



**RAMA**  
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## **DUS testing**

- **D: Distinctness:** The variety should be clearly distinguishable from any other existing variety.
- **U: Uniformity:** The variety should be sufficiently uniform to enable its description.
- **S: Stability:** The variety should be stable in its relevant characteristics, that is, it must remain true to its initial description even after repeated propagation.

### **PLANTING MATERIAL FOR DUS TESTING**

- The quantity of planting material requirement is indicated in the individual Test Guidelines of respective crops.
- The material submitted for DUS test should be representative of respective crops.
- The material submitted for DUS test should be representative of the candidate variety.

### **DURATION OF “DUS” TESTS**

- Usually the DUS examination requires more than one independent growing cycles with reference to ecosystem of the variety for studying the consistency of results.
- The candidate varieties are studied in a given location, over at least two successive seasons.
- For many crops, it is possible to complete two growing cycle in the same year. The two growing cycles should be independent of each other.
- For plants grown in green houses, provided the time between the sowing is not too short and the trial is randomized, at least partly, two growing cycles can overlap and still be compared as independent. For some crops such as fruit trees, the same plants are examined over successive years. The condition of independence of growing cycle is also satisfied in this case.

### **TEST LOCATIONS**

- Varieties of different geographical regions may require different agro-climatic growing conditions. Different locations can be used in order to meet growing conditions of different varieties.
- Some DUS testing centers might have a primary location, backed by a safety location. Normally, only the data from primary location will be used, but in case this location has major problem then the second one will be available to prevent the loss of one year's results.
- Even UPOV is currently exploring the circumstances in which more than one location might be used in order to obtain independent growing cycles in a given year.

## **CRITERIA FOR DUS TESTING BASED ON MORPHOLOGICAL CHARACTERS**

National Test Guidelines development for individual crops and representing harmonized approach for the testing of new varieties should form the basis of the DUS examination.

It contains details on

- (I) subject of the guidelines
- (II) material required
- (III) conduct of tests
- (IV) methods and observations
- (V) grouping of varieties
- (VI) characteristics and symbols
- (VII) table of characteristics
- (VIII) explanations on the table of characteristics
- (IX) literature and
- (X) technical questionnaire.

- The characteristics in the table follow the botanical order viz., seed (submitted), seedling, plant (growth habits etc.), root, root system or other subterranean organs, stem, leaf (blade, petiole, stipule) inflorescence, flower (calyx, sepal, corolla, pistil) and fruit.

### **DUS test for variety Registration and Notification**

- Plant variety Protection (PVP) has been brought in to sharp focus by agreement on Trade Related Aspects of Intellectual Property Rights (TRIP's) which is a part of agreement establishing world Trade organization (WTO).
  - The establishment of a clear identity for a variety to be protected and registered involves the following elements.
  - The variety should be clearly distinguishable from any other existing variety it must be different (Distinctness).
  - The variety should be sufficiently uniform to enable its description (Uniformity).
  - The variety should be stable in its relevant characteristics, that is, it must remain true to its initial description even after repeated propagation (Stability).