

Curriculum vitae

ARNOLD PARCO

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EDUCATION

- May, 1988 Bachelor of Science, Major in Cell Biology
University of the Philippines at Los Banos, Laguna, Philippines
- May, 2000 Master of Science, Major in Plant and Soil Science
Oklahoma State University, Stillwater, OK, USA
Thesis: Inheritance of Allozyme Markers in Switchgrass (*Panicum virgatum* L.)
- May, 2007 Doctor of Philosophy, Major in Plant Science
Oklahoma State University, Stillwater, OK, USA
Dissertation: Bermudagrass Tissue Culture and Genetic Transformation through
Agrobacterium and Particle Bombardment Methods

EMPLOYMENT HISTORY

- 1987-1990 Student Assistant, Entomology Department¹
Graduate Assistant, Department of Plant Physiology²
The International Rice Research Institute, Laguna, Philippines
Job Description: ¹Assisted in isozyme characterization of rice insect pest populations.
 ²Helped in greenhouse and field experiments on the effects of UV-B
 radiation in rice plants.
- 1991-1997 Research Assistant, Department of Plant Breeding, Genetics, & Biochemistry
The International Rice Research Institute, Laguna, Philippines
Job Description: Participated in projects involving phylogenetic analyses of rice
 germplasm collection using molecular markers, fine-mapping of rice
 genetic linkage maps, and DNA marker-assisted selection of blast
 resistance genes.
- 1998-2006 Graduate Assistant, Department of Plant & Soil Sciences
Oklahoma State University, Stillwater, OK, USA
Job Description: Studied isozyme marker segregation to determine mode of polyploid
 inheritance in switchgrass. Conducted tissue culture and genetic
 transformation experiments in bermudagrass. Assisted in greenhouse
 and field works associated with turf and forage breeding programs.

RELEVANT SKILLS & CERTIFICATIONS

DNA cloning and library construction

Plant genome mapping

Utilization of DNA markers in phylogenetic studies and plant breeding

Grass tissue culture and genetic transformation

Flow cytometry to determine plant nuclear DNA content

PCR Methods and Applications, Special Course, May 19-21, 1999, Department of Biochemistry & Molecular Biology, Oklahoma State University

Methods in Protein Purification, Special Course, July 31-August 3, 2000, Department of Biochemistry & Molecular Biology, Oklahoma State University

Radiation Safety Course, September 2002, Radiation Safety Office, Oklahoma State University

PROFESSIONAL MEMBERSHIP

Crop Science Society of America

PUBLICATIONS

Huang, N, S.R. McCouch, T. Mew, A. Parco, and E. Guiderdoni. 1994. Development of an RFLP map from a doubled haploid population in rice. *Rice Genetics Newsletter* 11:134-137.

Mew, T.V., A. Parco, S. Hittalmani, T. Inukai, R.J. Nelson, R.S. Zeigler, and N. Huang. 1994. Fine-mapping of major genes for blast resistance in rice. *Rice Genetics Newsletter* 11:126-128.

Parco, A., G. Magpantay, G. Second, R. Rodrigues, and N. Huang. 1994. Restriction fragment length polymorphism and linkage analysis of rice alpha-amylase gene family. *Rice Genetics Newsletter* 11:137-140.

Resurreccion, A.P., C.P. Villareal, A.Parco, G. Second, and B.O. Juliano. 1994. Classification of cultivated rices into indica and japonica types by the isozyme, RFLP, and two milled-rice methods. *Theoretical and Applied Genetics* 89:14-18.

Khush, G.S., K. Singh, T. Ishii, A. Parco, N. Huang, D.S. Brar, and D.S. Multani. 1996. Centromere mapping and orientation of the cytological, classical and molecular linkage maps of rice. *Rice Genetics, III*. IRRI, Manila, Philippines. Proceedings of the Third International Rice Genetics Symposium, G.S. Khush (ed), 1996, pp. 57-75.

Singh, K., T. Ishii, A. Parco, N. Huang, D.S. Brar, and G. Khush. 1996. Centromere mapping and orientation of the molecular linkage map of rice (*Oryza sativa* L.). Proceedings of the National Academy of Sciences USA 93:6163-6168.

- Huang, N., A. Parco, T. Mew, G. Magpantay, S.R. McCouch, E. Guiderdoni, J. Xu, P. Subudhi, E.R. Angeles, G.S. Khush, and J.C. Xu. 1997. RFLP mapping of isozymes, RAPD, and QTLs for grain shape, brown planthopper resistance in a doubled haploid rice population. *Molecular Breeding* 3:105-113.
- Maheshwaran, M., P.K. Subudhi, S. Nandi, J.C. Xu, A. Parco, D.C. Yang, and N. Huang. 1997. Polymorphism, distribution, and segregation of AFLP markers in a doubled haploid rice population. *Theoretical and Applied Genetics* 94:39-45.
- Yang, D., A. Parco, S. Nandi, P. Subudhi, Y. Zhu, G. Wang, and N. Huang. 1997. Construction of a bacterial artificial chromosome (BAC) library and identification of overlapping BAC clones with chromosome 4-specific RFLP markers in rice. *Theoretical and Applied Genetics* 95:1147-1154.
- Harushima, Y., M. Yano, A. Shomura, M. Sato, T. Shimano, Y. Kuboki, T. Yamamoto, S.Y. Lin, B.A., Antonio, A. Parco, H. Kajiya, N. Huang, K. Yamamoto, Y. Nagamura, N. Kurata, G.S. Khush, and T. Sasaki. 1998. A high-density rice genetic linkage map with 2275 markers using a single F₂ population. *Genetics* 148: 479-494.
- Hittalmani, S., A. Parco, T.V. Mew, R.S. Zeigler, and N. Huang. 2000. Fine mapping and DNA marker-assisted pyramiding of the three major genes for blast resistance in rice. *Theoretical and Applied Genetics* 100:1121-1128.
- Parco, A. and C.M. Taliaferro. 2000. Inheritance of allozyme markers in switchgrass. *Crop Science Society of America, 2000 Annual Meetings.*
- Parco, A. and C.M. Taliaferro. 2004. Bermudagrass Regeneration from Solid Cultures of Mature Caryopsis Explants. *Crop Science Society of America, 2004 Annual Meetings.*