
Boerhavia diffusa L. (Nyctaginaceae), Atuka mamidi, PT 45874	Cough (4)	Leaves are used (I)	Leaves-Cooked as stew alone	1.00
Chamaecrista mimosoides (L.) Greene., (Fabaceae), Nelaponna, PT 45845	Diarrhoea (5)	Decoction of leaves is given (I)	Leaves-Cooked as stew with fried onions, olive oil	1.00
Calophyllum inophyllum L. (Calophyllaceae) Ponna chettu, PT 45875	Eye diseases (3)	Leaves are soaked in water and applied (E)	Leaves-Cooked as stew alone	1.00
Cardiospermum halicacabum L., (Sapindaceae), Teega, PT 45846	Piles (2) Joint pain (1)	Decoction of leaves given (I) Leaf paste used (E)	Leaves-Cooked as stew alone/Raw as a side vegetable	0.50
Cassia tora L. (Leguminosae), Thantepu, PT 45876	Ringworm (5) Tumour (1)	Leaf paste used(E) Seedpowder+cow urine is applied(E)	Leaves-Cooked as stew alone	0.80

Celosia argentea L. (Amaranthaceae), Gunaka kura, PT 45847	Snake bite (5) Skin diseases (3)	Leaves ash used(I) Root powder with honey applied (E)	Leaves-Cooked as stew with chick peas	0.86
Centella asiatica (L.) Urb., (Apiaceae), Saraswathi Aaku, PT 45819	Abscess (2) Leprosy (1)	Leaf paste used(I) Leaf decoction used (I)	Leaves-Cooked as stew with fried onions, olive oil	0.50
Chenopodium album L. (Amaranthaceae), Aku koora, PT 45848	Hookworms-2 Dysentery (3)	Seeds oil used (I) 2 tablespoons of leaf juice used(I)	Leaves-Cooked as stew with chick peas	0.75
Corchorus olitorius L. (Malvaceae), Perinta-kura, PT 45877	Anaemia (2)	Leaves used to anaemic diseases (I)	Leaves-Cooked as stew alone	1.00
Cissus quadrangularis L., (Vitaceae), Nalleru kada, PT 45835	Joint pain (3) Bone fracture (1)	25 g. of boiled leaves taken(I) Stem paste used(E)	Stem/Leaves-Cooked as boil with pickled	0.66
Cleome monophylla L. (Cleomaceae), Vaminta, PT 45849	Swellings (2) Insect bite (1) Tooth ache (2)	Leaf juice used (E) Leaf paste used(E) Leaf juice used (E)	Leaves-Raw as salads	0.50
Clerodendrum serratum (L.) Moon., (Lamiaceae), Bommala marri, PT 45878	BP (2), Diabetes (2) Asthma (3)	Leaves eaten (I) Root decoction used (I)	Leaves-Cooked as stew with fried onions in olive oil	0.75
Colocasia esculenta (L.) Schott., (Araceae), Chama gadda, PT 45850	Otorrhea (1) Scorpion sting (1)	leaf juice dropped into ears (I) Leaf paste used(E)	Tubers- Cooked as boil alone /vegetables	0.00
Commelina benghalensis L., (Commelinaceae), Vennaddu Aaku, PT 45879	Diarrhoea (2) Pimples (2)	Leaf powder decoction given (I) Leaf paste used (E)	Leaves-Cooked as omelettes	0.66
Cyamopsis tetragonaloba (L.) Taub., (Fabaceae), Goruchikkudu, PT 45851	Skin diseases (5) Dyspepsia (1)	Leaf paste used (I) 2 spoonsful of Leaf paste, honey are given (I)	Leaves/Pods-Cooked as stew with fried onions in olive oil	0.80
Cycas circinalis L. (Cycadaceae), Ranaguvva, PT 45880	Gastritis (2)	3 spoons of leaf juice are used (I)	Leaves-Cooked as stew alone	1.00
Digera muricata (L.) Mart., (Amaranthaceae) Chenchali koora, PT 45852	Urinary disorder (3) Purgatives (2)	Leaf paste used (I) Whole plant paste is used daily twice for 2 days (I)	Leaves-Cooked as stew with chick peas and onions	0.75
Erythroxylum monogynum Roxb. (Erythroxylaceae), Devadaru, PT 45881	Sore-throat (4) Fever (3)	Decoction of leaves is given(I) Stem paste used(I)	Leaves-raw in salads	0.83
Emilia sonchifolia (L.) DC. (Asteraceae), Sarasruti, PT 45853	Eye disease-2 Conjunctivitis (1)	Leaf juice used (I) Leaf juice instilled into the eyes (E)	Leaves-Cooked as stew alone	0.50
Euphorbia hirta L. (Euphorbiaceae), Gurri mokka, PT 45882	Gastritis (3) Cuts (5)	Leaf juice used (I) Latex of whole plant is applied (E)	Leaves-Cooked as stew alone	0.86

Hibiscus sabdariffa L. (Malvaceae), Yerra gongura, PT 45854	Dysentery (1)	Leaves are used (I)	Leaves-raw as pickled in salt and vinegar	0.00
Hibiscus surattensis L., (Malvaceae), Adavigogu, PT 45883	Joint pain (1)	leaf paste is applied on the affected parts (E)	Leaves-Cooked as stew with Dall /Prepare pickle	0.00
Hibiscus cannabinus L. (Malvaceae), Gongura, PT 45855	Aphrodisiac-1 Stomach pain (3)	Leaves are used (I) Leaf juice used (I)	Leaves-Cooked as stew with Dall and pickle	0.66
Ipomoea aquatica Forssk., (Convolvulaceae), Tuti Aaku, PT 45884	Dysentery (4) Eczema (5)	leaf juice used (I) Leaf paste is applied (E)	Leaves-Cooked as stew alone/ with chick peas	0.87
Ipomoea batatas (L.) Lam., (Convolvulaceae), Chilakada dumpa, PT 45856	Swellings (1)	Leaf paste applied as a poultice (E)	Leaves/Tubers-Cooked as boil alone/in mixture with other species	0.00
Ipomoea muricata (L.) Jacq., (Convolvulaceae), Thutikada, PT 45885	Piles (1)	Leaf paste is applied (E)	Leaves-Cooked as stew alone/ chick peas	0.00
Lagenaria siceraria (Molina) Standl., (Cucurbitaceae), Sorakaya, PT 45857	Cough (1), fever (2)	Young leaves are used (I)	Leaves/fruit-Cooked as stew alone /with salads	0.50
Justicia glauca Rottler., (Acanthaceae), Kondapindi Aaku, PT 45836	Cut (1), injury (2)	Leaf paste is used on as haemostatic (E)	Leaves-Cooked as stew alone	0.50
Leucas aspera (Willd.) Link., (Lamiaceae), Thunika kaya mokka, PT 45858	Sinusitis (2) Jaundice (2)	1 drop of leaf juice used as nasal (I) Leaf juice is used (I)	Leaves-Cooked as stew alone	0.66
Luffa acutangula (L.) Roxb., (Cucurbitaceae), Beera kaya, PT 45886	Earache (1)	2-3 drop of leaf juice is instilled into the ear (E)	Leaves Cooked as stew with Dall, tomatoes	0.00
Marsilea quadrifolia L. (Marsileaceae), Ciklintakura, PT 45859	Ringworm (1)	Leaves are used for (E)	Leaves-Cooked as stew alone	0.00
Moringa oleifera Lam. (Moringaceae), Munaga chettu, PT 45887	Eye diseases (1)	Used in catarrhal affections (E)	Leaves/fruit-Cooked as stew alone/raw in salad	0.00
Murraya koenigii (L.) Spreng., (Rutaceae), Karivepaku, PT 45860	Dysentery (1) Gastritis (2)	Leaves are eaten raw (I) leaf juice used (I)	Leaves- Prepare pickle/ use other dishes	0.50
Olax scandens Roxb. (Olacaceae), Mekabanda, PT 45861	Headache (1)	Boiled leaves are tied in the forehead (E)	Leaves-Cooked as stew alone	0.00
Oxalis corniculata L. (Oxalidaceae), Pulicinthaku, PT 45888	Headache (1) Fever (2) Dysentery (1)	Leaves used (E) Leaves used (I) Leaves used(I)	Leaves- Prepare pickle/raw in other dishes	0.33

Ocimum americanum L. (Lamiaceae), Kukkatulasi, PT 45862	Burns (1), Cuts (1) Dyspepsia (2)	Leaves are used (I) Leaves are used (I)	Leaves-raw in salads	0.33
Pergularia daemia (Forssk.) Chiov., (Apocynaceae), Juttipaku, PT 45889	Gastritis (1)	4 tablespoons of leaf juice are used after meals (I)	Leaves-Cooked as stew alone	0.00
Pedalium murex L. (Pedaliaceae), Palleru mokka, PT 45863	Gonorrhoea (2)	Leaf powder is given with milk (I)	Leaves-Cooked as stew alone	1.00
Phyllanthus debilis J.G. Klein ex Willd., (Phyllanthaceae), Gunne chintakura, PT 45890	Jaundice (1)	Leaf paste is used daily once on empty stomach for 12 days (I)	Leaves-Cooked as stew alone/ chick peas and onions	0.00
Polygonum chinense L. (Polygonaceae), Sarpakshi, PT 45864	Stomach-ache (1)	25 g. of boiled tender leaves are taken with meal (I)	Leaves-Cooked as stew alone	0.00
Portulaca oleracea L. (Portulacaceae), Pappukuraku, PT 45891	Skindiseases 4 Earache (1)	Leaf paste used(E) leaf juice-instilled into the ear (E)	Leaves-Cooked as stew with Dall, tomatoes, onions	0.75
Rhynchosia minima (L.) DC., (Fabaceae), Nela Alumu, PT 45865	Swellings (1) Toothache (2)	Leaves used (E) Plant juice is used (I)	Basal rosettes and leaves-Cooked as stew alone	0.50
Sauropus quadrangularis (Willd.) Mull. Arg. (Euphorbiaceae), Multivitamin plant, PT 45892	Skin diseases (2) Sores (2)	Leaf paste made with camphor and butter used as ointment (E) Leaf paste used(E)	Leaves-Cooked as stew alone	0.66
Smilax zeylanica L., (Smilacaceae), Konda thamberaku, PT 45866	Rheumatism (1)	Leaf powder used (I)	Leaves-Cooked as stew alone	0.00
Solanum americanum Mill., (Solanaceae), Jaji Kura mokka, PT 45893	Headache (1) Night blindness (1) Cuts (2)	Leaf juice used (I) Leaves-cooked as stew (I) Leaf juice used(E)	Leaves/fruit-Cooked as stew alone/raw in salads	0.33
Stachytarpheta urticaefolia Sims., (Verbenaceae), Yerri Tulasi, PT 45867	Swellings (1) Ulcers (3)	Leaf paste used (E) 2 spoonsful of leaf juice used (I)	Leaves-raw in salads	0.66
Tamarindus indica L., (Fabaceae), Chinta chettu, PT 45838	Anthelmintic (1) Fever (2)	Decoction of leaves is given (I) Leaves are used (I)	Leaves-Cooked as stew with Dall and tomatoes	0.50
Trianthema decandra L., (Aizoaceae), Tella galijeru, PT 45894	Asthma (1) Rheumatism (1) Jaundice (2)	Leaf juice used (I) Leaf juice used (I) Leaf juice used (I)	Leaves-Cooked as stew alone	0.33
Trigonella foenum-graecum L., (Fabaceae), Menthulu, PT 45868	Dysentery (2) Kidney stones (1)	Decoction-seeds are given (I) Roots are used (I)	Leaves-Cooked as stew with Dall, tomatoes, onions	0.50

Tridax procumbens L. (Asteraceae), Gaayapaku, PT 45895	Chicken pox (1), Cuts (1)	Fresh leaf paste is applied on affected part (E)	Leaves-Cooked as stew alone	0.00
Vitex negundo L., (Lamiaceae), Tella vavili, PT 45869	Malaria (3)	50 g. of leaves decoction – administered (I)	Leaves-Cooked as stew alone	1.00
Xanthium pungens Wallr., (Asteraceae), Peddatitheram, PT 45896	High blood pressure (1), Diabetes (3)	25 g. of boiled leaves taken 30 days (I)	Leaves-Cooked as stew alone	0.00
Zingiber zerumbet (L.) Roscoe ex Sm., (Zingiberaceae), Karallamu, PT 45870	Dysentery (1)	2 tablespoons of rhizome juice is taken after meals for 5 days (I)	Leaves/Rhizome-raw in salads/prepare pickle	0.00

Note: - I - Internal, E - External, VN - Vernacular Name (Local Name), C - Cultivated, UR - use-reports, IAR - Index on Agreement of Remedies, PT – Ethnobotany Herbarium Number/Voucher Number.

Table 2. Fic values for 18 different ailment categories reported by the Rampachodavaram agency division tribe, ASR district of Andhra Pradesh, India

Ailment Categories	No of UR	% of UR	No of Species	F_{ic}
Antidote (Ad)	11	0.05	05	0.600
Circulatory System Disorders (CSD)	03	0.01	02	0.500
Dermatological infection (DI)	50	0.25	18	0.653
Deworming (DW)	02	0.01	01	1.000
Ear, Nose, Throat problem (ENT)	19	0.09	11	0.444
Endocrinal Disorder (ED)	05	0.02	02	0.750
Fever (Fr)	09	0.04	04	0.625
Gastro intestinal disorders (GID)	48	0.24	22	0.553
General Health (GH)	06	0.03	04	0.400
Genito - urinary disorders (GUD)	04	0.02	02	0.667
Kidney Stone (KS)	02	0.01	02	0.000
Liver problems (LP)	05	0.02	03	0.500
Oncogenes (Og)	01	0.00	01	0.000
Oral Care (OC)	06	0.03	03	0.600
Piles (P)	04	0.02	03	0.333
Respiratory System Disorders (RSD)	08	0.04	03	0.714

Skeleton Muscular System Disorders (SMSD)	19	0.09	13	0.333
Smallpox's (SP)	01	0.00	01	0.000
Total	202			

Table 3. List of important plant species prescribed by the Rampachodavaram agency division tribe, ASR district of Andhra Pradesh, India

Ailment Categories	List of important species
Antidote	*Amaranthus viridis* (0.500), *Celosia argentea* (0.860), *Cleome monophyla* (0.500), *Vitex negundo* (1.000)
Circulatory System Disorders	*Clerodendrum serratum* (0.750)
Dermatological infection	*Abrus precatorius* (1.000), *Alternanthera sessilis* (0.720), *Cassia tora* (0.800), *Celosia argentea* (0.860), *Centella asiatica* (0.500), *Commelina benghalensis* (0.660), *Cyamopsis tetragonaloba* (0.800), *Euphorbia hirta* (0.860), *Ipomoea aquatica* (0.870), *Justicia glauca* (0.500), *Ocimum americanum* (0.330), *Portulaca oleracea* (0.750), *Sauropus quadrangularis* (0.660), *Solanum americanum* (0.330)
Deworming	*Chenopodium album* (0.750)
Ear, Nose, Throat problem	*Alternanthera sessilis* (0.720), *Calophyllum inophyllum* (1.000), *Erythroxylum monogynum* (0.830), *Emilia sonchifolia* (0.500), *Leucas aspera* (0.660), *Portulaca oleracea* (0.750), *Solanum americanum* (0.330)
Endocrinal Disorder	*Clerodendrum serratum* (0.750)
Fever	*Erythroxylum monogynum* (0.830), *Lagenaria siceraria* (0.500), *Oxalis corniculate* (0.330), *Tamarindus indica* (0.500)
Gastro intestinal disorders	*Acalypha indica* (1.000), *Justicia adhatoda* (1.000), *Alternanthera sessilis* (0.720), *Amaranthus spinosus* (0.660), *Chamaecrista mimosoides* (1.000), *Chenopodium album* (0.750), *Commelina benghalensis* (0.660), *Cycas circinalis* (1.000), *Digera muricata* (0.750), *Euphorbia hirta* (0.860), *Hibiscus cannabinus* (0.660), *Ipomoea aquatica* (0.870), *Murraya koenigii* (0.500), *Oxalis corniculate* (0.330), *Stachytarpheta urticaefolia* (0.660), *Trigonella foenum-graecum* (0.500)
General Health	*Corchorus olitorius* (1.000), *Cyamopsis tetragonaloba* (0.800), *Hibiscus cannabinus* (0.660), *Ocimum americanum* (0.330)
Genito - urinary disorders	*Digera muricata* (0.750), *Pedalium murex* (1.000)

Kidney Stone	*Amaranthus spinosus* (0.660), *Trigonella foenum-graecum* (0.500)
Liver problems	*Leucas aspera* (0.660), *Trianthema decandra* (0.330)
Oncogenes	*Cassia tora* (0.800)
Oral Care	*Amaranthus viridis* (0.500), *Cleome monophyla* (0.500), *Rhynchosia minima* (0.500)
Piles	*Basella alba* (0.660), *Cardiospermum helicacabum* (0.500)
Respiratory System Disorders	*Boerhavia diffusa* (1.000), *Lagenaria siceraria* (0.500), *Trianthema decandra* (0.330)
Skeleton Muscular System Disorders	*Basella alba* (0.660), *Cardiospermum helicacabum* (0.500), *Cissus quadrangularis* (0.660), *Cleome monophyla* (0.500), *Oxalis corniculata* (0.330), *Rhynchosia minima* (0.500), *Solanum americanum* (0.330), *Stachytarpheta urticaefolia* (0.660), *Trianthema decandra* (0.330)

Note: - Species were arranged in accordance with the number of UR for the particular ailment category, Values mentioned within the parentheses indicate IAR.

CONCLUSION

The present study highlights that the regular use of wild edible leafy vegetables contributes significantly to traditional therapeutic preparations. This is the first report from the Rampachodavaram agency division in the Eastern Ghats of the Alluri Sitharama Raju (ASR) district that quantifies medicinal plants with nutritional value utilized by tribal communities. Our findings reveal the traditional use of plants to treat 11 illness categories with dermatological ailments and bites being of high importance. Illness categories including 07 gastrointestinal, 06 musculoskeletal and pulmonary ailments exhibited moderate consensus while 03 categories showed low consensus. These results warrant deeper investigations into traditional medicinal practices and local health systems. This study underscores the need for further attention to traditional remedies to preserve this knowledge for future generations.

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