

# Dandelion greens, mallow, purslane and amaranth- The common underutilized vegetables of Kashmir valley

*Ummyiah H. Masoodi, Berjes Zehra, Gazala Nazir and Khansa Bashir*

*Division of Vegetable Science, Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Shalimar, Srinagar-190025, J & K (India)*

In nature, there are many underutilized greens of great nutritive value, which can nourish the increasing human population. They often have medicinal properties and provide options for improved income to the poor. Kashmir valley is a hilly terrain with a severe cold winter and the people living in this region are mostly dependent on underutilized leafy vegetables for their source of food when other vegetables are unavailable. Wild and underutilized leafy vegetables grow naturally in Kashmir Himalayas. Besides using leaves of such vegetables, petioles, seeds, roots of some species are also utilized. Most of these crops are easy to grow, resistant to pests and diseases, hardy and acceptable to the local taste. They are rich source of proteins, vitamins and minerals. Four out of a treasure of the wild and underutilized vegetables that are popular in Kashmir are briefly discussed below:

## **Dandelion greens**

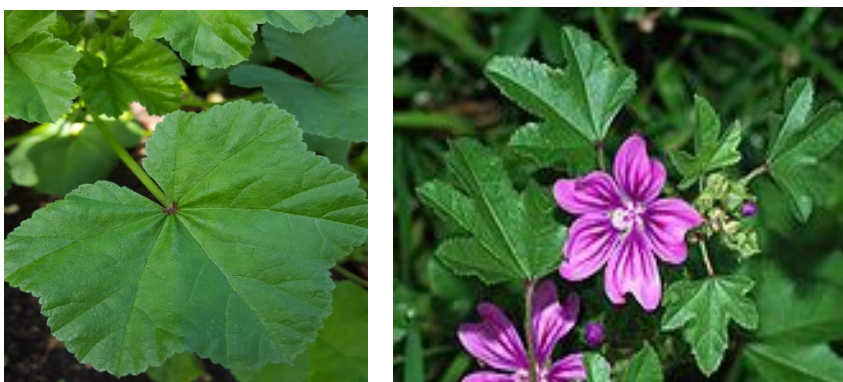
*Taraxacum officinale* commonly called Dandelions in English and Handh in Kashmiri is a common weed found in orchards, roadsides, vegetable fields of valley. It belongs to family Asteraceae. They flower in May-June or sometimes in November and the seeds are disseminated by wind. It grows from unbranched taproots and produces one to more than ten stems. The stems are tinted purplish, upright or lax, which produce flower heads that are taller than the foliage. The foliage is upright growing or horizontally orientated, with leaves having narrowly winged petioles. Young dandelion greens can be eaten cooked. Raw leaves have a slightly bitter taste. The leaves are high in vitamin A, vitamin C and iron, which is higher than the amount of iron and calcium in spinach. A leaf decoction can purify blood, for the treatment of anemia, jaundice etc. in addition to having a diuretic effect. Being rich in iron, handh is consumed by lactating mothers in Kashmir either as fresh vegetable or in dehydrated form.



*Kashmiri Handh- Dandelion Greens*

## **Mallow**

*Malva sylvestris* belonging to family *Malvaceae* is commonly called Sotchal in Kashmiri. It grows in fields, hedgerows and in fallow fields. It is a spreading herb, which is usually annual or perennial with a growth habit which can be straight or decumbent and branched. The leaves are borne upon the stem, are roundish, and have three or five to seven or five to nine shallow lobes. Cultivation is by sowing the seeds directly outdoors in early spring. The seed is easy to collect, and they often disseminate by irrigation water. Mild tasting young mallow leaves can be a substitute for lettuce, whereas older leaves are better cooked as a leafy green vegetable. The young leaves when boiled and fried is a wholesome vegetable and is eaten in several parts of Valley. The buds and flowers can be used in salads. The fruit can be used as demulcents and emollients giving a soothing effect, the seeds are used in a decoction as a diuretic and the leaves can be made into poultices as an emollient for external applications.



*Kashmiri Sotchal- Mallow*

## **Purslane**

Common Purslane which is botanically *Portulaca oleracea* belonging to family *Portulacaceae* and called Nunnar in Kashmiri is widely considered an edible plant. It has smooth, reddish, mostly prostrate stems and alternate leaves clustered at stem joints and

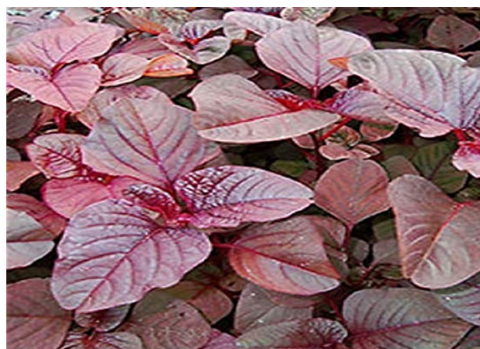
ends which are oval or oblong and sub succulent. It commonly grows in orchards, vegetable fields and fallows lands. The stems, leaves and flower buds are all good to eat. Although purslane is considered a weed in Kashmir, it is mostly eaten as a leafy vegetable. In Valley it is cooked along with amaranthus and an egg to form a delicious curry. Purslane is rich in, (Artemis et al., 2004), vitamins (mainly vitamin A, vitamin C, and some vitamin B and carotenoids) and minerals such as magnesium, calcium, potassium and iron. Two types of alkaloid pigments, the reddish betacyanins (visible in the coloration of the stems) and the yellow betaxanthins (noticeable in the flowers and in the slight yellowish cast of the leaves) are present in purslane that are potent antioxidants. Purslane is used as a remedy for constipation and against inflammation of the urinary tract.



*Kashmiri Nunnar- Portulaca*

## Amaranth

*Amaranthus spinosus* of Family Amaranthaceae is locally called Lissa in Kashmir. Its English name is pigweed, several species of which are often considered a weed of orchards, vegetable fields and fallow lands. Kashmiri people consider amaranths as leafy vegetable. It is an annual herb, erect or trailing, scarce to profuse branching, stem green to purple or with mixed shades of these two colours, simple leaves with acute tip, green to purple or with different shades of these two colours. Purple colouration is prominent in young leaves and fades away at maturity. Amaranth seeds, like buckwheat and quinoa, contain proteins. Besides leaves, seeds of amaranth are consumed along with jaggery in the form of small pellets, commonly known as Ganhar in valley, which are good source of protein, dietary fiber and minerals such as iron, magnesium, copper and especially manganese. Regular consumption reduces blood pressure and cholesterol levels, while improving immunity (Czerwinski et al., 2004; Gonor et al., 2006).



*Kashmiri Lissa- Amaranth*

## References

- Simopoulos, A. P. (2004). Omega-3 Fatty Acids and antioxidants in Edible Wild Plants. Biol Res. 37:263-277.
- Czerwiński J, Bartnikowska E, Leontowicz H, et al (2004). "Oat (*Avena sativa* L.) and amaranth (*Amaranthus hypochondriacus*) meals positively affect plasma lipid profile in rats fed cholesterol-containing diets". J. Nutr. Biochem. 15 (10): 622-9.
- Gonor KV, Pogosheva AV, Derbeneva SA, Mal'tsev Glu, Trushina EN, Mustafina OK (2006). The influence of a diet with including amaranth oil on antioxidant and immune status in patients with ischemic heart disease and hyperlipoproteidemia (in Russian). Vopr Pitan 75 (6): 30–3.