Measuring and Collecting Plant Genetic Diversity. (C08-brown001756-Oral)

Authors:

- A.H.D.Brown* CSIRO Plant Industry
- C.L.Brubaker CSIRO Plant Industry

Abstract:

It is a sad irony that just when new techniques are opening further the treasury of plant genetic diversity, genetic erosion of wild and domesticated plant species continues relentlessly. How are we to measure, monitor and manage plant genetic resources? How big should germplasm collections be? What should they contain? How are they to be assembled and structured to meet the needs of the genomics era? Can DNA banks (conservation in glacie) substitute for costly seed collections? Indicators of diversity richness, evenness, divergence and value are needed for both populations in situ, and collections in hand. Without these, ad hoc management will prevail, and attempts at conservation will be sporadic, and subject to fluctuating goals, whims and the resources of institutions.

Corresponding Author Information:

Tony Brown phone: 61-2-62465081 CSIRO Plant industry fax: 61-2-62465000

GPO Box 1600 e-mail: tony.brown@csiro.au

Canberra, AC 2601

Australia

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