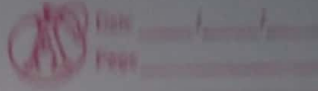


Economic Botany



Cereal plants

1. Wheat

Botanical name :- Triticum aestivum
Triticum vulgare

Edible part - Endosperm

Systematic Position -

Class - Monocotyledon

Series - Glumaceae

Family - Gramineae

Genus - Triticum

Species - vulgare

Economic Importance

- (i) Wheat flour is used for making different kinds of bread, biscuits, cakes, pasty, cracker etc.
- (ii) It is also used for the manufacture of beer and alcohol.
- (iii) From the specific type of starchy wheat, textile fibres are also manufactured.
- (iv) Wheat stems (dried) are used for making hat, mat & mat.
- (v) Wheat stems are used as fodder for animals etc.
- (vi) Maide & Sugi are also made from wheat.

2. Rice :-

Botanical Name :- Oryza sativa

Systematic Position :-

Class - Monocotyledon

Series - Glumaceae

Family - Gramineae

Genus - Oryza

Species - sativa

Economic importance -

- (1) Baked rice are main food of India.
 - (ii) Baked rice are also used for making alcohol.
 - (iii) rice water (Masi) is used for stiffening the cloth.
 - (iv) Masi is also used by people.
 - (v) dried rice is also used as starch and also for soap or Masi is prepared from it.
 - (vi) Rice plant is now used as animal fodder & dried plant (Chul) is also used as fodder for animal.
 - (vii) dried plant is also used for Mat, Mat PMat making.
 - (viii) Edible part Endosperm (Seed → Endosperm + Embryo)
- (Starch food and supports embryo during germination)
- (3) Maize
 Botanical name :- Zea mays

Systematic position - Monocotyledon
 Gramineae
 Gramineae (Poaceae)
 Zea
 mays

Economic Imp.

- (i) chief food of poor men, livestock, cattle, and other domestic animals.
- (ii) cornmeal is a poor breakfast. Grains are used for bread making, Satta, Ghanta ch.
- (iii) Fried popcorn and Fried grains while atta with the cob (चूड़ा) are highly tasteful.
- (iv) Edible part - Endosperm (Seed → Embryo)

① Sugarcane :-

Botanical name - *Saccharum officinarum*

Family - *Mono Gramineae*
(*Saccharum officinarum*)

Economic importance

1. Sugarcane provides juice, which is used for making white sugar (शर्करा) and Jaggery (gur) and many by-product like bagasse (बागसे) (pulp of crushed stem) and molasses. (Jaggery = Bura gur)
2. Bagasse is used as a fuel, for production of fibre board, papers, plastics and furfural.

Furfural :-

A colourless, oily liquid $C_5H_4O_2$ (aldehyde) having an aromatic odour, obtained from bran, sugar, wood, ~~corn~~, corn cobs, or the like, by distillation, used chiefly in the manufacture of plastics and as a solvent in the refining of lubricating oils. Also called Furfuraldehyde.

Furfural is a liquid aldehyde with penetrating odour, made from plant hulls and corn cobs. (शर्करा)

Sugarcane :-

It is the main source of sugar in India and holds a prominent position as a cash crop. India was the 2nd largest producer of sugar in the world after Brazil.

Sugarcane is a renewable, natural agricultural resource because it provides sugar, besides biofuel, fibre, fertilizer etc.



- (i) Sugarcane is a cash crop gives ready cash to the farmers.
- (ii) It is mainly used for manufacture of Jaggery (gur) and sugar.
- (iii) It is used for the preparation of juice (Raswanti), Syrup and also for chewing purpose.
- (iv) Various by-products like bagasse, immature top, molasses (CBENT), press mud, cake etc obtained from cane are used for different purposes—
 - (a) Immature green tops are used as fodder.
 - (b) Bagasse is used as fuel, and for making paper.
 - (c) Molasses is used for preparing alcohol and other chemicals.
 - (d) Press mud cake is used as manure.
 - (e) Trash is used for thatching of huts, mulching and composting.
 - (f) The stubbles are used as fuel or for making compost.