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## **Module 3: SEED: MULTIPLICATION OF ADOPTED AND RESISTANT VARIETIES, CONSERVATION AND CERTIFICATION**



**Session 2: Process of seed certification .  
crop varieties, hybrids in vogue and  
trending**



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# Seed certification:

- **Objective:**

- The main objective of the Seed Certification is to ensure the acceptable standards of seed viability, vigour, purity and seed health. A well organized seed certification should help in accomplishing the following three primary objectives.



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## Contd...

- The systematic increase of superior varieties;
  - The identification of new varieties and their rapid increase under appropriate and generally accepted names.
  - Provision for continuous supply of comparable material by careful maintenance.



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# Certification agency:

- Certification shall be conducted by the Certification Agency notified under Section 8 of the Seeds Act, 1966.





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# Eligibility requirements for certification:

- Seed of only those varieties which are notified under Section 5 of the Seeds Act, 1966 shall be eligible for certification. Any variety to become eligible for seed certification should meet the following requirement:
  - General requirement-
    - Should be a notified variety under Section-5 of the Indian Seed Act, 1966. Should be in the production chain and its pedigree should be traceable.



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## ➤ Field standards -

- Field standards include the selection of site, isolation requirements, spacing, planting ratio, border rows etc.

## ➤ Specific requirements -

- Presence of off-types in any seed crop, pollen-shedders in Sorghum, Bajra, Sunflower etc., Shedding tassels in maize crosses, disease affected plants, objectionable weed plants etc., should be within the maximum permissible levels for certification.





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- Seed standards -
  - Minimum seed certification standards have been evolved crop-wise.





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# Process followed in Seed certification:

- An Administrative check on the origin of the propagating material: Source seed verification is the first step in Seed Certification Programme.
- ❖ **Field Inspection :**
  - Evaluation of the growing crop in the field for varietal purity, isolation of seed crop is to prevent out-cross, physical admixtures, disease dissemination and also ensure crop condition as regards to the spread of designated diseases and the presence of objectionable weed plants etc.





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## ❖ **Sample inspection:**

- Assessing the planting value of the seeds by laboratory tests. Certification agency draws representative samples from the seeds produced under certification programme and subjects them to germination and other purity tests required for conforming to varietal purity.

## ❖ **Control plot testing:**

- Here the samples drawn from the source and final seed produced are grown side by side along with the standard samples of the variety in question.



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## ❖ **Grow-out test:**

- Evaluation of the seeds for their genuineness to species or varieties or seed borne infection.
- Growing plants are observed for the varietal purity. Grow-out test helps in the elimination of the sub-standard seed lots.



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