



Quality Seed ensures Higher Yield

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Seed is defined as matured ovule that consisting of an embryonic plant together with a store of food, all surrounded by a protective coat. In seed, the importance is given to the biological existence whereas; in grain the importance is given to the supporting tissue the economic produce. Seed is a basic input in agriculture.

Importance of Seed

Seed is the vital input in crop production because through seed only the investment made on other inputs like pesticide, fertilizer, irrigation and crop maintenance can be realized. The seed required for raising the crop is quite small and its cost is also less compare to other inputs, but the greater income farmer gets depends upon the quality of the small quantity of seed he uses.

In addition to above seed is the basic for the following event of agriculture.

- Carrier of new technologies
- Basic tool for secured food supply
- Principal means to secure crop yields in less favorable production areas
- Medium for rapid rehabilitation of agriculture in cases of natural disaster

Seed Quality

Good quality seed is the seed with required genetic and physical purity that is accompanied with physiological soundness and health status.

1. **Physical Quality:** It is the cleanliness of seed free from other seeds, debris, inert matter, diseased seed and insect damaged seed.
2. **Genetic purity:** It is the true to type nature of the seed. *i.e.*, the seedling / plant / tree from the seed should resemble its mother plant in all aspects.
3. **Physiological Quality:** It is the actual expression of seed in future generation / multiplication. Physiological quality characters of seed comprises of seed germination and seed vigour.
4. It should be free from designated diseases
5. Free from other crop seeds (expressed in number /kg)
6. It should be free from objectionable weed seeds
7. It should have optimum moisture content for storage
8. It should have high market value

Role of Good Quality Seed

Therefore, utmost care must be given upon the use of quality seed and thus certification guarantees quality and ensures high and assured yield under environmental stress conditions. This emphasizes the need for increasing the area under quality seed production. So one has to take efforts to produce quality seed and boost the yield by seed to seed seedling concept.

Characters of Good Quality Seeds

- High genetic purity
- High pure seed percentage (physical purity)
- High germinability
- High vigour and stamina
- Higher field establishment
- Free from pest and disease
- Good shape, size, colour etc., according to the specification of variety
- Higher physical soundness and weight
- High longevity / shelf life/ storage capacity
- Optimum moisture content for storage
- High market value

Significance of Quality Seed

- Ensures genetic and physical purity of the crops
- Gives desired plant population
- Capacity to withstand the adverse conditions
- Seedlings produced will be more vigorous, fast growing and can resist pest and disease incidence to certain extent
- Ensures uniform growth and maturity
- Development of root system will be more efficient that aids absorption of nutrient efficiently and result in higher yield.
- It will respond well to added fertilizer and other inputs.
- Good quality seeds of improved varieties ensures higher yield atleast 10 – 12 %

