

**Research Article**

## **STUDY OF SOME WILD FLOWERS AS POSSIBLE FOOD-SUPPLEMENT TO THE MAL-NUTRITIONED PEOPLE OF JHARKHAND**

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### **ABSTRACT**

Jharkhand is a state is blend of vivid cultural practices and traditional food habits. The Mundas, Oraons, Santhals, Kharias, Birhors, Paharias and Asurs constitute the prominent ethnic groups of Jharkhand. The BPL (Below poverty line) people of those communities work hard and the source of their good health is the minerals and vitamins they take as vegetable. The present survey of the wild flowery vegetables of Jharkhand has been done with an objective to know particularly those wild flowers which though found in this area but yet not used as vegetable by the folk in this region. The present study has observed that these flowers are being used as vegetables at places outside the Jharkhand based on the reports from other places. After their identification this would add up varieties as vegetable to the folk of Jharkhand.

**Keywords :** Wild Flowers, Vegetables, Ethnic People, Jharkhand, Malnutrition

### **INTRODUCTION**

In Jharkhand a variety of flowers and pot herbs both cultivated and wild are sold in the local village markets for the purpose of vegetable. Ojha and Kumar (2011) had reported about eleven species of wild flowers consumed by the people of Jharkhand as vegetable. The average diet in Jharkhand is predominantly cereal based with rice and millet as major staple food (Gupta, 1974). These diets have poor bioavailability of iron and zinc (Chiplonkar *et al.*, 1993; Joshi and Agte, 1995), leading to anemia and Vitamin A deficiency (Draper, 1996). Consequently they suffer from malnutrition with one or other kind of mineral deficiency symptoms. The problem has been a bit more worsened as our niche has been contaminated by various anthropogenic activities. In this state of affair, putting forth cheap and nutritious alternatives could serve the purpose and this has led the genesis of present work. The present study has tried to investigate those wild flowery vegetables found in Jharkhand which are not yet known to the people of this area and thus by identifying them this could be promoted among locals to add up varieties of cheap vegetables in their diet which would fight with malnutrition.

### **MATERIALS AND METHODS**

#### **Methodology**

Both intensive and extensive ethno botanical survey have been carried out during the Year 2012-2014 in remote tribal dominated villages and village haats (markets) of different areas of Jharkhand viz. Dumka tin bazar, Sikaripara and Masanjore in Dumka district. In Ranchi districts the markets include Norhi, Rargaon and Salgadih in Tamar Block; Taimara, Nailagara and Bundu in Bundu Block. The survey included Runtukel, Lili and Kote in Murhu block of Khunti district also. The information collected and recorded related to those wild flowers of which are used as vegetables and also which though found in these areas but not known as vegetables to locals and thus not in use also. The information was collected by interviews, observations and participation with the ethnic respondents.

Identification of these plants specimens were done with Haines (1921-25), Ghosh (1971), Sarma and Sarkar (2002), Singh *et al.*, (2001) and also by matching the herbaria at NBRI (LWG), Lucknow.

### **RESULTS AND DISCUSSION**

1. *Bidens pilosa* L. (Asteraceae) /'Piri man'[SK 20006], Sikaripara.

Young leaves and flowers are reported to have been eaten in the area of Saharan Africa in both the forms as fresh and dry (Guarino, 1997; Morton, 1962).

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2. *Buddleja asiatica* Lour. (Buddlejaceae) / 'Nimda' [SK 2019], Masanjore.



**Figure 1: *Bidens pilosa* L**



**Figure 2: *Buddleja asiatica* Lour.**



**Figure 3: *Callicarpa arborea* Roxb.**



**Figure 5: *Clerodendrum serratum* (L.) Moon**



**Figure 6: *Gmelina arborea* Roxb.**



**Figure 7: *Pterospermum accrifolium* (L.) Willd.**



**Figure 8: *Urnea lobota* L.**



**Figure 9: *Zingiber zerumbet* (L.) Smith**

Flowers of 'Deing-tuti mynneng' is reported to be cooked as vegetable in Meghalaya (Sawian *et al.*, 2007).

3. *Callicarpa arborea* Roxb.(Verbinaceae) / 'Papundi daru' [SK 2008] ', Lili.

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Hnah-Kiah' is fried with meat to be consumed in Mizoram (Kar *et al.*, 2013). However this plant is known as 'Arhi-arong' in Assam and is consumed in the form of chutney mixed with chili and ginger (Kar and Borthakur, 2008).

4. *Cassia fistula* L. (Caesalpiniaceae) / 'Bandar lauri' [SK 2004] Runtukel.

'Phung-ril' flowers are fried and eaten as vegetable in Mizoram (Kar *et al.*, 2013). In Assam the plant is known as 'Shonaru' and tender buds are boiled and eaten as vegetable (Kar and Borthakur, 2008).

5. *Clerodendrum serratum* (L.) Moon (Verbenaceae) / 'Saramlutur' [SK 2009], Kote.

'Lei dum-suak' flowers are fried and used as vegetable in Mizoram (Kar *et al.*, 2013).

6. *Gmelina arborea* Roxb. (Verbenaceae) / 'Gamhair' [SK 2014], Salgadih.

'Thlamvawng' flowers are boiled and eaten with food in Mizoram (Kar *et al.*, 2013).

7. *Pterospermum accrifolium* (L.) Willd. [Sterculiaceae] / 'Machkund' [SK 2010], Norhi.

'Sik-sil' flowers are used as boiled vegetable in Mizoram (Kar *et al.*, 2013).

8. *Urnea lobota* L. (Malvaceae) / 'Mindi lat' [SK 2002], Rargaon.

The flower of *Urnea lobota* is used as vegetable in African countries (Freedman, 1998).

9. *Zingiber zerumbet* (L.) Smith (Zingiberaceae) / 'Makabari Bach' [SK 2001], Nailagara.

The flower buds of this plant are boiled and eaten as vegetable in Thailand (Sirirugsa, 1999).

### Conclusion

The information about the delicious taste and the nutrient value that nature has bestowed on these nine wild flowers need to be disseminated among more people around. It is also felt that these flowers must be given the status of 'minor forest produce' which definitely be proved as a source of revenue among folk and help them upgrade their socio-economic condition.

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