

CC-7:Economic Botany
Unit 2: Lecture 3
Brief account of Millets

Dr Sunita Bandopadhyay

Millets: definition

- **Millets are the certain cultivated grasses (Family Poaceae) with very small seeds.**
- **They have abundant foliage used for fodder. The grains are used for food by man as well as for domestic animals.**
- **They are cultivated in India since pre-historic times.**
- **Millets are resistant to drought but are sensitive to cold**

Scientifically speaking, millets are a group of small-seeded cereal grains that belong to the family of grasses (Poaceae family).

Depending upon their size, they are broadly divided into two categories: major millets (sorghum, pearl millet, and finger millet) and minor millets (little millet, foxtail millet, proso millet, barnyard millet, and kodo millet).

Botanists have counted two pseudo millets too namely, buckwheat and amaranth.

Importance of Millets:

- ✓ Millets are superfoods. They outshine wheat and rice in many aspects. They are high in both macro-nutrients, like proteins and fats, and micro-nutrients, like iron and calcium.
- ✓ They guard us against many vitamin and mineral deficiencies.
- ✓ They are rich in fibre, are gluten-free, and have a low glycaemic index (GI) which means low impact on your blood sugar.

Millet1 : Sorghum vulgare



https://www.netmeds.com/images/cms/wysiwyg/blog/2020/03/1583912022_Jowar_big_2.jpg

Jowar

Millet 1: *Sorghum vulgare* Pers. (Jowar)

- Origin – Africa and Asia
- Sorghum-growing states – Maharashtra, Karnataka, Andhra Pradesh, MP, Gujarat, Rajasthan, TN
- It is very hardy crop. Temperature range is 15.5 – 40.5 °
- Annual rainfall 35-150cm
- Grown in both kharif(July-Oct) and rabi(Oct-March) season



Sorghum:uses

- Cooked as rice or roti or bhakri (unleavened bread)
- The grain can be malted or popped
- Stem and leaves important in cattle feed
- This cereal is highly underused as it is of very high nutrition value and full of vitamins
- Varieties:hybrids- CSH-1 to CHS-8 etc
- true-breeding varieties:CSV-1 to CSV-7 etc

Millet 2: *Eleusine coracana* (L) Gaertn. (finger millet/ragi/marwa/African millet)

- Origin- Native of India (De Candolle)
- Ragi-growing states- Karnataka, TN, Andhra Pradesh, Orissa, Bihar, Gujarat, Maharashtra
- Grows in areas with annual rainfall 50-100cm
- It is *kharif* crop in N. India
- Can withstand severe drought
- Improved varieties: PR202, BR2, Indaf5, Indaf7 etc



Fig. 1: Finger millet plants showing the finger-like head

Finger millet :uses

- Crop is mainly grown for grain, which is highly nutritious and rich in vitamins
- It is useful in diabetes as well as for the poor
- In S.India it is sometimes fed to the infants after malting
- The stalk is a good fodder

<https://www.asiafarming.com/wp-content/uploads/2017/06/Finger-Millet-Ragi-Cultivation-Information..jpg>

Millet 3: *Pennisetum typhoides* L. (pearl millet/bajra)

- Origin : Africa
- Bajra-growing states- Karnataka,TN, Andhra Pradesh,Gujarat, Maharashtra, Haryana,UP
- Use: Flour from the grains is very nutritious and used for making unleaven bread
- Important source of food for the poor
- Large quantity of forage



Millet4 : *Setaria italica* Beauv.
Italian/fox-tail millet/kaon

- Grains are used as food and cooked as rice
- Stalks are used for cattle feed
- Medicinal properties: serves as diuretic



Millet 5 : *Panicum miliaceum* L.
Common millet/Cheena

- Cooked or parched before consumption
- Chapatis are also made



<https://milletadvisor.com/wp-content/uploads/2021/06/Foxtail-Millet-Farming.jpeg>

Millet 6 : *Paspalum scorbiculatum* L.

Kodo

- Coarse-grained crop
- Used for food by some native people
- Recommended for diabetic patients



Health Benefits Of Millet

Treats Coronary Artery Disorder

Helps in Weight Loss

Reduces Risk of Colon Cancer

Helps to decrease high blood pressure

Helps in preventing Celiac disease

Controls Diabetes

Good Source of Antioxidants

Helps in slowing down muscle degradation

Aids in Sleep

Helps in relieving menstrual cramps

www.lybrate.com

lybrate