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Course name :

**Crop Production Technology-II
(ASAG 2204)**

Course credit :

(2-1-0)

Experiment 5

Topic: Study of Yield

**Contributing Characters of *Rabi*
Season Crops**



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- **5.1 Aim**
- To know the yield contributing characters and yield calculation of *rabi* season crops.
- **5.2 Materials Required**
- (i) Polythene bags
- (ii) Harvesting equipment like sickle, knife, etc.
- (iii) Balance
- (iv) Gunny bags or baskets, pans, etc.



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5.3 Importance of optimum time of harvesting

- Delayed harvesting causes yield loss in quantitative manner.
- Early harvesting causes yield loss in quantitative manner
- Common visual symptoms are yellowing and drying.

There are 2 stages of maturity

5.4 Physiological maturity

- No further addition of dry matter.



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- **5.5 Maturity indices**
- Attains 7-10 days after physiological maturity water moisture gets reduced. Harvesting is mostly done at harvesting maturity.
- In rice, it can be harvested when all the colour changes from green to yellow. moisture contents for harvesting is 20-25 %.
- In wheat moisture content for harvesting is <22 %. In maize it is about <30 % husk and silk becomes yellow and black respectively. But for sweet corn it is about 35 %.
- Pop corn ears should be harvested at 30 – 35 %. For sorghum it is less than 25 %. For millets it is 18-25 %. Yield potentials of crops/varieties can be accessed on the basis of yield attributes.
- Different crops have different yield attributing characters. After collecting information on these attributes, theoretical yield. These observations help farmers to choose a suitable crop or variety for cultivation. Some of the examples are:



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- Yield per hectare through the single plant yield method and yield per unit area method can be calculated by using the following formula
- $\text{Yield} = \text{Area} \times \text{Weight per plant} \times \text{No. of plants /spacing.}$