

DOCTORADO EN CIENCIAS AGROALIMENTARIAS

**Ximena Besoain Canales**

**Publicaciones (2017- 2021)**

1. Valenzuela, M., González, M., Velásquez, A., Dorta, F., Montenegro, I., **Besoain, X.**, Salvá, F., Jaén-Luchoro, D., Moore, E.B., Seeger, M. 2021. Analyses of Virulence Genes of *Clavibacter michiganensis* subsp. *michiganensis* Strains Reveal Heterogeneity and Deletions That Correlate with Pathogenicity. *Microorganisms*, 9: 7. Q2.
2. Díaz, K., Werner, E., **Besoain, X.**, Flores, S., Donoso, V., Said, B., Vega, E., Montenegro, I., Madrid, A. 2021. In Vitro antifungal activity and toxicity of dihydrocarvone-hybrid derivatives against *Monilinia Fructicola*. *Antibiotics*, 10: 7. Q2.
3. Olivera, M., Delgado, N., Cádiz, F., Riquelme, N., Montenegro, I., Seeger, M., Bravo, G., Barros, W., Pedreschi, R., **Besoain, X.** 2021. Diffusible compounds produced by *Hanseniaspora osmophila* and *Gluconobacter cerinus* help to control the causal agents of gray rot and summer bunch rot of table grapes. *Antibiotics-Basel*, 10: 664. Q2.
4. Delgado, N., Olivera, M., Cádiz, F., Bravo, G., Montenegro, I., Madrid, A., Fuentealba, C., Pedreschi, R., Salgado, E., **Besoain, X.** 2021. Volatile Organic Compounds (VOCs) produced by *Gluconobacter cerinus* and *Hanseniaspora osmophila* displaying control effect against table grape-rot pathogens. *Antibiotics-Basel*, 10: 663. Q2.
5. Larach, A., Torres, C., Riquelme, N., Valenzuela, M., Salgado, E., Seeger, M., **Besoain, X.** 2020. *Phytopathologia Mediterranea*, 59: 537-548. Q2.
6. Vásquez, I., **Besoain, X.**, Vega-Celedón, P., Valenzuela, M., Seeger, M. 2020. First Report of Bacterial Wilt Caused by *Ralstonia solanacearum* Phylotype IIB Sequevar 1 Affecting Tomato in Different Regions of Chile. *Plant Disease*, 104: 2023. Q1.
7. Jiménez, I., Cádiz, F., Aravena, R., Larach, A., **Besoain, X.**, Ezcurra, E., Rolshausen, P. 2020. First Report of *Diaporthe cynaroidis* and *D. australifricana* Associated with Walnut Branch Canker in Chile. *Plant Disease*, 104: 10. Q1.
8. Tapia, L., Larach, A., Riquelme, N., Guajardo, J., **Besoain, X.** 2020. First Report of *Neofusicoccum luteum* Causing Stem-End Rot Disease on Avocado Fruits in Chile. *Plant Disease*, 104: 2027. Q1.
9. Werner, E., Montenegro, I., Said, B., Godoy-Martínez, P., **Besoain, X.**, Caro, N., Madrid, A. 2020. Synthesis and Anti-Saprolegnia Activity of New 2',4'-Dihydroxydihydrochalcone Derivatives. *Antibiotics*, 9: 317. Q2.

DOCTORADO EN CIENCIAS AGROALIMENTARIAS

10. Flores, O., Retamales, J., Núñez, M., León, M., Salinas, P., **Besoain, X.**, Yáñez, C., Bastías, R. 2020. Characterization of Bacteriophages against *Pseudomonas syringae* pv. *actinidiae* with Potential Use as Natural Antimicrobials in Kiwifruit Plants. *Microorganisms*, 8: 974. Q2.
11. López, G., Mellado, M., Werner, E., Said, B., Godoy-Marínez, P., Caro, N., **Besoain, X.**, Montenegro, I., Madrid, A. 2020. Sonochemical Synthesis of 2'-Hydroxy-Chalcone Derivatives with Potential Anti-Oomycete Activity. *Antibiotics*, 9: 576. Q2.
12. Méndez, V., Valenzuela, M., Salvá, F., Jaén-Luchordo, D., **Besoain, X.**, Moore, E.R.B., Seeger, M. 2020. Comparative Genomics of Pathogenic *Clavibacter michiganensis* subsp. *michiganensis* Strains from Chile Reveals Potential Virulence Features for Tomato Plants. *Microorganisms*, 8: 1679. Q2.
13. Montenegro, I., Said, B., Godoy-Martínez, P., **Besoain, X.**, Parra, C., Día, K., Madrid, A. 2020. Antifungal Activity of Essential Oil and Main Components from *Mentha pulegium* Growing Wild on the Chilean Central Coast. *Agronomy*, 10: 254. Q1.
14. Alvarado, L., Saa, S., Cuneo, I.F., Pedreschi, R., Morales, J., Larach, A., Barros, W., **Besoain, X.** 2020. A comparison of immediate and short-term defensive responses to *Phytophthora* species infection in both susceptible and resistant walnut rootstocks. *Plant Disease*, 104: 921-929. Q1.
15. Morales, J.A., **Besoain, X.**, Cuneo, I., Saa, S. 2019. Impact of nitrogen fertilization on *Phytophthora cinnamomi* root-related damage in *Juglans regia* samplings. *HortScience* 54: 2188-2194. Q2.
16. Montenegro, I., Mellado, M., Russo, A., Said, B., **Besoain, X.**, Godoy, P., Werner, E., Caro, N., Madrid, A. 2019. Carveoylphenols and Their Antifungal Potential against Pathogenic Yeasts. *Antibiotics* 8: 185. Q2.
17. **Besoain, X.**, Guajardo, J., Larach, A., Riquelme, N., Galvez, E., Tapia, L., Alvarado, L.E., Saratscheff, T., Celis-Diez, J.L. 2019. First Report of *Diplodia seriata* causing gummy canker in *Araucaria araucana* wild populations in south-central Chile. *Plant Disease* 103: 2684. Q1.
18. Guajardo, J., Riquelme, N., Browne, G., Youlton, C., Castro, M., **Besoain, X.** 2019. Characterization of Oomycete species associated with root and crown rot of English walnut in Chile. *Plant Disease* 103: 691-696. Q1.
19. Valenzuela, M., Méndez, V., Montenegro, I., **Besoain, X.**, Seeger, M. 2019. Streptomycin resistance in *Clavibacter michiganensis* subsp. *michiganensis* strains from Chile is related to an *rpsL* gene mutation. *Plant Pathology* 68: 426-433. Q2.
20. Flores, O., Prince, C., Nunez, M., Vallejos, A., Mardones, C., Yáñez, C., **Besoain, X.**, Bastías, R. 2019. Genetic and Phenotypic Characterization of Indole-Producing Isolates of *Pseudomonas syringae* pv. *actinidiae* Obtained from Chilean Kiwifruit Orchards. *Frontiers in Microbiology* 9:1-12. Q1.

## DOCTORADO EN CIENCIAS AGROALIMENTARIAS

21. Montenegro, I., Madrid, A., Cuellar, M., Seeger, M., Alfaro, J.F., **Besoain, X.**, Martínez, J.P., Ramirez, I., Olgún, Y., Valenzuela, M. 2018. Biopesticide activity from drimanic compounds to control tomato pathogens. *Molecules* 23:2053. Q2.
22. Valenzuela, M., **Besoain, X.**, Durand, K., Cesbron, S., Fuentes, S., Claverías, F., Jacques, M.A., Seeger, M. 2018. *Clavibacter michiganensis* subsp. *michiganensis* strains from central Chile exhibit low genetic diversity and sequence types match strains in other parts of the world". *Plant Pathology* 67: 1944-1954. Q2.
23. Guajardo, J., Riquelme, N., Tapia, L., Larach, A., Torres, C., Camps, R., **Besoain, X.** 2018. First report of *Lasiodiplodia theobromae* causing Bot Gummosis in Citrus limón in Chile. *Plant Disease* 102: 818-819. Q1.
24. **Besoain, X.**, Guajardo, J., Camps, R. 2017. First Report of *Diplodia mutila* Causing Gummy Canker in *Araucaria araucana* in Chile. *Plant Disease* 101: 1328. Q1.
25. Guajardo, J., Saa, S., Camps, R., **Besoain, X.** 2017. Outbreak of crown and root rot of walnut caused by *Phytophthora cinnamomi* in Chile. *Plant Disease* 101, 636. Q1.

### Proyectos con financiamiento externo últimos 5 años (adjudicado y/o ejecutado)

1. Formulados de nanoemulsiones de exudados vegetales nativos para el control de enfermedades de patógenos asociados a suelo (*Phytophthora cinnamomi*, *fusarium oxysporum* sp. *Lycopersici*, *clavibacter michiganensis* subsp. *Michiganensis*) en nogal y tomate.  
Financiamiento: FONDEF IdeA N° ID21110162  
Rol: Co-investigador  
Duración: 2021-2023  
Año adjudicación: 2021
2. Effects of tissue age and endophytic microbiome of *Botryosphaeria dieback* caused by *Diplodia seriata* in cv. Cabernet Sauvignon in Central Chile, and biocontrol studies in plant.  
Financiamiento: FONDECYT regular.  
Rol: Directora  
Duración: 2021-2024  
Año adjudicación: 2021
3. Nuevo Servicio De Detección De Virus Y Viroides Para Determinar La Sanidad De Plantas De Cítricos En Chile.  
Financiamiento: Proyecto FIA PYT-2020-0218. Institución Asociada, Comité de Cítricos de Chile, ASOEX  
Rol: Directora  
Duración: 2020-2024  
Año adjudicación: 2020

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4. Consorcio biológico PUCV-VBL para el control de hongos en postcosecha de uvas para exportación.  
Financiamiento: I Concurso FONDEF IDeA en dos etapas, Temático en Inocuidad y Calidad Alimentaria-CONICYT, ID17AL0028.  
Rol: Directora  
Duración: 2017-2019  
Año adjudicación: 2017
5. KIWI PHAGE: Desarrollo de un antimicrobiano natural contra el cancro bacteriano del kiwi utilizando bacteriófagos  
Financiamiento: FONDEF Idea Dos Etapas  
Rol: Co-Investigadora  
Duración: 2015-2018  
Año adjudicación: 2015
6. Empaquetamiento y transferencia de producto biológico PUCV- VBL para el control de pudrición gris del racimo en vides.  
Financiamiento: CORFO INNOVA, Línea 4 Número de proyecto: Código 14IDL4-30222  
Rol: Directora  
Duración: 2014-2018  
Año adjudicación: 2014