Ethnobotanical Study of Wild Edible Plants Used by Meinit Ethnic Community in Bench-Maji Zone, Southwest Ethiopia

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Introduction

- **High plant diversity** with ample **traditional knowledge** of wild edible plants pertained by different cultural society in Ethiopia
- **These plant diversity** and associated **knowledge** have been declined.
- Ethnobotanical study is **very limited** in Meinit cultural society
- **Study aimed** to document ethnobotanical knowledge pertained by the Meinit community.

Material and Methods

- Three study districts (Guraferda, Meinit Goldiye, and Shasha) were **purposely selected** (Table 1).
- **Ethnobotanical data** collected by **semi structure interview** (May 2019 to March 2021).
- **Voucher specimens** collected and identified through standard procedure.

Table 1 Study place and number of participants

Study place	Districts	Sub-Districts	Households (age 18-70yrs)	Key informants	Focus group discussion(1group per sub- districts)
Bench-Maji zone	Guraferda	4	72	12	4
	Meinit Goldiye	4	64	12	4
	Meinit shasha	4	62	12	4
		Total	198	36	12groups
Sampling techniques	purposive sampling		simple random design	snowball sampling	

Results

Plant diversity and Growth habit

- A total of **66 wild edible plants** documented from **34** families.
- Growth habit recorded in decreasing order of (28 **herbs** > 14s**hrub**s >13**climbers** >11**trees** species).

Plant parts

- Highest in **leaves (42 species, 59%)** followed by fruits (19 species,27%)
- Smallest in **aerial part** (**2 species, 3%)** as presented (Figure 2).

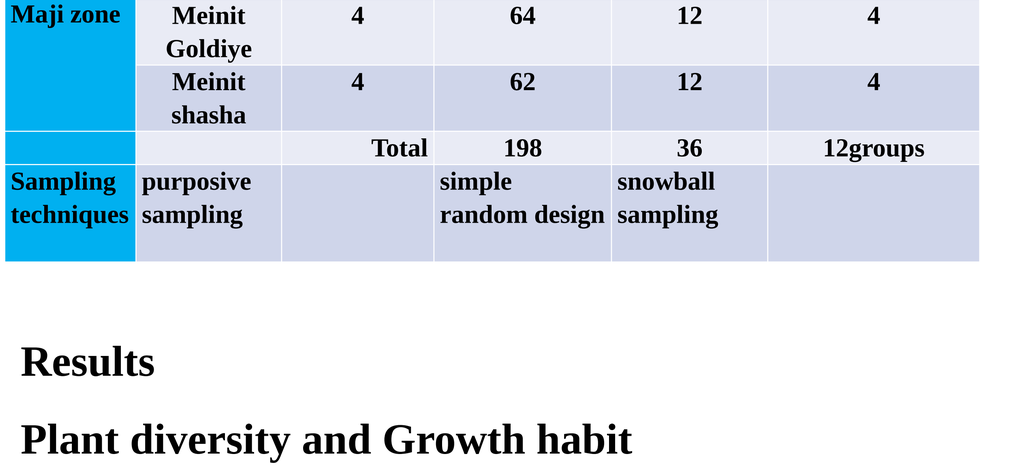

Figure 1 Edible plant parts

Traditional recipes prepared from wild edible plants

- Porridge (*poru*), fruit juice (*shanta*), boiled tuber, hot drink (*Tika*) , and fermented beverage (*sholu*) were some of local recipes (Figure 2)

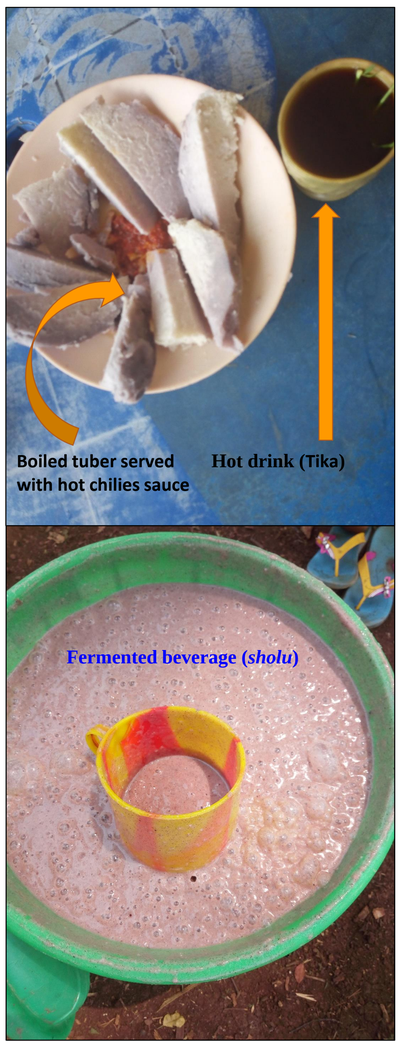

Figure 2 Recipes prepared from wild edible plants

Figure 4 Local market of wild edible plants

Figure 5 Human made forest fire(top) and management practice(bottom)

Results

Preparation for Consumption and Preservation

- Wild edible plants consumed in different forms such as boiled, baked or raw.
- **Sun drying** used to preserve some wild edible plant

Plant Habitat

- **Highest** number of species **occurred** in cultivated land (**33** species)
- **Smallest** number of species was found at forest margin (**1** species) as indicated (Figure 3).

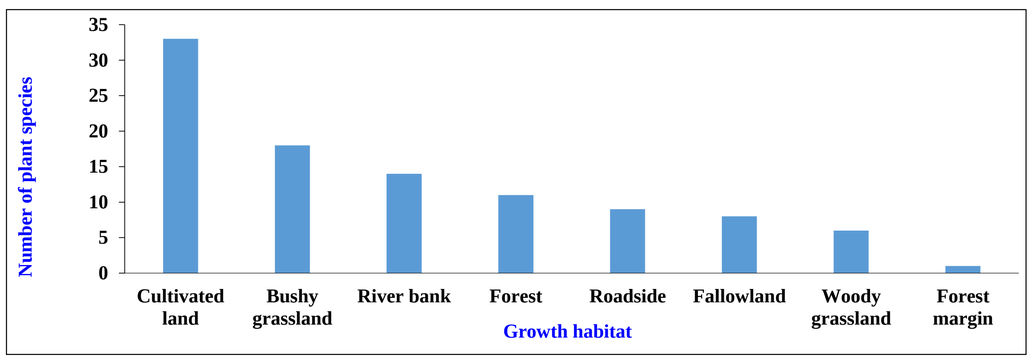

Figure 3 Wild edible plants growth habit

Medicinal Use of Wild Edible Plants

- 12 wild edible plant species used as **food** and **medicine**.
- *Eg. Solanum nigrum* L. used to treat different aliments such as gastritis, and hypertension

Market Value of Wild Edible Plants

- Women and young children involved to collect and market wild edible plants (Figure 4)
- *Eg. Solanum nigrum* L. a leaf bunch soled in **10 birr**
- It contributed to **income generating** for rural households.

Threats and Conservation of Wild Edible Plants

- **Human activity** were potential threat to the plant diversity and associated knowledge.
- **A few elder people** are conserving wild edible plant such as *Dioscorea* species (Figure 5)

Conclusions

- **High diversity of wild edible plants** and associated traditional knowledge were found in the three districts (Meinit Goldiye,Shasha and Guraferda)
- Wild edible plants are still utilized for **food** ,**medicine**, **market value,** and other purpose
- **Human activities** threaten wild edible plant diversity and traditional knowledge