

CURRICULUM VITAE

FRANCISCO JOSE MORALES G.

Date of Birth: February 20, 1948

Place of Birth: Cali (Valle), Colombia

Current Address: **Virology Research Unit**
Centro Internacional de Agricultura Tropical
Apartado Aéreo 6713
Cali, Colombia
Tel.: 57-2-4450 000
Fax: 57-2-4450 073
E.Mail: f.morales@cgiar.org

Civil Status: Married to Pamela Kay Anderson (U.S. citizen)

Education

1974-1978 **Ph.D.** University of Florida
Plant Pathology Department
Major: **Plant Pathology**
Specialization: **Plant Virology**

1972-1974 **M.Sc.** Cornell University
Plant Pathology Department
Major Area : **Plant Pathology**
Minor Area : **International Agricultural
Development.**

1966-1971 **B.Sc.** Universidad Nacional de Colombia
Facultad de Agronomía - Bogotá
Major: **Agronomy**
Minor: **Agricultural Engineering**

Professional Experience

2002-present	Coordinator Global IPM Whitefly Project CIAT, Cali, Colombia
1999-2002	Germplasm Health Specialist International Center for Plant Genetic Resources (IPGRI) Cali, Colombia
1988-present	Head Virology Research Unit Centro Internacional de Agricultura Tropical (CIAT) Cali, Colombia
1980-1988	Senior Staff -Virologist Centro Internacional de Agricultura Tropical (CIAT) Cali, Colombia
1978-1980	Post-doctoral Fellow Centro Internacional de Agricultura Tropical (CIAT) Cali, Colombia

Areas of expertise

1. International Agricultural Development
2. Plant Germplasm Health
3. Integrated Pest Management (IPM)
4. Plant Virology
5. Genetic Control of Plant Pathogens
6. Safe International Movement of Plant Germplasm
7. Agricultural Research & Development

Administrative Responsibilities

1. Coordinator Global Whitefly IPM Project
2. Head Virology Research Unit
3. Chairman Laboratory Services Committee
4. International Projects Manager

International Activities

Consultant and/or Project Manager to the National Programs of :

Middle America: Panama, Costa Rica, Nicaragua, El Salvador, Honduras, Guatemala, Cuba, Dominican Republic, Haiti, Jamaica, and Mexico.

South America: Argentina, Bolivia, Brazil, Chile, Ecuador, Perú, Uruguay and Venezuela.

Africa: Benín, Burundi, Ethiopia, Ghana, Kenya, Rwanda, Tanzania, Togo and Uganda.

Asia and Middle East: : China, Taiwan, Iran, Israel and Turkey.

Special Projects

IVP/CIAT/BMZ: "**Distribución and Importance of the Viruses that infect *Phaseolus vulgaris* and other legumes in Africa**". Institut fur Viruskrankheiten der Pflanzen. Braunschweig, W. Germany-CIAT, Cali, Colombia.

IFVA/CIAT: "**Characterization of Bean Yellow Mosaic Virus Strains in North Africa, West Asia and China**". Instituto di Fitovirolgia Applicata, Torino, Italy-CIAT, Cali, Colombia.

IFVA/CIAT: "**Characterization of Cucumoviruses Affecting Bean Production Worldwide**". Instituto di Fitovirolgia Applicata, Torino, Italy-CIAT, Cali, Colombia.

CDR-AID: "**Identification and Characterization of Whitefly Biotypes**". Tel-Aviv University, Israel-CIAT, Cali, Colombia.

USAID-PSTC: "Implementation of cDNA Technology for the Characterization, Epidemiology and Control of Bean Golden Mosaic Virus". University of Wisconsin, Madison and CIAT, Cali, Colombia.

USAID-PSTC: "Production of Monoclonal Antibodies for the Serological Differentiation of Bean Golden Mosaic Virus Isolates". University of Florida, Gainesville, and CIAT, Cali, Colombia.

Title XII/CRSP/U WISC/ CIAT: "Molecular Strategies for the Control of Bean Golden Mosaic Virus". Inst. for Molecular Virology and Dept. of Plant Pathology,

COLCIENCIAS. "Identification and Control of the Viruses that affect Passionfruit (*Passiflora edulis*) production in Colombia. CIAT, CORPOICA y BIOTECOL.

DANIDA. "Sustainable and Integrated Management of Whiteflies as Vectors of Viruses in legume and mixed cropping systems in the Lowlands of Central America, Mexico and the Caribbean Region". CIAT-National Programs in Central America, Mexico and the Caribbean Region.

ODA(DFID)-UK. "Characterization and Control of Rice Stripe Necrosis in the Americas. CIAT, Rothamstead, FEDEARROZ, CORPOICA.

FEDEPALMA. "Investigation on the possible viral etiology of diseases affecting African Oil Palm in Colombia". CIAT-CENIPALMA

COLCIENCIAS. "Diagnosis of Endemic and Exotic Viral Diseases of Sugarcane in Colombia". CENICAÑA, ASOCAÑA, CIAT

FONTAGRO. "Maize: Genetic Resistance to Diseases and Pests". CIMMYT, CIAT, CORPOICA, NARIs in South America.

DFID. "Sustainable Management of Whiteflies as Pests and Vectors of viruses in the Tropics" CIAT, IITA, CIP, AVRDC.

Languages

Spanish	Native
English	Fluent
Portuguese	Fluent
French	Colloquial
German	Elementary
Italian	Elementary

Scientific Societies

- American Phytopathological Society, U.S. and Caribbean Divisions.
- Sociedad Latinoamericana de Fitopatología
- Sociedad Colombiana de Fitopatología.

International Working Groups

- Plant Virus Epidemiology Committee.
- International Working Group on Legume Viruses.
- International Potyvirus Study Group
- International Geminivirus Group
- International Working Group on Plant Viruses with Fungal Vectors

Professional Awards

1996. Outstanding Scientific Publication
 1998. Outstanding Principal Staff Award, CIAT.
 2000. Outstanding Scientific publication

Publications

- Morales, F.J. and F.W. Zettler.** 1977. Characterization and electron microscopy of a potyvirus infecting *Commelina diffusa*. *Phytopathology* 67: 839-843.
- Morales, F.J. and F.W. Zettler.** 1977. Aphid transmission characteristics of dasheen mosaic virus. *Fitopatologia Colombiana* 6: 134. (Abstr.).
- Morales, F.J. and F.W. Zettler.** 1977. Effect of a potyvirus on the aphid transmissibility of cucumber mosaic virus from mixed infections. *Fitopatologia Colombiana* 6: 141 (Abstr.).
- Morales, F.J.** 1978. Electrophoretic properties of the viral capsid protein in relation to the dependent transmission phenomenon of potyviruses. University of Florida, Gainesville. 89 p.
- Morales, F.J.** 1979. Purification and serology of bean common mosaic virus. *Turrialba* 29: 320-323.
- Morales, F.J.** 1979. Aislamiento de cepas del virus del mosaico amarillo del fríjol. *Fitopatología Colombiana* 8: 3-7.

- Morales, F.J.** 1980. El mosaico común del frijol: metodología de investigación y técnicas de control. CIAT Serie 05SB-1. 22 p.
- Tamayo, P.J., L.F. Gómez and F.J. **Morales.** 1980. Reacción de algunas variedades de *Phaseolus vulgaris* L. aislamientos del virus del mosaico de la soya. Fitopatología Colombiana 9: 7-79.
- Temple, S.R. and F.J. **Morales.** 1981. Conversión del cultivares de frijol (*P. vulgaris*) susceptible al BCMV a cultivares resistentes mediante la incorporación de la resistencia hipersensible. In Proc. XXVII reunión Anual del PCCMCA, Santo Domingo, Rep. Dominicana. 7 p.
- Morales, F.J.** 1982. Enfermedades causadas por virus. En: Problemas de campo en los cultivos de frijol en América Latina. 2a. Ed. Cali, Colombia. Centro Internacional de Agricultura Tropical. p. 2-23.
- Castaño, M., J. Tamayo and F.J. **Morales.** 1982 'Monroe': a local lesion *Phaseolus vulgaris* L. assay variety for bean common and soybean mosaic viruses. Turrialba 32: 71-79.
- Morales, F.J.** 1983. El mosaico común del frijol: metodología de investigación y técnicas de control. Edición revisada. Centro Internacional del Agricultura Tropical, Cali, Colombia. 26 p.
- Morales, F.J.** and A.I. Niessen. 1983. Association of spiral filamentous virus-like particles with rice hoja blanca. Phytopathology 73: 971-974.
- Castaño, M. and F.J. **Morales.** 1983. Seed transmission of soybean mosaic virus in *Phaseolus vulgaris* L. Fitopatología Brasileira 8: 103-107.
- Morales, F.J.** and M. Castaño. 1985. Effect of a Colombian isolate of bean southern mosaic virus on selected yield components of *Phaseolus vulgaris*. Plant Disease 69: 803-804.
- Cáceres, O., S.R. and F.J. **Morales.** 1985. Incorporación de genes de resistencia y recesiva a cepas del virus del mosaico común en dos variedades comerciales de frijol (*Phaseolus vulgaris* L.). Acta Agronómica 35(4): 7-20.
- Morales, F.J.** 1986. Virus diseases of beans in the tropics. In Review of Tropical Plant Pathology. 3: 405-419.
- Morales, F.J.** 1986. Transmisión de virus de plantas por insectos. Miscelánea. Soc. Col. Entomol. 2: 3-22.
- Morales, F.J.,** and A.I. Niessen. 1986. Rice hoja blanca virus. C.M.I. Descriptions of Plant Viruses. No.299. 4 p.

- Morales**, F.J. and M. Castaño. 1987. Seed transmission characteristics of selected bean common mosaic virus strains in differential bean varieties. *Plant Disease* 71: 51-53.
- Davis, J.H.C., F.J. **Morales** and M. Castaño. 1987. Resistance to black root. *Annual Report Bean Improvement Cooperative* 30: 14-15.
- Falk, B.W., F.J. **Morales**, J.H. Tsai and A.I. Niessen. 1987. Serological and biochemical properties of the capsid and major noncapsid proteins of maize stripe virus, rice hoja blanca virus, and echinocloa hoja blanca viruses. *Phytopathology* 77: 196-201.
- Morales**, F.J. and L. Bos. 1988. Bean common mosaic virus. *AAB Descriptions of Plant Viruses*. No. 337. 6 p.
- Morales**, F.J. and A.I. Niessen. 1988. Comparative responses of selected *Phaseolus vulgaris* germplasm inoculated artificially and naturally with bean golden mosaic virus. *Plant Disease* 72: 1020-1023.
- Singh, S.P., C. Cajiao, J.A. Gutierrez, J. Garcia, M.P. Corrales and F.J. **Morales**. 1988. Selection for seed yield in inter-gene pool crosses of common bean. *Crop Science* 29: 1126-1131.
- Morales**, F.J. 1989. Bean Common Mosaic: screening for the disease resistance. CIAT. Cali, Colombia. 28 p.
- Morales**, F.J. and G.E. Galvez. 1989. Additional viruses. In *Bean Production Problems in the Tropics*. 2nd ed. CIAT, Cali, Colombia. p. 407-412.
- Morales**, F.J. and R. Gamez. 1989. Beetle-transmitted viruses. In *Bean Production Problems in the Tropics*. 2nd ed. CIAT, Cali, Colombia. p. 363-378.
- Galvez, G.E. and F.J. **Morales**. 1989. Aphid-transmitted viruses. In *Bean Production Problems in the Tropics*. 2nd ed. CIAT, Cali, Colombia. p. 33-362.
- Galvez, G.E. and F.J. **Morales**. 1989. Whitefly-transmitted viruses. In *Bean Production Problems in the Tropics*. 2nd ed. CIAT, Cali, Colombia. p. 379-406.
- Schwartz, H.F. and F.J. **Morales**. 1989. Seed Pathology. In *Bean Production Problems in the Tropics*. 2nd ed. CIAT, Cali, Colombia. p. 413-432.
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- Morales**, F.J., A. Niessen, M. Castaño and L.A. Calvert. 1990. Detection of a strain of soybean mosaic virus affecting tropical forage species of *Centrosema*. *Plant Disease* 74: 648-651.

- Morales**, F.J., A. Niessen, B.C. Ramirez and M. Castaño. 1990. Isolation and partial characterization of a geminivirus causing bean dwarf mosaic. *Phytopathology* 80: 96-101.
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- Morales**, F.J., L.A. Calvert, M. Castaño and J.A. Arroyave. 1991. Caracterización del virus del rayado necrótico o "Macana" del fique (*Furcraea* spp.) como un nuevo miembro del grupo de los dianthovirus. *Fitopatología Colombiana*. Vol. 15 No.2
- Morales**, F.J., M. Castaño, A.C. Velasco, J. Arroyave and F.W. Zettler. 1991. Natural infection of tropical forage legume species of *Arachis* and *Stylosanthes* by potyviruses related to peanut mottle virus. *Plant. Dis.* 75: 1090-1093.
- Morales**, F.J., and S.P. Singh. 1991. Genetics of resistance to bean golden mosaic virus in *Phaseolus vulgaris* L. *Euphytica* 52: 113-117.
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- Wool, D., D. Gerling, A. Bellotti, F. **Morales** and B. Nolt. 1991. Spatial and temporal genetic variation in populations of the whitefly *Bemisia tabaci* (Genn.) in Israel and Colombia: an interim report. *Insect Sci. Applic.* Vol. 12, No. 1/2/3, p. 225-230.
- Morales**, F.J. and M. Castaño. 1992. Increased disease severity induced by some comoviruses in bean genotypes possessing monogenic dominant resistance to bean common mosaic potyvirus. *Plant Dis.* 76: 570-573.
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- Wool D., D. Gerling, A.C. Bellotti and F.J. **Morales**. 1993. Esterase electrophoretic variation in *Bemisia tabaci* (Genn.) (Hom.,Aleyrodidae) among host plants and localities in Israel. *J. Appl. Ent.* 115: 185-196.
- Morales**, F.J. 1994. Viral Diseases. Chapter 11. In *Diseases of Tropical Pastures Plants*, CABI, Wallingford, UK..
- Morales**, F.J. 1994. Bean Golden Mosaic: Research Advances. CIAT, Cali, Colombia. 193 p.
- Morales**, F.J., M. Castaño, A.C. Velasco and J. Arroyave. 1994. Detection of a potyvirus related to guineagrass mosaic virus infecting *Brachiaria* spp. in South America. *Plant Disease* 78: 425-428.
- Anderson, P.K. and F.J. **Morales**. 1994. The emergence of new plant diseases: The case of insect-transmitted plant viruses. *Ann. N.Y. Acad. Sci.* 70: 181-194.
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- Castaño, M., G.E. Galvez, J.A. Arroyave, A.C. Velasco y F.**Morales**. 1994. Aislamiento de una cepa Colombiana del virus del mosaico del banano. *Fitopatología Colombiana*. Vol. 18 No.2. 130-134.
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- Morales**, F.J., J.A. Arroyave, A.C. Velasco and M. Castaño. 1995. Caracterización parcial del virus del "entorchamiento" o "necrosis rayada" del arroz en Colombia. *Fitopatología Colombiana*. Vol. 19 No. 1. 48-54.
- Morales**, F.J., M. Castaño, J.A. Arroyave and M.D. Ospina. 1995. A sobemovirus hindering the utilization of *Calopogonium mucunoides* as a forage legume in the lowland tropics. *Plant Disease* Vol. 79: 1220-1224.

- Cancino, M., A.M. Abouzid, F.J. **Morales**, D.E. Purcifull, J.E. Polston and E. Hiebert. 1995. Generation and characterization of three monoclonal antibodies useful in detecting and distinguishing bean golden mosaic virus isolates. *Phytopathology* Vol. 85: 484-490.
- Kelemu, S., S. Lopointe and F. **Morales**. 1995. Enfermedades y plagas de especies de *Arachis* silvestre. pp. 102-109. In *Biología y Agronomía de Especies Forrajeras de Arachis*. P.C. Kerridge (ed.). CIAT Publ. No. 245. Cali, Colombia.
- White, P. Scott, F.M. **Morales** and Marilyn J. Roossinck. 1995. Interspecific reassortment of genomic segments in the evolution of cucumoviruses. *Virology* 207, 334-337.
- Morales**, F.J. 1996. Enfermedades virales de leguminosas y gramíneas forrajeras promisorias en Colombia. *Fitopatología Colombiana* 20(1): 26-28, 30.
- Morales**, F.J., M.D. Ospina, M. Castaño and L.A. Calvert. 1996. Sequence analysis of the genomic RNA 3'-terminal region of a potyvirus from *Brachiaria* spp. related to guineagrass mosaic virus. *J. Phytopathology* 144: 485-490.
- Benscher, D., S.S. Pappu, C.L. Niblett, F. Varón de Agudelo, F. **Morales**, E. Hodson, E. Alvarez, O. Acosta and R.F. Lee. 1996. A Strain of Soybean Mosaic Virus Infecting *Passiflora* spp. in Colombia. *Plant Disease*. Vol. 80: 258-262.
- Morales**, F.J. and S.P. Singh. 1997. Inheritance of the mosaic and necroses reactions induced by bean severe mosaic comoviruses in *Phaseolus vulgaris* L. *Euphytica* 93: 223-226.
- Morales**, F.J. 1998. Present status of controlling bean common mosaic virus. p 524-533. In A. Hadidi, R.K. Khetarpal and H. Koganezawa (eds.). *Plant virus disease control*. APS Press, St. Paul, Minnesota.
- Singh, S.P., C. Cardona, F.J. **Morales**, M.A. Pastor-Corrales and O. Voysest. 1998. Gamete selection for upright Carioca bean with resistance to five diseases and a leafhopper. *Crop Sci.* 38:666-672.
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- Morales**, F.J., Araya, C.M., Hernandez, J.C., Arroyave, J.A., Cuervo, M., Velasco, A.C., and Castaño, M. 1999. Etiología del "amachamiento" del frijol común en Costa Rica. *Manejo Integrado de Plagas* 52:42-48.
- Sedano, R., Muñoz, C., and **Morales**, F.J. 1999. Caracterización molecular de una cepa del virus del mosaico de la caña de azúcar aislada de maíz (*Zea mays* L.) en el Valle del Cauca. *Fitopatología Colombiana* 22:102-105.

- Velasco, A.C., Valencia, A.Z., and **Morales, J.J.** 1999. Producción de anticuerpos monoclonales contra los cucumovirus del mosaico del pepino y del raquitismo del maní. *Fitopatología Coombiana* 22:98-101.
- Morales, F.J.**, Arroyave, J.A., Castillo, J., De León, C. 1999. Cytopathology of maize chlorotic mottle in *Zea mays* L. *Maydica* 44:231-235.
- Morales, F.J., Ward, E., Castaño, M., Arroyave, J.A., Lozano, I., and Adams, M.J. 1999. Emergence and partial characterization of rice stripe necrosis virus and its fungus vector in South America. *European Journal of Plant Pathology* 105:643-650.
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- Morales, F.J.**, and **P.G.** Jones. 2004. The ecology and epidemiology of whitefly-transmitted viruses in Latin America. *Virus Research* 100: 57-65.
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