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Nota di contenuto	""Foreword""; ""Preface""; ""List of Contributors""; ""Abbreviations Used Throughout the Book""; ""Contents""; ""1. Conservation of Potato Genetic Resources""; ""I. HISTORY, VALUE AND NEED FOR POTATO GERMPLASM""; ""Origins of Potato Germplasm""; ""Value and Ownership of Potato Germplasm""; ""Germplasm Ownership""; ""Plant Rights""; ""Problems with Diseases, Pests, Stresses and Quality""; ""Problems with Breeding Methods""; ""II. STATUS OF GENETIC RESOURCES OUTSIDE GENE BANKS""; ""Goals for Adding Diversity to the Genebank""; ""Cultivated Species""; ""Wild Species"" ""Collection for Genetic Diversity""""Collection for Habitat and Geographic Diversity""; ""Extent to Which Genetic Diversity Outside the Genebank is Changing""; ""Cultivated Species""; ""Monocultures""; ""Losing Wild Populations""; ""Loss of Diversity within Populations""; ""Extent to Which Genebank Stocks Represent Plants in Nature""; ""Getting a Good Original Sample""; ""Changes Occurring in the Genebank""; ""Environmental Effects on Phenotype""; ""Practical Realities""; ""III. EX-SITU POTATO GERMPLASM COLLECTIONS: THEIR

DATA, GENERAL OBJECTIVES AND TECHNICAL RESEARCH

""Collections and Their Data"" ""Acquisition""; ""Classification""; ""Identification Plants Pertinent to the Potato Crop""; ""Classification to Guide Collecting, Breeding and Evaluating ""Core Subsets"" ""; ""Preservation""; ""Clonal""; ""Botanical Seeds""; ""Toward a Utopian Scheme""; ""The Aversion to Discard""; ""Preservation Research""; ""Effects of Seed Increase on the Genetic Integrity of Potato Collections""; ""Comparison of ex situ and in situ Populations""; ""Comparison of Original Populations and their First Seed Multiplication""

""Value of Germplasm with Unreliable or Missing Origin Data"" ""The Problem of ""Mystery"" Samples"" ""Vulnerability of Alleles in the Potato Genebank""; ""Unintentional Seedling Selection""; ""Analysis of Genetic Parity Between Potato Germplasm from Different Genebanks""; ""Studies on the Relationship of Genetic Diversity to Natural Habitats""; ""The Impact of Breeding System on the Preservation and Use of Germplasm""; ""Evaluation Research""; ""Distribution""; ""Other Forms of Germplasm Distribution""; ""Promoting Distribution""; ""Distribution of Information""; ""REFERENCES""

""APPENDIX 1 INFORMATION SOURCES"" ""A. Potato Genebanks and Related Sites""; ""B. Information about Named *S. tuberosum* Cultivars""; ""C. General Germplasm Conservation Information""; ""2. On-farm Profitability and Prospects for True Potato Seed (TPS)"";

""INTRODUCTION""; ""TPS TECHNOLOGIES ""; ""METHODS AND EXPECTATIONS""; ""SAMPLING AND DATA COLLECTION""; ""RESULTS ""; ""SENSITIVITY ANALYSIS""; ""EMPIRICAL RULES OF THUMB""; ""DISTRIBUTION OF BENEFITS""; ""CONCLUDING COMMENTS""; ""Acknowledgments""; ""REFERENCES""; ""3. Propagation by Traditional Breeding Methods""; ""INTRODUCTION""

""TRADITIONAL BREEDING OF CULTIVARS VS. GERmplasm ENHANCEMENT ""

Sommario/riassunto

Potato is the most significant non-cereal crop. Much attention has been paid to this commercially important crop. The aim of this volume is to capture the recent advances made in improving potatoes using traditional breeding methods as well as genetic engineering technology. The book provides a critical appraisal of the state-of-the-art finding on this crop.