

Bio-Data of Mrs. Ashwini Prashant Benke

- Name** : Ashwini Prashant Benke
- Designation** : Scientist (Genetics)
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e-mail: ashwini.benke@icar.gov.in
- Higher Degree** : M.Sc agri. (Genetics and Plant Breeding)
- Birth Date** : 15/7/1986
- Research Interest** : Plant genetic resources, Cytogenetics, Molecular breeding, Plant Tissue culture, Intellectual Property Management
- Description of Research** :
- Characterization of garlic germplasm during *kharif* and *Rabi* for different agro morphological and biochemical traits along with molecular marker. Development of garlic genetic resource catalogue
 - Identification of high yielding and trait specific genotypes for further improvement.
 - Formulation of core collection in onion and garlic for further critical secondary analysis
 - *In vitro* conservation of garlic germplasm at ambient temperature using different osmotic agents
 - Development of in vitro protocol in garlic for regeneration of plantlets through callus using root tip explant. Use of established protocol for further biotic stress and transformation studies
 - Pollen cryo-conservation in different allium sp.
 - Confirmation of Onion haploids using cytology and flow cytometer
 - Interspecific hybridization in allium sp.
 - Identification of garlic ecotypes for inducing flowering using molecular markers.
- Research Outcomes**
- Formulated core group in garlic as well as in Onion specific to season
 - Standardize in vitro plantlet regeneration protocol in garlic through callus using root meristem
 - Standardize in vitro media combination for slow growth conservation of garlic genotype for a year with two subculturing
 - Identified kharif suitable promising garlic accessions
- Projects** :
- Evaluation and Maintenance of Garlic Germplasm
 - Breeding in garlic improvement through conventional and biotechnical approaches



- All India Network Research Project on Onion and Garlic- Evaluation of Garlic Varietal trial
- Intellectual Property Management and Transfer/Commercialization of Agricultural Technology Scheme