

Diego F. Quito Avila

Associate Professor

<https://scholar.google.com/citations?user=epPElWoAAAAJ&hl=en>

EDUCATION

Ph.D. Plant Pathology, 2011, Oregon State University, Corvallis, OR, USA

Bs. Agricultural Engineering, 2007, Escuela Superior Politecnica del Litoral. ESPOL, Guayaquil, Ecuador

SERVICE ON THIS FACULTY (8 years)

2016-present, Associate Professor

OTHER RELATED EXPERIENCE

02/2012 – 02/2016, Researcher, Centro de Investigaciones Biotecnológicas del Ecuador, CIBE, Guayaquil, Ecuador

CONSULTING AND PATENTS

n/a

STATE IN WHICH REGISTERED

n/a

PUBLICATIONS LAST FIVE YEARS

1. Cornejo-Franco J.F., Ruiz-Barzola O., **Quito-Avila D.F. (2023)**. Investigating the potential antagonistic effect of babaco mosaic virus against papaya ringspot virus in *Carica papaya*. *Phytofrontiers*. *In press*.
2. Cornejo-Franco J.F., Alvarez-Quinto R., Mollov, D., **Quito-Avila D.F. (2023)**. Identification and genetic characterization of a new totivirus from *Bursera graveolens* in western Ecuador. *Arch. Virol.* *In press*.
3. **Quito-Avila D.F.**, Reyes-Proaño EG, Cañada-Bautista MG, Cornejo-Franco JF, Alvarez-Quinto RA, Moreira L, Grinstead S, Mollov D, Karasev AV. **(2023)**. Papaya 'sticky' disease caused by virus 'couples': a challenge for disease detection and management. *Plant Dis.* doi: 10.1094/PDIS-11-22-2565-FE. Epub ahead of print. PMID: 36572970.
4. Espinoza-Lozano, L. Sumba, M., Calero, A., Jimenez, M.I. and **Quito-Avila, D. 2022**. First report of *Neoscytalidium dimidiatum* causing stem canker on yellow dragon fruit (*Hylocereus megalanthus*) in Ecuador. *Plant Dis.* <https://doi.org/10.1094/PDIS-06-22-1403-PDN>

5. Cabrera Mederos, D.; Debat, H.; Torres, C.; Portal, O.; Jaramillo Zapata, M.; Trucco, V.; Flores, C.; Ortiz, C.; Badaracco, A.; Acuña, L.; Nome, C.; **Quito-Avila, D. F.**; Bejerman, N.; Castellanos Collazo, O.; Sánchez-Rodríguez, A.; Giolitti, F. **2022**. An Unwanted Association: The Threat to Papaya Crops by a Novel Potexvirus in Northwest Argentina. *Viruses*, *14*, 2297.
<https://doi.org/10.3390/v14102297>
6. **Quito-Avila, D.F.**, Reyes-Proaño, E. G., Mendoza, A., Margaria, P., Menzel, W., Bera, S., Simon, A. **2022**. Two new umbravirus-like associated RNAs (ulaRNAs) discovered in maize and johnsongrass from Ecuador. *Arch. Virol.* [10.1007/s00705-022-05525-4](https://doi.org/10.1007/s00705-022-05525-4)
7. Reyes-Proaño, E., Alvarez-Quinto, R., Cornejo-Franco, J.F., Mollov, D. **Quito-Avila, D.F. 2022**. Genome characterization and pathogenicity of two new *Hyptis pectinata* viruses transmitted by distinct insect vectors. *Phytopathology*. [10.1094/PHYTO-04-22-0130-R](https://doi.org/10.1094/PHYTO-04-22-0130-R)
8. Mosquera-Yuqui, F.; Flores, F.J.; Moncayo, E.A.; Garzón-Proaño, B.A.; Méndez, M.A.; Guevara, F.E.; **Quito-Avila, D.F.**; Viera, W.; Cornejo-Franco, J.F.; Izquierdo, A.R.; Noceda, C. **2022**. Phylodynamics and Coat Protein Analysis of Babaco Mosaic Virus in Ecuador. *Plants*. *11*, 1646.
doi.org/10.3390/plants11131646
9. Cañada-Bautista, M. G., Reyes-Proaño, E. G., Cornejo-Franco, J.F. Alvarez-Quinto, R.A., Mollov, D. **Quito-Avila D.F. 2022**. Characterization of a New Potyvirus Infecting *Thevetia ahouai* in Ecuador. *Arch. Virol.* doi: [10.1007/s00705-022-05450-6](https://doi.org/10.1007/s00705-022-05450-6)
10. Cornejo-Franco, J.F., Reyes-Proaño, E., Mollov, D., Mowery, J. **Quito-Avila, D.F. 2021**. Transmission and pathogenicity of papaya virus E: insights from an experimental papaya orchard. *Plant Dis.* <https://doi.org/10.1094/PDIS-08-21-1785-RE>
11. Cornejo-Franco, J.F., Flores, F., Mollov, D., **Quito-Avila, D.F. 2021**. An umbra-related virus found in babaco (*Vasconcellea x heilbornii*). *Arch. Virol.* <https://doi.org/10.1007/s00705-021-05117-8>
12. Medina-Salguero, A.X., Cornejo-Franco, J.F., Grinstead, S., Mollov, D., Mowery, J. and **Quito-Avila, D.F. 2021**. Genetic characterization of a mild isolate of

- papaya ringspot virus type-P (PRSV-P) and assessment of its cross-protection potential under greenhouse and field conditions. *PlosOne*. <https://doi.org/10.1371/journal.pone.0241652>
13. **Quito-Avila, Diego F.**, Freitas-Astúa, Juliana and Melzer, Michael J. **2021.** Bluner-, Cile-, and Higreviruses (Kitaviridae). In: Bamford, D.H. and Zuckerman, M. (eds.) Encyclopedia of Virology, 4th Edition, vol. 3, pp. 247–251. Oxford: Academic Press.
 14. Green, K., Funke, N. Chojnacky, J., Alvarez-Quinto, R., Ochoa, J. **Quito-Avila, D.F.** and Karasev, A. **2020.** Potato Virus Y (PVY) Isolates from *Solanum betaceum* Represent Three Novel Recombinants Within the PVY^N Strain Group and Are Unable to Systemically Spread in Potato. *Phytopathology*, 110:1588-1596, <https://doi.org/10.1094/PHYTO-04-20-0111-R>
 15. Cornejo-Franco, J.F., Medina-Salguero, A., Flores, F., Chica, E., Grinstead, S., Mollov, D. and **Quito-Avila, D.F. 2020.** Exploring the virome of *Vasconcellea x heilbornii*: the first step towards a sustainable production program for babaco in Ecuador. *European Journal of Plant Pathology*, <https://doi.org/10.1007/s10658-020-02037-2>
 16. Medina-Salguero, A.X., Cornejo-Franco, J.F., Grinstead, S., Mollov, D., Mowery, J.D., Flores, F. and **Quito-Avila, D.F. 2019.** Sequencing, genome analysis and prevalence of a cytorhabdovirus discovered in *Carica papaya*. *PLoS ONE* 14(6): e0215798. <https://doi.org/10.1371/journal.pone.0215798>
 17. Cornejo-Franco, J.F., Alvarez-Quinto, R.A., Grinstead, S., Mollov, D., Karasev, A.K. Ochoa, J.B. and **Quito-Avila, D.F. 2019.** A new tymovirus isolated from *Solanum quitoense*: characterization and prevalence in two solanaceous crops in Ecuador. *Plant Dis*. <https://doi.org/10.1094/PDIS-01-19-0113-RE>
 18. Cornejo-Franco, J.F., Alvarez-Quinto, R.A. and **Quito-Avila, D.F. 2018.** Transmission of the umbra-like papaya virus Q in Ecuador and its association with meleira-related viruses from Brazil. *Crop Protection*. *Crop Protection*. 110, 99-102.
 19. Braidwood, L., **Quito-Avila, D.F.**, Cabanas, D., Bressan, A., Wangai, A. and Baulcombe, D.C. **2018.** Maize chlorotic mottle virus exhibits low divergence

between differentiated regional sub-populations. *Scientific Reports* 8, 1173
doi:10.1038/s41598-018-19607-4

20. Green, K. J., Mollov, D., Tran, L.T., Alvarez-Quinto, R.A., Ochoa, J., **Quito-Avila, D.F.** and Karasev, A.V. **2018**. Characterization of a new tymovirus causing stunting and chlorotic mosaic in naranjilla (*Solanum quitoense*). *Plant Dis.* 102: 911-918 doi.org/10.1094/PDIS-10-17-1534-RE

PROFESSIONAL SOCIETIES

American Phytopathological Society

HONORS AND AWARDS

Bursary (Travel) award, American Phytopathological Society (APS)
annual meeting, Boston, MA, Boston, July 29 – Aug 3, 2018
International travel award, American Phytopathological Society (APS).
San Antonio, TX. Agosto 5-9, 2017
Award. Schroth Faces of the Future in Virology, Recognition by the
American Phytopathological Society. August 9-13, 2014.
Phytopathology Editor's Pick: "Transmission biology of Raspberry latent
virus, the First Aphid-Borne Reovirus". Quito-Avila et al. APS News
Capsule No 344. April 26, 2012

INSTITUTIONAL AND PROFESSIONAL SERVICE (LAST FIVE YEARS)

Plant Disease, Reviewer
Archives of Virology, Reviewer
European Journal of Plant Pathology, Reviewer
Virus Research, Reviewer

TIME DISTRIBUTION

75% Research, 25% Teaching (Virology and Plant Disease Diagnostics)