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Acharya, Rohini, Intellectual Property, Biotechnology and Trade: The Impact of the Uruguay Round on Biodiversit, Nairobi: Acts Press, 1992.

Ahmed, Iftikhar, ed., Biotechnology: A Hope or a Threat?, New York: St. Martin's Press, 1992.

Alcorns, Janis B., □thics, Economies and Conservation", in *Biodiversity: Culture, Conservation and Ecodevelopment*, Margery L. Oldfield and Janis B. Alcorn (eds.), published by Boulder Co, Westview, 1991.

Avramovic, Mila. *An Affordable Development? Biotechnology, Economics and the Implications for the Third World*, published by London Atlantic Highlands, Zed Books; New Jersey (USA), 1996.

Axt, Josephine R. et al., □iotechnology, Indigenous Peoples, and Intellectual Property Rights, Washington, D.C.: Congressional Research Service", *CRS Report for Congress*, no. 93-478A, 1993.

Barker, R., "Socio-economic Impact" in *Agricultural Biotechnology: Opportunities for Industrial Development*, Gabrielle Presley, ed., 299-310; published by CAB International, Wallingford (UK), 1990.

Barton, J., "Legal trends and agricultural biotechnology: effects on developing countries"; *Trends in Biotechnolog*, 7, 264-8, (1989); published by Elsevier Trends Journal, Oxford (UK).

Bifani, Pablo. "Biotechnology: Overview and Developments in Latin America" in Economic and Social Progress in

/...

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Latin America 1988 Report; published by Inter-American Development Bank, 195-283, 1988.

Biotechnology and the Environment: The Regulation of Genetically Engineered Organisms Used in th Environment, Proceedings of the Seventeenth Annual Conference on the Environment, Division for Public Services, American Bar Association, Washington, D.C., 1989.

Bohrer, Robert A., ed.; From Research to Revolution: Scientific, Business, and Legal Perspectives on the New Biotechnolog. Proceedings of the First Annual San Diego Biotechnology Conference, La Jolla, California, F.B. Rothman, Littleton, Colo., 1987.

Brown, J., Colwell R., Lenski R., Levin B., Lloyd M., Regal P. & Simberloff D.; *Report on Workshop on Possibl Ecological and Evolutionary Impacts of Bioengineered Organisms Released into the Environment*, Bull. Ecol. Soc. Amer. 65:432-438.

Bud, Robert, "The Uses of Life: A History of Biotechnology", Cambridge and New York: Cambridge University Press, 1993.

Busch, L., Lacy W., Burkhardt J. and Lacy L., *Plants, Power and Profit: Social, economic and Ethical Consequences of the New Biotechnologies*, Basil Blackwell, London, 1991.

Busch, L., Lacy W., Burkhardt J., Hemlien D., and others, *Making Nature, Shaping Culture: Plant Biodiversity in Global Context*, University of Nebraska, Lincoln, London, 1996.

Busch, Lawrence, *Plants, Power, and Profit: Social, Economic, and Ethical Consequences of th New Biotechnologies*, Cambridge, Mass.: B. Blackwell, 1991.

Buttel, F., "Sociological Impact". In *Agricultural Biotechnology: Opportunities for Industrial Development*, Gabrielle Persley, ed., 311-21; published by CAB International, Wallingford (UK), 1990.

Buttel, F. and Belsky J., "Biotechnology, Plant Breeding and Intelectual Property: Social and Ethical Dimensions", *Science, Technology and Human Values*, 12, winter, 31-49, 1987.

Cabirac, Daniel and Warmbrodt, Robert; *Biotechnology: Human Health and Nutrition*, January 1985-December 1992, National Agricultural Library, Quick Bibliography Series, no. QB 93-12, Beltsville, Md; 1993.

Cabirac, Daniel and Warmbrodt, Robert; *Biotechnology and Bioethics*, January 1985-December 1992, Nationa Agricultural Library, Quick Bibliography Series, no. QB 93-11, Beltsville, Md; 1993.

Cantley, Mark F., "Democracy and Biotechnology", in Swiss Biotech, May 1987, No. 5, pp.5-15.

Capron, Alexander Morgan, 'Biomedical Technology and Health Care: Transforming Our World', Southern California Law Review 65, 1991.

CEPAL, Los nuevos escenarios agricolas en formacion; Division Agricola, Santiago de Chile (Chile), 1992.

Chang, Te-Tzu, Sherl Dietz and Westwood M., "Maintenance and Use of Plant Germplasm Collections", in Bioti

Diversity and Germplasm Preservation: Blobal Imperatives, Lloyd Knutson and Allan Stoner (ed), Kluwer Academic Publishers, Dordrecht, 1989.

Coombs, Rod, Paolo Saviotti, and Vivien Walsh, (eds.), "Technological Change and Company Strategies: Economic and Sociological Perspectives", London and San Diego: Harcourt Brace Jovanovich, 1992.

Council of Europe, "Potential long-term ecological impact of genetically modified organisms", *Nature and environment*, no. 65.

Crawley, M. "The ecology of genetically engineered organisms: assessing the environmental risks". In *Introduction of Genetically Modified Organisms Into the Environment*, H. A.

Da Silva, E.J., Ratledge, Sasson, A., eds., *Biotechnology: Economic and Social Aspects - Issues for Developing Countries*, published by Cambridge University Press (UK) in association with UNESCO; Cambridge (UK), 1992.

Da Silva, E.J.; "The socio-cultural impact of applied microbiology and biotechnology for development", in *Proceedings of the EEC/UNESCO/CNRS Colloquiu* "L' impact des Biotechnologies sur le tiers monde", pp. 195-209, Paris (1982).

Da Silva, E.J., (ed.); *Microbial Technology in the Developing World*. Oxford and New York: Oxford University Press, 1987.

Davis, Bernard D, *The Genetic Revolution: Scientific Prospects and ublic Perceptions*, Baltimore: Johns Hopkins University Press, 1991.

Davis, Nancy (Ann), "Morality and Biotechnology", Southern California Law Review 65, 1991.

Deiaco, Enrico, Erick Hornell and Graham Vickery, (eds.), *Technology and Investment: Crucial Issues for the 1990s.* London: Pinter Publishers, 1990.

Der Meer, P., "Potential long-term ecological impact of genetically modified organisms"; *Nature and Environment*, No. 65, Council of Europe Press, 1993.

Doelle, H.W., "Socio-Economic biotechnology development for developing countries"; *MIRCEN Journal of Applied Microbiology and Biotechnolog*, No. 5, (1989a); Oxford (UK).

Doyle, J. D., Persley, G.J., eds., *Enabling the Safe Use of Biotechnology, Principles and Practi*, Environmentally Sustainable Development Studies and Monograph Series No.10, 1996, published by the World Bank, Washington, DC.

Eisenberg, R., "Proprietary rights and the Norms of Science in Biotechnology", 97 Yale Law Journal, December, 1987.

FAO. Towards an International Code of Conduct for Plant Biotechnology as it affects the Conservation and Utilization of Plant Genetic Resources, CPGR/93/9, Rome, February 1992.

Federal Coordinating Council for Science, Engineering, and Technology. Committee on Life Sciences and Health,

Page 4

Biotechnology for the 21st Century: A Report. Washington, D.C.: U.S. Government Printing Office, 1992.

Federal Coordinating Council for Science, Engineering, and Technology. *Committee on Life Sciences and Health, Biotechnology for the 21st Century: Realizing the Promise: A Report*. Washington, D.C.: Federal Coordinating Council for Science, Engineering, and Technology, 1990.

Fincham, J.R.S. & Ravetz J.R., *Genetically Engineered Organisms: Benefits and Ris*, University of Toronto Press, Toronto, 1990.

Fowler, C. Lachkovics E., Mooney P. and Shand H., "The Laws of Life: Another Development and the New Biotechnologies", (*Development Dialogu*, N. 1-2) 1988.

Fowler, C. and Mooney P, *Shattering: Food, Politics and the Loss of Genetic Diversit*, University of Arizona Press, Tucson, 1990.

Fox, Michael W., Superpigs and Wondercorn: The Brave New World of Biotechnology and Where It All May Lead, New York, N.Y.: Lyons & Burford, 1992.

Fry, J.C. and M.J. Day, *Release of Genetically Engineered and Other Micro-organisms*, Cambridge and New York: Cambridge University Press, 1992.

Gamez, R., "Threatened Habitats and Germplasm conservation: A Central American Perspective", in *Biotic Diversity* and Germplasm Preservation. Global Imperative, Lloyd Knutson and Allan Stoner, Kluwer academic Publishers, Dordrecht, 1989.

Gendel, Steven M., (ed.), Agricultural Bioethics: Implications of Agricultural Biotechnolog, Ames: Iowa State University Press, 1990.

George, K., "Biotechnology and Biodiversity", (Journal of Agricultural ethics, 1, winter), 1988

Giacometti, D. and Goedert C., "Brazil's National Genetic Resources and Biotechnology Center Preservers and Develops Valuable Germplasm", (*Diversit*, 5), 1989.

Giersch, H. (ed), *Emerging Technologies: Consequences for Economic Growth, Structural Change and Employment*, Universitat Kiel, Institut fur Weltwirtscharft; published by J.C.B. Mohr; Tubingen, 1982.

Ginzburg, Lev R., Assessing Ecological Risks of Biotechnolog. Boston: Butterwort. -Heinemann, 1991.

Goldstein, D. "Molecular Biology and the Protection of Germplasm: a Matter of National Securit", in *Seeds and Sovereignt*, Jack Kloppenburg (ed.), Duke University Press, Durham, 1988.

Graziano, Karen M., "Biosafety Protocol: Recommendations to Ensure the Safety of the Environment", *Colorado Journal of International Environmental Law and Poli*, Vol. 7, pp. 179-211, Winter 1996.

Greaves, Rosa, (ed.), *Protecting and Exploiting Biotechnological Inventions*, Chur, Switzerland: Worldwide Information; New York: Distributed by Scientific and Technical Book Services, 1991.

Greenshields, Rod, (ed.), *Resources and Applications of Biotechnolog*, The New Wave. London: Macmillan; New York: Stockton Press, 1989.

Hacking, A.J.; *Economic Aspects of Biotechnology*, published by Cambridge University Press; Cambridge (USA), 1986.

Hall, Peter et al, *Biotechnology: The Next Industrial Frontier*. Berkeley: Institute of Urban and Regional Development, University of California at Berkeley. 35 pages. Working Paper, no. 474, 1988.

Halos, S.C., *Biotechnology Trends: A Threat to Philippine Agriculture?*, World Employment Programme Research, Technology and Employment Programme, Working Paper WEP 2-22/WP 193, International Labor Office, Geneva (1989).

Hayenga, Marvin L., *Biotechnology: Implications for Agribusiness in the 1990s*, Ames: Technology and Social Change Program, Iowa State University, Studies in Technology and Social Change Series, no. 8, 1988.

Hermitte, M. and Joly P., *Biotechnologies et brevets: Presentation des differents modeles juridiques et analyse d leur impact sur la dynamique de l' innovation dans les industries des semences*, Universite Des Sciences Sociales, 1991.

Hobbelink, H., *Biotechnology and the Future of World Agriculture: The Fourth Resource*, London and Atlantic Highlands, N.J.: Zed Books, 1991.

Hobbelink, H., *Biotechnology and Third World Agriculture: New Hope or False Promise?*, International Coalition For Development Action, Barcelona, 1987.

Hoffman, C., "Ecological risks of genetic engineering of crop plants". *BioScience*, 40:434-37; published by the American Institute of Biological Sciences, Arlington, VA (USA), 1990.

Holla, Rogier A.H.G., *Cultural Attitudes and Institutional Forces: Explaining National Differences in Biot hnology Poli*. Cambridge, Mass.: Center for Science and International Affairs, John F. Kennedy School of Government, Harvard University. 17 pages. CSIA Discussion Paper, no. 93-01, 1993.

Jacobson, S., Jamison, A., Rothman H., eds., *The Biotechnological Challeng*, published by Cambridge Universit Press; cambridge (USA) 1986.

Johnson, H.G., "Technological Change and Comparative Advantage: An Advanced Country's Viewpoint", *Journal of World Trade La*, Vol.9, 1975; published by Twickenham, Middx.

Joly, P. and Trmmeter M., *World regulation of Genetic resources: Is the Model of common Heritage Sustainable?*, Paper presented at the International Symposium of the Federation of Institutes of Advances Studies, Nairobi, 1991.

Junne, G., *Biotechnology and Consequences for Changing Relations between EC-USA, EC-Japan and US -Japan*, Biotechnology Hearing, European Parliament, Committee on Energy, Research and Technology (PE 98.227/rev.), 30 October, (1985).

Page 6

Junne, G., "Nuevas Tecnologias: Una amenaza para la s exportaciones de los paises en desarrollo"; en *Efectos sobre la division Internacional del Trabajo*, pp. 41-66; publicado por la Secretaria del Trabajo y Prevision Social, Mexico, (1986).

Junne, G., Komen, J. & Tomei, F., "Dematerialization of production: impact on raw material exports of developing countries", *Third World Quarterl*, 11, 128-42, (1989); published by Carfax, abingdon (UK).

Kamely, Daphne; Chakrabarty, Ananda; and Kornguth, Steven, (eds.); *Biotechnology: Bridging Research and Applications*; Proceedings of the U.S.-Israel Research Conference on Advances in Applied Biotechnology, Kluwer, Boston, 1991.

Keller, Evelyn Fox, *Genetics, Reductionism, and the Normative Uses of Biological Information: Response to Kevles*, Southern California Law Review 65, 1991.

Kenny, M. and Buttel, F., "Biotechnology: Prospects and Dilemmas for Third World Development", *Development and Change*, Vol. 16, No.1, June 1985; Sage Publications, London (UK).

Kloppenburg, J., First the Seed: The Political Economy of Plant Biotechnology, 1492-2000, University Press, New York, Cambridge, 1988.

Knutson, L. and Stoner A., *Biotic Diversity and Germplasm Conservation*, Kluwer Academic Publishers, Dordrecht, The Netherlands, 1989.

Ko, Yusing, □n Economic Analysis of Biotechnology Patent Protection", 102 Yale Law Journal, 1992.

Krattiger, A. F. (Ed.), McNeely, J. A., Lesser, W. H., Miller, K. R., St. Hill, Y., Senanayake, R., *Widening Perspectives on Biodiversit*, The World Conservation Union and the International Academy of the Environment, Switzerland, 1994.

Krimsky, Sheldon, Biotechnics & Society: The Rise of Industrial Genetics. New York: Praeger, 1991.

Kristensen, R., Biotechnology and the Future Economic Development, Institute for Future Studies, Copenhagen, 1986.

Lacy, W., Bush, L. and Lacy, L., "Public Perceptions of Agricultural Biotechnology", in *Agricultural Biotechnology: Issues and Choices*, Bill Baumgardt and Marshall Martin (eds.), Purdue University Agricultural experiment Station, West Lafayette, 1991.

Ladisch, Michael R., and Bose, Arindam, (eds.), *Harnessing Biotechnology for the 21st Centur*, Proceedings of the Ninth International Biotechnology Symposium and Exposition, American Chemical Society, Washington, D.C., 1992.

Lemkow, Louis, *Public Attitudes to Genetic Engineering: Some European Perspectives*. Dublin, Ireland: Shankill, Co.; European Foundation for the Improvement of Living and Working Conditions; Lanham, Md.: UNIPUB, Inc. 44, 1993.

Lenski R.E., "Evaluating the fate of genetically modified microorganisms in the environment: are they inherently less

fit?", Experientia 49:201-209, 1993.

Lesser, William H., (ed.), Animal Patents: The Legal, Economic and Social Issues, London: Macmillan, 1989.

Linder, C., and J. Schmitt. "Assessing the risks of transgene escape through time and crop wild hybrid persistence", *Molecular Ecolog*, 3:23-30, 1994.

Manasse, R., and P. Kareiva, "Quantifying the spread of recombinant genes and organisms", In *Assessing Ecological Risks of Biotechnolog*, ed. L. R. Ginzburg, 21531. Boston: Butterwort -Heinemann, 1991.

Mantegazzini, M. Chiara, The Environmental Risks from Biotechnolog. London: Pinter, 1986.

Marchant, Gary, Modified Rules For Modified Bugs: Balancing Safety and Efficiency in the Regulation of Deliberate Release of Genetically Engineered Microorganisms, Harvard Law School, 1 Harv. J. Law and Tec 163, Spring 1988.

Mascherpa, J.M. and Moncousin, C., (eds.), *Proceedings of the International Symposium on Plant Biotechnolog and Its Contribution to the Improvement, the Multiplication and the Development of Plants*, International Society for Horticultural Science, 1991.

Meister, I. and Mayer S. *Genetically engineered plants: releases and impacts on less developed countries*, A Greenpeace inventory, Greenpeace International, 1994.

Mellon M. & Rissler J., Perils Amidst the Promis, Union of Concerned Scientists, Washington DC, 1993.

Molin, S., Boe, L., Jensen, L. B., Kristensen, C. S., and M. Givskov, □uicidal genetic elements and their use in the biological containment of bacteria", *Annual Reviews of Microbiolog*, 47:139-166, 1993.

Mooney H.A & Bernadi G. *Introduction of Genetically Modified Organisms into the Environment*, John Wiley and Sons, New York, 1990.

Mooney and G. Bernardi (ed.), 133-50. Scientific Committee on Problems of the Environment 44 Chichester, N.Y. (USA), 1990.

Mooney, P., "Biotechnology and North-South Conflict", in *Biotechnology Revolution and the Third World Challenges and Policy Options*, Research and Information System for the Non-Aligned and Other Developping Countries (RISNODEC), New Delhi, 1989.

Moraja-Rojel, J., "Plant Germplasm and Agricultural Biotechnology: Prospects for Modern Agricultural Technology in Chile", (*Revista Latinoamericana de las Ciencias y la Technologia*,7, May-August), 1990.

OECD, Technical Change and Economic Poli , Paris, 1980.

OECD, Long-Term Economic Impacts of Biotechnolog, unpublished Progress Report, 1986.

OECD: Long-Term Economic Impacts of Biotechnology, An International Sur, conducted by Dr. Rudiger Hoeren, Prognos AG, Basle, on behalf of the OECD, unpublished report, OECD, 1988.

OECD, Biotechnology and the Changing Role of Government, Paris, 1988.

OECD, Biotechnolog - Economic and Wider Impacts, Paris, 1989.

OECD, Safety Considerations for Biotechnolog, 1992.

OECD, Safety Evaluation of Foods Derived by Modern Biotechnology: Concepts and Principles, Paris, 1993.

OECD. Safety Considerations for Biotechnology: Scal -up of Crop Plants, Paris, 1993.

OECD. Compendium of Methods for Monitoring Organisms in th Environment, Environment Monograph No. 91, Paris, 1994.

OECD. Biotechnology for a Clean Environment: Prevention, Detection and Remediation, DSTI/STP/BE(93)7, Paris, January 1994.

OECD. A Comparative Analysis of Information and Data Elements used in the Assessment of Industrial Produ ts of Modern Biotechnology intended for Release to the Environment, ENV/MC/CHEM/BIO (94)2, Paris, August 1994.

OECD. Environmental Impacts of Aquaculture using Aquatic Organisms derived through Modern Biotechnology: The Proceedings of the Trondheim Workshop, COM/ENV/DSTI (94)36, Paris, August 1994.

OECD: Comercialization of agricultural products derived through modern biotechnology: Survey results, Environmental monograph 99, Paris, (1995).

OECD: Proceedings of the workshop on comercialization of agricultural products derived through modern biotechnolog; Environmental Monograph, No. 107, Paris, (1995).

OECD: *Biotechnology: Economic and Wider Impacts*. Paris, Washington, D.C.: Publications and Information Center, (1989).

Orton, T., "New Technologies and the Enhancement of Plant Germplasm Diversity", in *Seeds and Sovereignt*, J. Kloppenburg (ed.), Duke University Press, Durham, 1988.

Panchamukhi, V. R. & Kumar, "Impact on commodity exports", In *Biotechnology Revolution and the Third World.* challenges and *Policy Option*, pp. 207-24; Research and Information System for the Non -Aligned and Other Developing Countries, New Delhi (1988).

Parr, Keith D., *Developments in Agricultural Biotechnolog*, William Mitchell Law Review, 19 Wm. Mitchell L. Rev. 457, Spring, 1993.

Perpich, Joseph G., (ed.), Biotechnology in Society: Private Initiatives and Public Oversight. New York: Pergamon, 1986.

Persley, G. J., Giddings, L.V. and Juma, C.; Biosafety: The Safe Application of Biotechnology in Agricultur and the

Environment, ISNAR Research Report No. 5, The Hague, 1992.

Primrose, S.B., Modern Biotechnolog, Blackwell Scientific Publications, Oxford and Boston, 1987.

Raines, L., "Protecting Biotechnology's Pioneers", (Issues in Science and Technolog, Winter), 1991-1992.

Ramos, J. L., □z, E., Dowling, D., de Lorenzo, V., Molin, S., □ara, F., Ramos, C., and K. N. Timmis, □he behavior of bacteria designed for biodegradation", *BioTechnolog* 12:1349-1356, 1994.

Rebello Pinho, J. R., Barr, P. J., icente, E. J., and A. C. G. Schenberg, □xpression of the 18kDa protein antigen of *Mycobacterium lepra* in *Saccharomyces cerevisia* ", *Biotechnology Letters*, 16:1241-1246, 1994.

Rees, M., D. Kohn, R. Hails, M. Crawley, and S. Malcolm, "An ecological perspective to risk assessment", In *Biological Monitoring of Genetically Engineered Plants and Microbes*, ed. D. R. MacKenzie and S. C. Henry, 9 24. Bethesda, Md.; Agricultural Research Institute, 1991.

Rehm, H.J. and Reed, G., *Biotechnology: A Comprehensive Treatise*, 8 vols., Verlag Chemie, Weiheim and Deerfield Beach, Fla, 1981.

Rehm, H.J., *The Economic Potential of Biotechnologies*, Kiel Conference on Emerging Technology, Kiel Institut fur Weltwirtschaft, published in Giersch, H. (ed) (1982).

Reilly, J.M., *Consumer Effects of Biotechnolog*; Economic Research Service, United States Department of Agriculture, Agriculture Information Bulletin, Number 581, (1989).

Regal, P.J. "Models of Genetically-Engineered Organisms and Their Ecological Impact" in *Ecology of Biological Invasions of North America and Hawaii*, Harold Mooney and James A Drake (eds), Springer-Verlag, New York

Regal, P.J., "Safe and Effective Biotechnology: Mobilizing Scientific Expertis", in *Application of Biotechnology: Environmental and Policy Issues*, John Fowle (ed.), Westview Press, Boulder, CO, AAAS Symposium #106.

□ eport of the Independent Group of Scientific and Legal Experts on Biosafet ", *Biosafety: Scientific Findings and Elements of a Protocol*; Published by Third World Network, Penang, 1996.

Ribeiro dos Santos, M. G. G., Aboutboul, H., Faria, J. B., Schenberg, A. C. G., and W. Schmidell, improvement of *Saccharomyces* for ethanol production from starch", *Yeast* 5:11-15, 1989.

Rimmington, Anthony, *Technology and Transition: A Survey of Biotechnology in Russia, Ukraine, and the Balti States*, Westport, Conn.: Quorum Books, 1992.

Rissler, J., Mellow, M., & the Union of Concerned Scientist, *Perils Amidst the Promise. Ecological risks of transgenic crops in a global market*; Union of Concerned Scientist, Cambridge, MA (USA), 1993.

Ruivenkamp, G., "The Impact of Biotechnology on International Development: Competition Between Sugar and New Sweeteners", in *New Technologies and Third World Development*, Forschungs Institut der Friedrich-Ebert-Stiftung, Germany, 1986.

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Sagoff, Mark, Ethics, Ecology, and the Environment: Integrating Science and La , Tennessee Law Review 56, 1988.

Sasson, A. and Costarini, V. (eds), *Biotechnologies in Perspective: Socio-economic implications for developing countries*, published by UNESCO, Paris, 1991.

Sasson, A., Biotechnologies in developing countries, present and futur , UNESCO, Paris, 1993.

Sasson, Albert, *Biotechnologies and Development*, Paris: UNESCO; Ede, Netherlands: Technical Centre for Agricultural and Rural Cooperation, 1988.

Schenberg, A. C. G. and S. O. P. Costa, □olecular and genetic approaches to alcohol biotechnology in Brazil', *Critical Reviews in Biotechnolog*, 6:323-355, 1987.

Schenberg, A. C. G., Vicente, E. J., and S. Astolfi Filho, \Box xpression of heterologous amylases in the yeast *Saccharomyces cerevisia* ", $Ci\Box cia\ e\ Cultura$, 45:181-191, 1993.

Schmid, Rolf D., Biotechnology in Japan: A Comprehensive Guide, Berlin and New York: Springer-Verlag, 1991.

Shiva, V., □ onocultures of the Mind - Perspectives on Biodiversity and Biotechnology", *International Affairs*, Vol. 70, Issue 2, pp. 327-339, 1994; the Royal Institute of International Affairs; Cambridge University Press, Cambridge (UK).

Souza Silva, J., □iotechnology in Brazil and Prospects for South-South Cooperation", in *Biotechnology, Revolution* and the Third World: Challenges and Policy Options, (RISNODEC), New Delhi, 1989

Stephenson, J.R. and Warnes, A., *Release of genetically modified microorganisms into the environment*, J. Chem. Tech. Biotech. 65:5-16.

Steward R., and Martinez, M., "International Aspects of Biotechnology: Implications for environmental law and policy", *Journal of Environmental La*, Vol. 1, No.2, pp 158-172, Oxford University Press (UK) 1989.

Sukopp, H. and Sukopp U., "Ecological long-term effects of cultigens becoming feral and of naturalization of non-native species", *Experientia*, 49:210-218, 1993.

Svarstad, H., *Biotechnology and the International Division of Labour*, University of Oslo; Institute for Sociology; Oslo (1988).

Tewolde B. G. Egziabher and Zemede Asfaw, *Socio-Economic considerations including issues of liability and compensation;* Paper presented at the workshop on Transboundary Movement of Living Modifi ed Organisms Resulting from Modern Biotechnology, 19-20 July 1996, Aarhus, Denmark, organized by the International Academy of the Environment (Chemin de Conches 4 CH-1231, Geneva, Switzerland).

Tiedje J.M. et al., "The Planned Introduction of Genetically Modified Organisms: Ecological Considerations and Recommendations", *Ecology*, 70:298-315, 1989; Duke University Press, Durham, NC (USA).

Tzotzos G. (ed), *Genetically Modified Organisms: A Guide to Biosafet*, published by CAB International, Wallingford (UK), 1995.

UK Royal Commission on Environmental Pollution, *The release of genetically modified organisms to th environment*; (Her Majesty's stationary Office, CM 720), London 1989.

UNCED: United Nations conference on environment and Development, Agenda 21, chapter 16; Rio de Janeir (1992).

UNCTAD: (United Nations Conference on Trade and Development). *Trade and Development Report 1989.* Geneva, 1989.

UNCTAD: Trade and Development Aspects and Implications of New and Emerging Technologies: The Case of Biotechnology. Document No. TD/B/C.6/154. Geneva, 1991.

UNEP: Guidelines for Country Studies on Biological Diversit; 73KB/104KB, (12/93).

UNEP: Capacity Building for Safety in Biotechnolog; 21KB/18KB, (12/95).

UNEP: Review of Draft International Technical Guidelines for Safety in Biotechnolog; 20KB/12KB, (12/95).

UNEP: The UNEP Biodiversity Programme and Implementation Strateg, 35KB/66KB, (8/95).

UNEP: Report of Exports on UNEP Guidelines for Safety in Biotechnolog; (12/95).

UNEP: International Technical Guidelines for Safety in Biotechnolog, (12/95).

UNIDO: (United Nations Industrial Development Organization), *Biotechnology and the Developing Countries Applications to the Pharmaceutical Industry and Agricultur*, Vienna, 1984.

UNIDO; An International Approach to Biotechnology Safet, Vienna, 1990.

UNIDO; "Biotechnology in a Global Economy", *Genetic Engineering and Biotechnology Monitor*, Vol.14, Issue 2, pp.97-99, Vienna (Austria), 1994.

UNIDO. "International biosafety guidelines and code of conduct for the release of genetically engineered microorganisms and plants", *Genetic Engineering and Biotechnology Monitor*, 39:1 19, Vienna, 1992.

UNIDO, Issues in the Commercialization of Biotechnolog, Vienna, 1993.

UNIDO: Report on the environmentally sound management of biotechnolog; Vienna.

Van den Doel, K. & Junne, G., "Product substitution through biotechnology: impact on the Third World"; *Trends in Biotechnolog*, 4, 88-90, (1986); published by Elsevier Trends Journal, Oxford (UK).

Vasil, Indra K., (ed.), *Biotechnology: Science, Education, and Commercialization*, Proceedings of an International Symposium; sponsored by the University of Florida Biotechnology Institute for Technology Transfer; Elsevier, New

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York, 1990.

Walgate, R., Miracle or Menace? Biotechnology and the Third World; The Panos Institute, London, (1990).

Warhust, A., The Application of Biotechnology in Developing Countries: The Case of Mineral Leaching with Particular Reference to the And an Pact Copper Project; UNIDO (IS.450), Vienna, (1984).

Webber, David J., (ed.), *Biotechnology: Assessing Social Impacts and Policy Implications* New York: Greenwood Press, 1990.

Wiegele, Thomas C., *Biotechnology and International Relations: The Political Dimensions* Gainesville: University of Florida Press, 1991.

Wiegele, Thomas C., *The Social Impacts of Biotechnology: An Annotated Bibliography of Recent Works*, Association for Politics and the Life Sciences, Northern Illinois University, Dekalb, Ill., 1986.

Williamson, M., "Environmental risks from the release of genetically modified organisms (GMOs). The need for molecular ecology." *Molecular Ecolog*, 1:38, 1992.

Wilson, W.G. & Sullivan, G.D.; "Biotechnology: Implications for Agriculture"; *Economic Impact*, 48, 43-9, (1984); published by US Information Agency, Washington DC (USA).

Witt S.C., Biotechnology: Microbes and the Environment, Center for Science Information, San Francisco, Calfinornia, 1990.

Yoxen, E., "The Social Impact of Biotechnology"; *Trends in Biotechnolog*, 4, 86-8, (1986); published by Elsevier Trends Journal, Oxford (UK).

Yoxen, Edward and Vittorio Di Martino, *Biotechnology in Future Society: Scenarios and Options for Europe*. Luxembourg: Office for Official Publications of the European Communities. Aldershot, Hants: Dartmouth, 1989.

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