



SKUAST-Kashmir

SUCCESSFUL CONSERVATION AND DOMESTICATION MODEL OF GUREZ-ZEERA TOWARDS A SUSTAINABLE TRIBAL AREA ENTERPRISE

A Success Story



NATIONAL MISSION ON HIMALAYAN STUDIES



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Introduction

- Kala zeera is an economically important medicinal spice and a perennial herb native to Europe and Western Asia
- It grows naturally on the hills of northwestern Himalayas of India including Gurez valley
- High morphological variability has been observed in Kala zeera accessions, but the people from these areas often lift immature plants along with tubers for their immediate financial gains.
- This has restricted propagation of Kala zeera and has also lead to its exploitation and genetic erosion.
- Hence the crop is becoming an immediate conservation concern in northwestern Himalayan hills.
- The efforts of conservation of genetic resources and breeding interventions could contribute towards enhancement of its production and productivity.

Objectives

- Morphological characterization of local Kala zeera germplasm and perform selections on the basis of various morphological, yield and yield attributing traits
- Establishment of diverse accessions in the form of Kala zeera Germplasm Bank
- Multiplication of elite Kala zeera accessions for distribution to farmers
- Promoting scientific cultivation of Kala zeera through farmers' trainings & successful domestication

Methodology

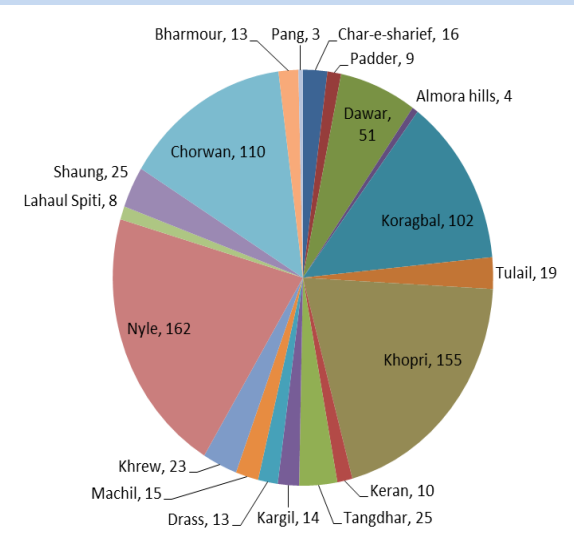
- Exploration, collection, characterization of local biodiversity
- Training tribal farmers for scientific cultivation
- Promoting domestication through FLD trials



(Kala zeera Plant)



Layout of Kala zeera trials at MAR&ES SKUAST-K Gurez



Germplasm accessions collected during exploration visits



Exploration visits

Achievements

- Routine practice of harvesting of immature zeera by tribal people was restricted through campaigns and involvement of local administration.
- Village level awareness camps to stop harvesting of Gurez zeera before its full maturity.
- Survey and collection of indigenous Gurez zeera germplasm with an objective to harness its local biodiversity.
- Establishment of Kala zeera Germplasm Bank based on 252 diverse accessions at MAR&ES SKUAST-Kashmir Gurez.
- Identification and multiplication of elite accessions and their distribution to tribal farmers as Front line demonstration (FLD) trials.
- Training of tribal farmers for zeera cultivation on scientific.
- Successful domestication of Kala zeera in Gurez demonstrated through performance of 25 FLDs and adoption of zeera cultivation in kitchen gardens.

Conclusion

- Restricting the practice of harvesting immature zeera shall allow natural propagation of zeera on hills.
- The successful efforts of scientific cultivation and domestication of zeera are expected to boost zeera cultivation, area expansion and enhancement in zeera production and productivity in Gurez.
- The involvement of women and youth in zeera farming and involvement of public sector in branding, GI tagging and e-marketing of Gurez zeera are expected to revolutionize cultivation of this important spice crop.

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