

Editorial

It is with great pleasure that we welcome you to the first issue of Genetics, Plant Breeding and Seed Science. This journal represents a significant step forward as a platform for advancing research, knowledge exchange, and collaboration in Genetics, Agrobiodiversity, Seed Science, Breeding, Biotechnology, and Biostatistics (GAS-3B), vital disciplines to agricultural transformation and the development of resilient food systems.

This inaugural issue brings together a diverse collection of studies from universities, national research institutions, private sector, and development partner, highlighting the vibrant scientific community in Nepal and beyond. The articles span from foundational research on crop development to field-based evaluations of landraces and hybrids cultivated by farmers, highlighting the essential connection between scientific rigor and practical agricultural advancement. This issue features research on the phenotypic diversity of Nepalese finger millet landraces, evaluations of hot pepper collections and maize hybrids under local conditions, and analyses of how wheat genotypes, potato varieties and their planting dates influence yield. Collectively, these studies provide critical data and actionable insights to support breeding programs aimed at developing climate-resilient, high-yielding, and locally adapted crop varieties.

The issue also features two insightful review articles exploring integrated strategies for climate-resilient agriculture, sustainability, and equity in food systems. These remind us that seed and genetic improvements must be part of a broader socio-ecological framework to drive lasting change. The germplasm and registration section showcases three articles on indigenous varieties such as ‘Madale kankro’ (cucumber), ‘Raato Kodo’ (finger millet), and ‘Raayo saag’ (broad leaf mustard). Documenting these genetic treasures is crucial not only to safeguard heritage but also to inspire innovations enriching Nepal’s agrobiodiversity.

This journal is made possible through the collaborative efforts of the Seed Quality Control Centre, Ministry of Agriculture and Livestock Development, and the Plant Breeding and Genetics Society of Nepal. Their shared vision has established a platform that connects generations and disciplines, linking farmers’ fields with research laboratories, and integrating traditional knowledge with modern technological advances.

As we begin this journey, we reaffirm our commitment to publishing high-quality, peer-reviewed science supporting evidence-based agricultural decisions. We invite researchers, breeders, policymakers, extension workers, and private sector partners to engage with the journal as readers and contributors. May this platform serve as a beacon and bridge connecting communities driving agricultural progress.

We extend our sincere thanks to all authors, reviewers, editorial board members and publishers who made this issue possible. We highly appreciate encouragement from Chief of SQCC and Chairperson of PBaGSoN. We look forward to nurturing an inclusive, dynamic, and impactful space fostering innovation, collaboration, and sustainable agricultural development in Nepal and the region.

Editor-in-Chief

Genetics, Plant Breeding and Seed Science
Volume 1 Issue 1, 2025

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