CONTENTS

VOLUME XIV

Why Genetic Modification Arouses Concerns: Social, Cultural and Political Impacts 1
Richard Braun, BIOLINK, Bern, Switzerland

1. Introduction
   1.1. The public perception of new technologies
   1.2. The status of applications of genetic modification
2. How to Know about Concerns
   2.1. Surveys
   2.2. Media reports
   2.3. Consultations
   2.4. Public votes on the application of genetic modification
3. What are the Concerns
   3.1. Human health
   3.2. Environment
   3.3. Ethics
   3.4. Economics
4. Cultural Roots of the Concerns
   4.1. Lack of understanding the science
   4.2. Education
   4.3. Naturalness
   4.4. Religion
5. Political Factors Contributing to the Concerns
   5.1. Governments and Government Agencies
   5.2. Industry
   5.3. Farmers
   5.4. NGOs
   6.1. Contributions by industry
   6.2. Contributions by Scientists and the Media
   6.3. Contributions by the Political Arena
   6.4. Contributions by Science Organisations

Gender Relations in Local Plant Genetic Resource-Mangement and Conservation 20
Willemijn Johanna Maria Cuijpers, Wageningen University, The Netherlands
Patricia Louise Howard-Borjas, Wageningen University, The Netherlands

1. General Background
   1.1. Gender Relations and Gender Bias
   1.2. What is Conserved is Related to Who Conserves
2. Patterns in Relief: Women's Knowledge and Management of Plant Genetic Resources
   2.1. Woman, the Housewife
   2.2. Woman, the Gatherer
   2.3. Woman, the Gardener
   2.4. Woman, the Herbalist
   2.5. Woman, the Seed Custodian
   2.6. Woman, the Plant Breeder
3. Behaviors in Relief: the Practice and Consequences of Gender Bias
   3.1. Women's Rights to Plant Genetic Resources
   3.2. Gender Bias in Ethnobotany and Related Sciences
   3.3. Gender, Biodiversity Loss, and Conservation
4. Needs in Theory and Practice
# Biotechnology

## Biowarfare and Bioterrorism: The Dark Side of Biotechnology

**Edgar J. DaSilva, International Scientific Council for Island Development, France**

1. Introduction
2. Biological/Chemical Warfare Characteristics
3. Bioweapons
4. Bioterrorism
5. Control, Monitoring and Reporting Systems
6. Conclusion

## Social Factors in the Treatment and Reuse of Organic Wastes in Developing Countries

**Christine Furedy, York University Canada, Australia**

**Hanns-Andre Pitot, AT-Association, Germany**

1. Introduction: Attitudes, behaviours and technology for organic waste reuse
   1.1. Variety of organic wastes or residues
   1.2. Reactions to wastes
2. Household and community-scale action for treatment and reuse
   2.1. Compost latrines
   2.2. Urban-waste-derived compost and vermicompost
   2.3. Biogas digesters
3. Technology choice, behavioural change and institutional supports
4. Conclusion

## Potentials of Bioenergy from the Sago Industries in Malaysia

**Kopli Bujang, Universiti Malaysia Sarawak, Malaysia**

1. Introduction
2. Starch Industries
3. The Sago Palm
4. Production of Bio-Ethanol
   4.1. Hydrolysis of Sago Starch
   4.2. Justification of Bioethanol Production
   4.3. Ethanol Fermentation Process
5. Waste Production and Management
   5.1. Liquid waste
   5.2. Solid waste
6. Prospects and Problems

## The Pacific Islands: A Natural Treasurehouse Of Bioresources and Island Biotechnology

**Edgar J. DaSilva, International Scientific Council for Island Development (INSULA), Paris, France**

**Murukesan V. Krishnapillai, Agricultural Experiment Station, College of Micronesia-FSM, Federated States of Micronesia**

1. Introduction
2. The Pacific Region and Medicinal Plants
3. Aboriginal and Maori Medicine
4. Pacific Island Medicinal Plants and Intellectual Property Rights
5. Safety
6. Biodiversity trade in the contemporary Pacific
7. Trade considerations - Green pharmaceuticals
8. Gender
9. Kava and Nonu
   9.1. Kava
   9.2. Nonu
10. Conclusion

Index 213

About EOLSS 217