Dr. Namita Kumari Associate Professor Department of Botany Magadh Mahila College Patna University, Patna dr.namitakumari@gmail.com Mobile no 9472938409

CEREALS

- Introduction
- Types
- Botanical names and family
- Distribution, Botanical characters and economic uses of one cereal (Rice).

INTRODUCTION

- The cereals are the most important sources of plant food for man.
- They contain a high percentage of **carbohydrates**, together with a considerable amount of proteins and some fats. Even vitamins are also present.
- The cereals are the members of family Gramineae or Poaceae.

• Two types- Major cereals and Minor cereals.

- Major cereals are Rice, Wheat and Maize.
- Minor cereals are Barley, Oat and Rye.
- Major cereals- 1. Rice, Botanical name-<u>Oryza sativa</u>, family- Gramineae\ Poaceae.
 2.Wheat, Botanical name- <u>Triticum</u> <u>aestivum</u>, family- Gramineae\ Poaceae.
 Maize, Botanical name- <u>Zea mays</u>, family-Gramineae\ Poaceae.

Types contd.

- Minor cereals 1. Barley, Botanical name-<u>Hordeum vulgare</u>, family-Gramineae Poaceae. 2.Oat, Botanical name-<u>Avena sativa</u>, family-Gramineae Poaceae and 3.Rye, Botanical name <u>Secale cereale</u>, family-Gramineae\ Poaceae.
- So alltogether ther are 6 cereals- 3 major cereals and 3 minor cereals.







Wheat



Maize













RICE\Paddy – Oryza sativa

Gramineae\ Poaceae

- Distribution- Rice is a primarily a plant of the hot moist tropics. It is predominantly (95%) a crop of Asia, extending from Pakistan, China, India to Japan.
- In India it is grown in the largest area, 79 million acres in the world. In India it is grown in Andhra Pradesh, Assam, Bihar, Maharashtra, Madhya Pradesh, Tamil Nadu, Orissa, Uttar Pradesh and West Bengal are the main producing states.

Botanical characters of rice 1

- Rice plant is an annual herb. It grows about 4 feet in height. The leaves are long and flattend. Its inflorescence is made up of spikelets bearing flowers that produce the fruit(caryopsis) or grains. It takes 30 to 40 days for the production of trillers.
- The grains of the rice are removed by thrashing
- It is a kharif crop.

Economic uses of Rice

- It is used as cereals. The chief use of rice is food. Rice is eaten after boiling.
- Broken grains also used as human and cattle food, for making alcoholic beverages after fermentation, and as a source of starch and rice flour.
- The rice straw is used for making straw boards, paper and mats.
- Paddy husk is used as fuel, the bran is also used as cattle feed.
- The fatty oil obtained from bran is used for edible purposes.

THANK YOU.