



DOCUMENTATION OF FOLK KNOWLEDGE ON WILD EDIBLE PLANTS OF RAMPACHODAVARAM AGENCY DIVISION, ANDHRA PRADESH, INDIA

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Abstract:

Folklore medicinal uses of 23 species of Wild edible plants belonging to 21 genera of 20 families for various ailments among the tribes of Rampachodavaram or Rampa agency division of Alluri Sitharama Raju (ASR) district, Andhra Pradesh is reported along with local name, mode of administration and prescribed doses. Local people use leaves, stem, flowers, fruits, seeds and roots as a part of their diet. Present study reveals the importance of 23 species of plants as they are eaten substantially by village folk as well as by city dwellers. It is desirable to bring these plants under organized agriculture as new crops to increase their production and utilization.

Keywords: Edible wild plants, Folk knowledge, Folk medicines, Tribal diet.

Introduction

The rich and diversified flora of Rampachodavaram or Rampa agency provides a valuable storehouse of medicinal plants. Since early times, man had used plants for medicine, fuel, timber and food. The traditional knowledge on the use of plants as medicine is well documented [1,2], however, the knowledge on the use of wild plants as food is very much limited [3-7]. Large sections of population of Rampa agency division are situated on North-East of Andhra Pradesh living in villages and remote forests depend on Wild edible plants. Even the people in cities purchase Wild edible plants marketed by village folk. There is no accurate documentation of folk knowledge on Wild edible plants. The folk knowledge is fast disappearing due to factors such as migration of villagers to cities, input of high-quality food in markets etc. Hence, a survey was undertaken to document folk knowledge on Wild edible plants of Rampa agency, Andhra Pradesh.

Material and Methods



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Study Area

Rampa agency division Forest range is situated between 17° 17' 30" - 17° 48' 05" N latitude and 81° 44' 26" - 82° 13' 10" E longitude (Fig. 1.). and covers an area of 6,431.63 sq. km. It consists 66% of forest area of 4,260.97 sq. km. with high species diversity and wealth of medicinal plants. Rampa agency division has mainly rain fed agricultural land along with an estimated area of 457.95 sq. km. During the year 2022 – 2023, several trips were undertaken to different villages in Rampa agency division, viz. Sunnampadu (Maredumilli Taluka), Paluru (Devipatnam Taluka), Dalipadu (Y.Ramavaram Taluka), Kimmuru (Addateegala Taluka), Jaddangi (Rajavommangi Taluka), Zaderu (Gangavaram Taluka), Pedageddada (Rampachodavaram Taluka), Rayanapeta (Yetapaka Taluka), Kalleru (Chinturu Taluka), Abicherla (Kunavaram Taluka), Kunduluru (V.R. Puram Taluka) to document folk knowledge on Wild food plants and their medicinal uses.

The people in these villages comprised those belonging to different communities like Konda Reddy, Konda Kapu, Konda, Konda Dora, Koya, Valmiki, Parang Proja – an ethnic group. They live in villages or nearby forests to earn their livelihood and are generally well aware of uses and therapeutic importance of plants. The tribal women sell minor forest products like fire wood, honey, herbal drugs, Wild edible leafy vegetables (*Amaranthus viridis* etc), Wild edible fruits (*Annona squamosa*, *Zizyphus* species etc).



Fig. 1. Location Map of Rampa agency division, ASR District, Andhra Pradesh

Methodology

Data Collection

Data sheets were prepared with village name and its locality, date of visit, address of respondent, age, sex and community or ethnic group, Vernacular Names of Wild edible plants, botanical name, family, habit, habitat, plant description, edible parts and how they are eaten (raw or cooked), special attributes if any (food and medicinal uses), herbarium, photograph references and any other information. At least 5-10 people in each village were interviewed. On Interacting

with their medicinal uses was recorded. Several respondents confirmed that they used the wild plants as food and also for their medicinal use.

The method of collection of voucher specimens, herbaria preparation and technique for the collection of ethnomedicinal information was followed [8]. Plant species were identified with the help of flora [9,10]. These plant specimens were carefully and critically studied and identified in the laboratory. The species were identified and classified according to Bentham and Hooker system of classification. The voucher specimens were deposited in the herbarium of Department of Botany, Sri Krishnadevaraya University, Ananthapuramu-515003, Andhra Pradesh, India.

Results

Identification of the collected Wild plants including Scientific name, Family, Local or Vernacular Name, Edible part used, Medicinal values, and Preparation and administration for the ailments were displayed.

1. *Asparagus racemosus* Willd. LILIACEAE

VN: Pilli peechera, Pilli teegalu; Armed vine, branchlets glabrous shrub; PT 45813

Fl & Fr: Jul – Oct. Wild. Zaderu, Gangavaram.

WOUNDS: Tuberous root paste is applied on the affected areas daily twice for 2 d; Tender shoots cooked and eaten as vegetable, Tuberous roots boiled and eaten.

2. *Achyranthes aspera* L. AMARANTHACEAE

VN: Uchulu chettu, Uthareni; An erect branched herb; PT 45830

Fl & Fr: Throughout the year. Wild. Boyapadu, Rajavommangi.

DOG BITE: A spoonful of root paste mixed with a spoonful of honey is administered daily twice for about 15 d; Leaves used as vegetable.

3. *Ananas comosus* (L.) Merr. BROMELIACEAE

VN: Anas pandu, A herbaceous perennial with a short stout stem; PT 45814

Fl & Fr: Mar – May. Wild and Cultivated. Y. Ramavaram.

ABORTION: 3 spoonfuls of leaf paste is administered early in morning for 3 d; Fruit edible.

4. *Abelmoschus manihot* (L.) Moench. MALVACEAE

VN: Peda benda, perennial herb; PT 45831

Fl & Fr: Aug – Jan. Wild. Rayapalli, Adateegala.

ECZEMA: Root paste mixed with a pinch of turmeric is applied on the affected areas daily twice till cure., leaves used as vegetable.

5. *Aegle marmelos* (L.) Correa., RUTACEAE

VN: Maredu, Small or medium sized evergreen tree; PT 45815

Fl & Fr: Jun – Nov. Wild. Dalipadu, Y. Ramavaram.

DIARRHOEA: four spoonfuls of fruit juice is administered daily thrice for 3 days., Fruit edible and pulp of fruit is used for preparation of jam and candy.

6. *Anacardium occidentale* L. ANACARDIACEAE

VN: Geedimamidi; A small tree with short; PT 45832

Fl & Fr: Jan – Jun. Wild and cultivated. Rampachodavaram.

SCABIES: Fruit paste is applied on the affected areas daily twice for 3 d., A delicious drink is prepared from the spongy thalamus, Ripened hypocarp edible and also used as vegetable, kernal edible.

7. *Annona reticulata* L., ANNONACEAE

VN: Ramapalam; Small tree up to 4 m. tall; PT 45816

Fl & Fr: May – Nov. Wild and cultivated. Kimmuru, Addateegala.

INSECT REPELLENT: Unripened fruit powder is placed near stored food grains. Fruits edible and used in religious rites; also sold in market.

8. *Annona squamosa* L. ANNONACEAE

VN: Seethaphalam, A small tree about 6 m. in height; PT 45833

Fl & Fr: Jun – Nov. Wild and cultivated. Vetamamidi, Addateegala.

SNAKE BITE: A spoonful of stem bark juice is given as antidote for snake bite., Fruits edible and used in the preparation of arrack and also sold in market.

9. *Azadirachta indica* A. Juss., MELIACEAE

VN: Yepa chettu, A large tree up to 15m tall; PT 45817

Fl & Fr: Mar – Jun. Wild and cultivated. Pedageddada, Rampachodavaram.

CHICKEN POX: Leaf paste mixed with turmeric is applied on the affected areas daily twice till cure., Fruits edible.

10. *Bambusa arundinacea* (Retz.) Willd. POACEAE

VN: Bongu Veduru, Bamboo, A tall thorny bamboo up to 30 m in height shrub; PT 45834

Fl & Fr: Oct – Dec. Wild. Rampachodavaram.

LEUCODERMA: Leaf paste mixed with a pinch of turmaric is applied on the affected areas daily twice for 5d; Boiled grains are cooked and eaten.

11. *Borassus flabellifera* L. ARECACEAE

VN: Tadi chettu. A tree up to 30 m tall; PT 45818

Fl & Fr: Feb – Apr. Wild. Devarapalli, Maredumilli.

CUTS: Tender leaf paste is applied on the affected areas daily twice for 3d; Boiled primary root, terminal bud, tender kernal, fruit pulp and ripened fruit edible.

12. *Cassia occidentalis* L. FABACEAE sf. CAESALPINIACEAE

VN: Eddukommu mokka, shrub 2 m. tall; PT 45834

Fl & Fr: Throughout the year. Wild. Rajavommangi.

TYPHOID: Two spoonfuls of root paste mixed in a glass of milk is administered daily twice for 5 d; Leaves fried and eaten.

13. *Centella asiatica* (L.) Urban. APIACEAE

VN: Mandu mokka, Saraswathi aku, Creeping herb; PT 45819

Fl & Fr: Apr – Nov. Wild and cultivated. Rampachodavaram.

LEPROSY: 100 ml. of leaf decoction is administered twice a day for 5 months; leaves cooked as vegetable.

14. *Cissus quadrangularis* L. VITACEAE

VN: Nalleru, Climbing shrub; PT 45835

Fl & Fr: Jun – Dec. Wild. Addateegala.

BONE FRACTURE: Stem with Stem bark of *Polyalthia longifolia* and *Azadirachta indica* are taken in equal quantities and ground. Paste mixed with egg albumen and lime is applied on affected areas and bandaged for 2 weeks; Tender stems and leaves used as vegetable.

15. *Dioscorea alanta* L. DIOSCOREACEAE

VN: Pendalamu, A large Climber, up to 15 m long shrub; PT 45820

Fl & Fr: Sep – Dec. Wild and cultivated. Gangavaram.

HELMINTHIASIS: Tuberous root with leaves of *Andrographis paniculata* are taken in equal quantities and ground. 2 spoonful of paste mixed with a spoonful of honey is administered early in the morning for 3d; Tubers boiled and eaten.

16. *Dioscorea oppositifolia* L. . DIOSCOREACEAE

VN: Gentica dumpa, Climber, rhizomes branched with cylindric roots, shrub; PT 45826

Fl & Fr: Aug – Dec. Wild. GM Valasa, Maredumilli.

CUTS AND WOUNDS: Leaf paste mixed with a pinch of turmeric is applied on the affected areas daily twice for 3d; Tubers directly put on fire or boiled and eaten. It is one of the major food lean season.

17. *Justicia glauca* Rottl. ACANTHACEAE

VN: Konda pindi, Diffuse erect or decumbent herb to 50 cm; PT 45836

Fl & Fr: Aug – Feb. Wild . busigudem, Rampachodavaram.

KIDNEY STONES: Tender leaves used as Vegetable along with dal administered twice a week; Tender leaves used as Vegetable.

18. *Lantana camara* L. VERBENACEAE

VN: Gabbu mokka, Bushy scandent, prickly shrub, up to 2.5 m tall; PT 45827

Fl & Fr: Throughout the year. Wild. Devipatnam.

WOUNDS: Leaf paste mixed with a pinch of turmeric is applied on the affected areas daily twice for 3d; fruits edible.

19. *Manihot esculenta* Crantz. EUPHORBIACEAE

VN: Karrapendalamu, A shrub 2.5 m height; PT 45837

Fl & Fr: Jun – Dec. Wild and cultivated. Rajavommangi.

WOUNDS: Tuberous root paste mixed with a pinch of turmeric and camphor is applied on the affected areas daily twice for 3d; Leaves used as Vegetable, tuberous roots edible.

20. *Physalis minima* L. SOLANACEAE

VN: Kuppante, A herbaceous annual 15 – 30 cm in hight; PT 45828

Fl & Fr: Throughout the year. Wild. Pullangi, Maredumilli.

COUGH: Two spoonfuls of whole plant paste mixed with a spoonful of honey is administered daily twice for 5d; fruits edible.

21. *Tamarindus indica* L. FABACEAE sf. CAESALPINIACEAE

VN: Chinta Chettu, tree about 15-30 m tall; PT 45838

Fl & Fr: Feb – Aug. Wild. And cultivated. Devipatnam.

BOILS: Leaf paste mixed with pinch of camphor and turmeric is applied on the affected areas once a day till cure; Tender leaves and fruits used for culinary purpose and also used in preparation of pickles, Roasted cotyledons edible.

22. *Terminalia catappa* L. COMBRETACEAE

VN: Badam, tree up to 12 m tall; PT 45829

Fl & Fr: Apr – Nov. Wild and cultivated. Y. Ramavaram.

DYSENTERY: Two spoonfuls of stem bark decoction is administered daily twice for 3d; fruits edible and also sold in market.

23. *Ziziphus xylopyrus* (Retz.) Willd. RHAMNACEAE

VN: Gotte Chettu, Regu, A small armed tree; PT 45839

Fl & Fr: Mar – Oct. Wild. Devipatnam.

LEUCODERMA: Stem bark with stem barks of *Bauhinia recemosa*, *Madhuca indica* and *Andrographis paniculata* leaves taken in equal quantities are ground. Paste is made in to pills of peanut seed size and dried. Two pills are administered daily once for 30 d; fruit edible.

*PT=Ethnobotany Herbarium Number; VN=Vernacular Name; Fl.=Flowering; Fr.=Fruiting; sf.=sub family.

Discussion

Due to the importance of twenty-three species of Edible wild plants, it is suggested to bring these plants such as [*Asparagus racemosus* Willd., *Achyranthes aspera* L., *Ananas comosus* (L.) Merr., *Abelmoschus manihot* (L.) Moench., *Aegle marmelos* (L.) Correa., *Anacardium occidentale* L., *Annona reticulata* L., *Annona squamosa* L., *Azadirachta indica* A. Juss., *Bambusa arundinacea* (Retz.) Willd., *Borassus flabellifera* L., *Cassia occidentalis* L., *Centella asiatica* (L.) Urban., *Cissus quadrangularis* L., *Dioscorea alanta* L., *Dioscorea oppositifolia* L., *Justicia glauca* Rottl., *Lantana camara* L., *Manihot esculenta* Crantz., *Physalis minima* L., *Tamarindus indica* L., *Terminalia catappa* L., *Ziziphus xylopyrus* (Retz.) Willd.] in to the lime light of Ethnobotany and medicinal plants history.

These Edible wild plants used to cure 20 types of ailments. Perusal of literature indicates the diversity of Wild edible plants in different regions in india are entirely different compared to South India[11]. Even in South India, the diversity of Wild edible plants for Andhra Pradesh[7,12]. Several of the Wild edible plants observed in the present survey was exploited by the local folk hence it has become necessary to conserve these Wild edible plants.

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