



JUAN J. ARMESTO

Institute of Ecosystem Studies
65 Sharon Turnpike; Box AB
Millbrook NY 12545-0129

Telephone: (845) 677-5343 -- FAX: (845) 677-5976

E-mail: armesto@bio.puc.cl

Education:

M. Sc. Biology at Universidad de Chile, Santiago, Chile, 1977

Ph. D. in Botany and Plant Physiology, Rutgers University, 1984

Professional Positions:

Adjunct Scientists, IES

Professor, Center for Advanced Studies of Ecology and Biodiversity, Catholic University of Chile, Santiago, Chile

Professor, Universidad de Chile, Santiago, Chile

Selected Professional Honors:

1980 Fulbright Fellowship

1987 Cary Summer Fellowship, Institute of Ecosystem Studies, The New York Botanical Garden, USA

1990 Short Term Visiting Scientist, Smithsonian Institution, Washington, D. C.

1992 Science & Technology Award "Manuel Noriega Morales", in the field of Biological Sciences, OAS, Washington, USA.

1996 Co-recipient of the Mercer Award (with Dr. L.O. Hedin), Ecological Society of America, USA.

1997 J. S. Guggenheim Memorial Fellow, New York, USA.

1999 Endowed Presidential Chair in Science, Government of Chile.

Research Interests and Activities:

- Conservation of biodiversity and ecological interactions in anthropogenic landscapes, biogeochemical processes during forest succession, functions of biodiversity in forest ecosystems
- Communicating ecological science to the local community, park rangers, managers, and school teachers. Internships for graduate students in ecology, botany and zoology. This work is based at "Senda Darwin" Biological Station, Ancud, Chiloé. (www.sendadarwin.cl)

Selected Publications:

Smith-Ramírez, C. & **J.J. Armesto** (1998) Nectarivoría y polinización por aves en *Embothrium coccineum* (Proteaceae) en el bosque templado de Chiloé. *Revista Chilena de Historia Natural* 71:51-63.

Smith-Ramirez, C., **J.J. Armesto** & J. Figueroa (1998) Flowering, fruiting, and seed germination of Myrtaceae in Chilean temperate forests: ecological and phylogenetic constraints. *Plant Ecology*, 136: 119-131.

Devall, M., B. R. Parresol & **J.J. Armesto** (1998) Dendroecological analysis of a *Fitzroya cupressoides* and a *Nothofagus nitida* stand in the Cordillera Pelada, Chile. *Forest Ecology and Management* 108: 135-145.

Armesto, J.J., R. Rozzi, C. Smith-Ramírez & M. K. Arroyo (1998) Conservation targets in South American temperate forests. *Science* 279: 1271-1272.

Pérez, C., L.O. Hedin & **J.J. Armesto** (1998) Nitrogen mineralization in two unpolluted, old-growth forests of contrasting structure and biodiversity. *Ecosystems* 1:361-373

Allnutt, T.R., A.C. Newton, A. Lara, A. Premoli, **J.J. Armesto**, R. Vergara & M. Gardner (1999) Genetic variation in *Fitzroya cupressoides* (alerce), a threatened South American conifer. *Molecular Ecology* 8: 975-987. *

Díaz, I., C. Papic & **J. J. Armesto** (1999) An assessment of post-dispersal seed predation in temperate rainforest fragments in Chiloé Island, Chile. *Oikos*, 87: 228-238.

Vidiella, P. E., **J. J. Armesto** & J. R. Gutiérrez (1999) Vegetation changes and sequential flowering after rain in the southern Atacama desert. *Journal of Arid Environments* 43: 449-458.

Sala, O. E., F. S. Chapin III, **J. J. Armesto**, E. Barlow, J. Bloomfield, R. Dirzo, E. Huber-Sanwald, L. Huenneke, R. B. Jackson, A. Kinzing, R. Leemans, D. M. Lodge, H. A. Mooney, M. Oesterheld, N. LeRoy Poff, M. T. Sykes, B. H. Walker, M. Walker & D. W. Hall (2000) Global biodiversity scenarios for the year 2100. *Science* 287: 1770-1774.

Rozzi R., J. Silander Jr., **J. J. Armesto**, P. Feinsinger & F. Massardo (2000) Three levels of integrating ecology with the conservation of South American temperate forests: the initiative of Institute of Ecological Research Chiloé, Chile. *Biodiversity and Conservation* 9: 1199-1217.

Armesto, J. J., I. Díaz, C. Papic & M. F. Willson (2001) Seed rain of fleshy and dry propagates to different habitats in temperate rainforests of Chiloé, Chile. *Austral Ecology* 26: 311-320.

Armesto J. J., C. Smith-Ramírez & R. Rozzi (2001) Conservation strategies for biodiversity and indigenous people in Chilean forest ecosystems. *Journal of the Royal Society of New Zealand* 31: 865-877.

Figueroa, J. A. & **J. J. Armesto** (2001) Community-wide germination strategies in a temperate rainforest of Southern Chile: ecological and evolutionary correlates. *Australian Journal of Botany* 49: 411-425.

Armesto J.J., Rozzi & R., Caspersen, J. (2001) Temperate forests of North and South America. In: Chapin F.S., Sala, O. E., and Huber-Sannwald, E. (eds.) Global biodiversity in a changing environment. Scenarios for the 21st century. Springer, New York, pp 223-249.

Lawler, S. P., **J. J. Armesto** & P. Kareiva (2002) How Relevant To Conservation Are Studies Linking Biodiversity And Ecosystem Functioning? in A. P. Kinzig, D. Tilman and S. W. Pacala eds. "The functional consequences of Biodiversity. Empirical progress and theoretical extensions". Princeton University Press, New Jersey, pp. 294-313.

Carmona M., J. C. Aravena, C. Pérez & **J. J. Armesto** (2002) Coarse woody debris biomass in successional and primary temperate forests in Chiloé Island, Chile. *Forest Ecology and Management* 164: 265-275.

Aravena. J. C., C. A. Pérez, M. Carmona & **J. J. Armesto** (2002) Changes in tree species richness, stand structure and soil properties in a successional chronosequence of forest fragments in northern Chiloé Island, Chile. *Revista Chilena de Historia Natural* 75:339-360.

Guevara, R., **Armesto, J.J.**, & Carú, M. (2002). Genetic diversity of *Nostoc* microsymbionts from *Gunnera tinctoria* revealed by PCR-STRR fingerprinting. *Microbial Ecology* 44: 127-136.

Smith-Ramírez, C. & **J. J. Armesto** (2002) Foraging behaviour of bird pollinators on *Embothrium coccineum* (Proteaceae) trees in forest fragments and pastures in southern Chile. *Austral Ecology* 28: 53-60.

DeSanto T. L., M. F. Willson, K. E. Sieving & **J. J. Armesto** (2002) Nesting biology of tapaculos (Family Rhinocryptidae) in fragmented south-temperate rainforests of Chile. *The Condor* 104: 482-495.

Vann D.R., A. Joshi, C. Pérez, A.H. Johnson, J. Frizano, D.J. Zarin & **J.J. Armesto** (2002) Distribution and cycling of C, N, Ca, Mg, K and P in three pristine, old-growth forests in the Cordillera de Piuchué, Chiloé. *Biogeochemistry* 60: 25-47.

Battles, J. J., **J.J. Armesto**, D.R. Vann, D.J. Zarin, J. C. Aravena, C. Pérez & A. H. Johnson (2002) Vegetation composition, structure, and biomass of two unpolluted watersheds in the Cordillera de Piuchué, Chiloé Island, Chile. *Plant Ecology* 158: 5–19, 2002.

Pérez, C. A., **J. J. Armesto**, C. Torrealba and M. R. Carmona (2003) Litterfall dynamics and nitrogen-use efficiency in two evergreen temperate rain forests of southern Chile. *Austral Ecology*, in press.