General Article

SOME LEAFY VEGETABLES (SAAG) OF MEDICINAL VALUE

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ABSTRACT

Saag or leafy vegetables has been an important ingredient of food in Jharkhand including North Chhotanagpur. Traditionally more than 100 leafy vegetables were known to local people and they use them almost in all seasons. It is unfortunate however, that even in the areas known for its diversity is getting confined to Palak and Lal Sag only. Extensive survey revealed that even today few rural populations eat over 25 different types of leafy vegetables which are not only highly nutritious but have medicinal properties as well.

Katili Chaulai (Amaranthus spinosus), Chakore (Cassia tora), Bathua (Chenopodium album), Hurhurag (Cleome viscose) are some of them, which not only contain carbohydrate and protein but also good amount of secondary metabolites that are now known to fight cancer. Protein in saag make it good option to fight protein hunger and good amount of fibre make it beneficial for patients suffering from life style diseases, like cardiac problem and diabetes. Old generation of North Chhotanagpur area was almost free from these problems. So revival of old practice of using these leafy vegetables is highly recommended.

INTRODUCTION

Jharkhand is situated in the eastern part of India and is hotspot for traditional ethno-medicinal wisdom owing to a significant percentage of tribal population, rich floristic diversity, sub humid, sub-tropical climate and plateau topography (Tomar et al. 2012).

The state of Jharkhand is known for its forest reserves and vegetation. The state is also known for its tribal population practicing their
ancient culture which has been preserved by them in almost pure form. The Tribal population is seen to use different plants found naturally or grown in local area for food. The population is very close to nature, cares a lot for nature and hence, seems to be highly blessed by the nature as being free from lifestyle and degenerative diseases.

Food is the one absolute need for humans and the history of man perhaps could be written in terms of diet. Nutrition as a biological process is fundamental for self-preservation and the preservation of species. Food habits of men developed on the basis of experience and survival through successive generations (Richards 1948).

Tribal Traditional food supply is mainly based on collection, hunting and crop cultivation. Local vegetables make one of the most important food items of the tribal people of Chhotanagpur Plateau along with agricultural products like rice, cereals and millets (Gupta1974). Tribal concept of health varies greatly. However they learned to use vegetables as a cure and prevention of many diseases (Tomar et al. 2012, Mishra et al. 2015). Regarding the origin of such a tradition, practically nothing is known, probably developed by experience (Gupta 1965).

The green leafy vegetables are rich source of calcium, iron, carotene, vitamin C, riboflavin and folic acid. These greens are inexpensive and are advisable to include at least 50 g daily in one’s diet. They contain all important nutrients required for growth and maintenance of health (NIN 2007). Urbanization has made life easy to live and prosperous to look, anything is available to a person with minimum effort. But as a side effect it has brought the havoc of lifestyle and degenerative diseases, Heart with blockage, Brain with stroke, Limbs with varicose vein, Bones with pores etc.

The present study was undertaken to find out simple living and natural eating practices of tribal people to find out some connection for their healthy living and to see whether applicable to urban people.

MATERIALS AND METHODS

Extensive survey of different parts of Jharkhand was undertaken and local varieties of edible plants were collected. Elderly people of Munda, Oraon and Santhali people were interviewed to know traditional uses of
different leafy plants.

Some of the leafy vegetables collected were sent to laboratory for its nutritional evaluation.

**RESULTS AND DISCUSSION**

Following leafy vegetables were found to be used by local people of Jharkhand. Nutritional values of these vegetables were also tabulated.

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>BOTANICAL NAME</th>
<th>CHEMICAL/NUTRITIONAL COMPOSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katili Chaulai</td>
<td><em>Amaranthus spinosus</em></td>
<td>Protein-3.8%, carbohydrate 12%, terpenoids-8.5%, flavonoids, glycosides</td>
</tr>
<tr>
<td>Chakore</td>
<td><em>Cassia tora</em></td>
<td>Alkaloids, tannins, saponins, flavonoids, glycosides.</td>
</tr>
<tr>
<td>Bathua</td>
<td><em>Chenopodium album</em></td>
<td>Protein 2.2%, fibre 1.7%, alkaloids, saponins, flavonoids, glycosides</td>
</tr>
<tr>
<td>Hurhurag</td>
<td><em>Cleome viscosa</em></td>
<td>Protein 3.65%, carbohydrate 18%, fiber 4.6%, alkaloids and saponins</td>
</tr>
<tr>
<td>Amti sag</td>
<td><em>Oxalis corniculata</em></td>
<td>Protein 1.6%, carbohydrate 2.1%, fibre 7.1%, flavonoids, glycosides</td>
</tr>
<tr>
<td>Pat sag</td>
<td><em>Corchorus olitorius</em></td>
<td>Protein 5.7%, fibre 12.8%, saponins</td>
</tr>
<tr>
<td>Golgola sag</td>
<td><em>Portulaca oleracea</em></td>
<td>Protein 1.9%, fiber 11.5%, alkaloids and tannins</td>
</tr>
<tr>
<td>Dudhi sag</td>
<td><em>Euphorbia hirta</em></td>
<td>Protein 3.6%, carbohydrate 7.5%, fibre 10.9%, alkaloids and tannins.</td>
</tr>
<tr>
<td>Kalmi sag</td>
<td><em>Ipomea repetans</em></td>
<td>Protein 3.1%, fibre 5.2%</td>
</tr>
<tr>
<td>Dela</td>
<td><em>Melochia chorchorifolia</em></td>
<td>Protein 2.5%, fibre 3.7%</td>
</tr>
</tbody>
</table>

**Fig. 1:** Chowlai Saag (*Amaranthus spinosus*)  **Fig. 2:** Kalmi Saag (*Ipomea repetans*)
Fig. 3: Golgola Saag (*Portulaca oleraces*)

Fig. 4: Gendhari Saag (*Amranthus spp.*)

Fig. 5: Bathua saag (*Chenopodium album*)

Fig. 6: Pat saag (*Corchorus solitarius*)
REFERENCES


Mishra P K et al. 2015. *Forgotten Food Revisiting old Cuisines of North Chhotanagpur.* Vinoba Bhave University Publication, Hazaribag, Jharkhand

