

CURRICULUM VITAE

BIOGRAPHICAL SKETCH Martha Lucia Orozco-Cárdenas

HONORS AND AWARDS.

2004. Merit Advancement to Academic Coordinator II, Step 6. University of California – Riverside. June 14, 2004

1999-2000. Helen and Loyal H. Davis, Graduate Student Award. Washington State University, Pullman, WA-USA.

1997. UNESCO, Short Fellowship Program. Visiting Scientist. Boyce Thompson Institute for Plant research Inc. Cornell University, Ithaca, N.Y.

1996. USDA, Cochran Fellowship Program. Visiting Scientist. Boyce Thompson Institute for Plant research Inc. Cornell University, Ithaca, N.Y.

1995. EU-European Union, Fellowship. Visiting Scientist. Laboratory of Tropical Crop Improvement, Catholic University of Leuven, Belgium.

1995. COLCIENCIAS. Beneficiary of the Research Incentive Program. Colombia. Santa fé de Bogotá, Colombia – South America.

1994. UNESCO, Short Fellowship Program. Visiting Scientist. International Centre for Genetic Engineering and Biotechnology – ICGBE, New Delhi, India.

1993. OEA, Fellowship Program. USA1993. COLCIENCIAS. Beneficiary of the National Return Program of Colombian Researchers, sponsored by the Instituto Colombiano para el Desarrollo de la Ciencia y la Tecnología – Santa fé de Bogotá, Colombia – South America.

1981. Meritorious thesis award, Universidad Nacional de Colombia, Palmira-Valle, Colombia – South America

PUBLICATIONS.

1. Orozco-Cárdenas, M.L., Ryan, C.A. (2003). Polygalcturonase β -subunit antisense gene expression in tomato plants leads to a progressive enhanced wound response and necrosis in leaves and abscission of developing flowers. *Plant Physiol.* **133**, 693-701

2. Orozco-Cárdenas, M.L., Ryan, C.A. (2002). Nitric oxide modulates wound signaling in tomato plants. *Plant Physiol.* **130**, 487-493.

3. C.R. Pineda, N.Toro Perea, J. Narvaez, **M.L. Orozco**, A. Laignelet, and H. Cardenas. (2002). Genetic transformation by *Agrobacterium tumefaciens* of embryogenic cell suspension of plantain "Dominico Harton" (Musa AAB Simmonds). *InfoMusa.* **11**, (2), 9-13

4. Orozco-Cárdenas, M.L., Narváez-Vásquez, J., Ryan, C.A. (2001). Hydrogen peroxide acts as a second messenger for the induction of defense genes in tomato plants in response to wounding, systemin, and methyl Jasmonate. *Plant Cell* **13**, 1-14.

5. Orozco-Cárdenas, M.L., Ryan, C.A. (1999). Hydrogen Peroxide is generated

systemically in plant leaves by wounding and systemin via the octadecanoid pathway. Proc. Natl. Acad. Sci. USA **96**, 6553-6557.

6. Bergey, D.R., **Orozco-Cárdenas, M.L.**, De Moura, D and Ryan, C.A. (1999). A wound- and systemin-inducible polygalacturonase in tomato leaves. Proc. Natl. Acad. Sci. USA **96**, 1756-1760.

7. Narváez-Vásquez, J., **Orozco-Cárdenas, M. L.**, Ryan, C.A. (1996). Expression of proteinase inhibitor genes in plants. In: Proc. Int. Workshop on Transgenic Tech. in plants, Bogota. Eds. O. Acosta and K.D. Webster, Universidad Nacional de Colombia and Scottish Crop Research Institute. pp. 36-42.

8. Pineda, C.R. and **Orozco-Cárdenas, M.L.** (1996). *Agrobacterium tumefaciens* como el mejor ingeniero genético de la naturaleza. Innovación y Ciencia. Santa fé de Bogotá, Colombia. ACAC, **5**, 26-32.

9. Narváez-Vásquez, J., Pearce, G., **Orozco-Cárdenas, M.L.**, Franceschi, V.R., Ryan, C.A. (1995). Autoradiographic and biochemical evidence for the systemic translocation of systemin in tomato plants. Planta **195**, 593-600.

10. McGurl, B., **Orozco-Cárdenas, M.L.**, Pearce, G., Ryan, C.A. (1994). Overexpression of the prosystemin gene in transgenic tomato plants generates a systemic signal that constitutively induces proteinase inhibitor synthesis. Proc. Natl. Acad. Sci. USA. **91**, 9799-9802.

11. Narváez-Vásquez, J., **Orozco-Cárdenas, M.L.**, Ryan, C.A. (1994). A Sulfhydryl Reagent Modulates Systemic Signaling for Wound-Induced and Systemin-Induced Proteinase Inhibitor Synthesis. Plant Physiol. **105**, 725-730.

12. **Orozco-Cárdenas, M.L.**, McGurl, B., Ryan, C.A (1993). Expression of an antisense prosystemin gene in tomato plants reduces resistance toward *Manduca sexta* larvae. Proc. Natl. Acad. Sci. USA **90**, 8273-8276.

13. Ryan, C.A, Pearce, G., Johnson, S., McGurl, B., **Orozco-Cárdenas, M.L.**, Farmer, E. E. and Ryan, C.A. (1992). Systemin, a polypeptide signal for proteinase inhibitor gene expression in plants. In: Mechanisms of plant defense responses. Proc. of the 2nd conference of the European Foundation for Plant pathology, Strasbourg-France, August 24-27, 1992. Ed.B. Fritig and M. Legrand. Kluwer academic publishers, pp. 196-201.

14. McGurl, B., Pearce, G. **Orozco-Cárdenas, M.L.**, and Ryan, C.A. (1992). Structure, expression, and antisense inhibition of the systemin precursor gene. Science, **225**, 1570-1573.

15. Narváez-Vásquez, J., **Orozco-Cárdenas, M.L.**, and Ryan, C.A. (1992). Differential expression of a chimeric CaMV-tomato proteinase inhibitor I gene in transformed nighshade, tobacco and alfalfa plants. Plant Mol. Biol. **20**, 1149-1157.