

## **The Monitoring, Collecting, and Conserving of Landraces and Wild Plant Genetic Resources, *in situ*, On-farm**

Cultivated plant genetic resources, crop breeding, and sophisticated evaluation are important subjects, often referred to both at conferences and in articles published in agricultural journals. Botanical research of wild flora, including vegetation, taxonomy, ecology etc., is an important subject of botanical periodicals. There is very little investigation encompassing both fields; and what there is, is difficult to present. Wild plant genetic resources are usually neglected, and land races are seldom reported. Agricultural botany, and research into wild ancestors as well as crops' wild relatives often fall somewhere between the agricultural and botanical sciences. The investigation of wild plants, using agricultural research methods; and conversely, research of agricultural plants in natural vegetation using standard botanical field methods were the subjects of the 2<sup>nd</sup> International Seminar, "The monitoring, collecting and conserving of landraces and wild plant genetic resources, *in situ*, on-farm".

Present breeding programmes look for the desired genes in old landraces, or in other related species, including wild plants. Therefore, their investigation is highly desirable. First, they must be collected by the gene bank, exchanged with other gene banks, or collected from either rural farms or from their natural environment.

Additional new functions, non-productive and ecological, are being imposed on present-day agriculture. In the past, large-scale agriculture used to be one of the most harmful human activities to wild biota. Misusing or overusing nutrients and pesticides, with the objective of maximizing yields, caused the escape of sensitive species. Improper farming technology and overgrazing led to the degradation of both soil and vegetation. Agriculture must be responsible for maintaining a sustainable farming system. It should participate in the restoration of the rural landscape, as well as maintaining those fragments of extant botanical richness in their territories.

The topics and problems listed above were the focal points when planning this specialized seminar. The following papers should summarize recent research on the periphery of botany and agriculture, and should provide experimental results to inspire further agricultural and botanical research.

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