

2006

Plant DNA banks and the role in plant genomics

Nicole F. Rice
Southern Cross University

Loraine Watson
Southern Cross University

Robert J. Henry
Southern Cross University

Publication details

Rice, NF, Watson, L & Henry, RJ 2006, 'Plant DNA banks and the role in plant genomics', paper presented to the ISPMB 8th International Congress of Plant Molecular Biology, Adelaide, SA, 20-25 August.

ePublications@SCU is an electronic repository administered by Southern Cross University Library. Its goal is to capture and preserve the intellectual output of Southern Cross University authors and researchers, and to increase visibility and impact through open access to researchers around the world. For further information please contact epubs@scu.edu.au.

Plant DNA Banks and the Role in Plant Genomics

Rice, N., Watson, L. and Henry, R.J.
Australian Plant DNA Bank, Centre for Plant Conservation Genetics,
Southern Cross University, PO Box 157 Lismore NSW 2480 Australia

The Australian Plant DNA Bank aims to preserve representative genetic information from Australian flora and cultivated species. The collection stores DNA from all accessions including rare species and species of economic importance. Information regarding the species in this collection is available at www.dnabank.com.au.

DNA Banks

- complementary to traditional germplasm and herbaria
- house material collected for the purpose of DNA extraction, genomic DNA and associated products from molecular based research.

Standardisation of DNA Banking

- global standardisation and international co-ordination of efforts
- address operational issues such as data storage and management, quality assurance and control
- compliance with international agreements and treaties governing access and transfer of samples to third parties for research.

DNA Banks and Plant Genomics

- Recent advances in genomics have provided techniques for efficient, large scale sample processing
- DNA banks can provide genomics programs with access to large collections of diverse material.

Benefits to research

- a central repository for the effective dissemination and exchange of genetic material from many sources
- a ready supply of DNA to support research involving gene expression, gene discovery, genotyping, marker development, assessment of diversity and phylogenetics.

biobank



Southern Cross
UNIVERSITY

References:

Graner, A *et al.* (2006) Ch 10 A model for DNA Banking to enhance the management, distribution and use of ex-situ stored PGR *in de Vicente, C* DNA Banks – providing novel options for genebanks? Topical Reviews in Agricultural Biodiversity. International Plant Genetic Resources Institute, Rome, Italy

Rice *et al.* (2006) DNA Banks and their role in facilitating the application of genomics to plant germplasm Plant Genetic Resources 4(1): 64 - 70

