

RESEARCH ARTICLE

Usefulness of morphological characters for varietal identification in oats (*Avena sativa* L.)

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SUMMARY

Eleven varieties of oats were studied to know the various morphological characters responsible for identification. The study revealed that seed morphological character like seed colour, seedling character like colour of coleoptile region and plant characters like, growth habit, stem hairiness of uppermost node, flag leaf attitude, orientation of branches in panicle, attitude of branches in panicle and presence of awns were found as the important morphological characters for identification. Other seedlings characters like, anthocyanin pigmentation on coleoptiles, first leaf, sheath of first leaf and plants characters like lower leaf hairiness of sheath were of secondary importance for identification of varieties. Some of the characters were recorded in quantitatively and the cluster was formed from the recorded quantitative data, based on similarity in the characters the varieties were grouped into two main clusters, the variety UPO94 alone formed the one main cluster and the remaining ten varieties formed the another main cluster.

Key Words: Oats, Morphological characters, Identification

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