

WILSON BARROS PARADA

**Escuela de Agronomía, Pontificia Universidad Católica de Valparaíso,
Calle San Francisco s/n, La Palma, Quillota, Chile**

I. PUBLICACIONES (2015 – presente)

Publicaciones en revistas indexadas (ISI)

1. Tapia-Gatica J, Selles I, Bravo M, Tessini C, **Barros-Parada W**, Novoselov A, Neaman A (2022). Global issues in setting legal limits on soil metal contamination: A case study of Chile. *Chemosphere* 290; doi: 10.1016/j.chemosphere.2021.133404
2. Olivera M, Delgado N, Cádiz F, Riquelme N, Montenegro I, Seeger M, Bravo G, **Barros-Parada 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* 10(6); doi: 10.3390/antibiotics10060664
3. Camps R, Fiore N, Riquelme N, **Barros-Parada W**, Besoain X (2021). Genotype variation of citrus tristeza virus after passage on different hosts, and changes in the virus genotype populations by the vector Aphis gossypii. *Phytopathologia Mediterranea* 61(1); doi: 10.36253/phyto-12965
4. Rojas-Gálvez R, Talamas E, Albornoz M, Flores, F, **Barros-Parada W**, Bout A (2021). Gryon aetherium Talamas (Hymenoptera, Scelionidae): Parasitoid of Bagrada hilaris (Burmeister) (Hemiptera, Pentatomidae) Adventive in Chile. *Journal of Hymenoptera Research* 87; doi: 10.3897/jhr.87.75363
5. **Barros-Parada W**, Fuentes-Contreras E, Bergmann J, Herrera H, Kinsho T, Miyake Y (2021). Monitoring chilecomadia valdiviana (Lepidoptera: Cossidae) using sex pheromone-baited traps in apple orchards in chile. *Insects* 12(6) doi: 10.3390/insects12060511
6. **Barros-Parada W**, Bergmann J, Curkovic T, Espinosa C, Fuentes-Contreras E, Guajardo J, Herrera H, Morales S, Queiroz A, Vidal Á (2020) 3,7-Dimethylpentadecane: a Novel Sex Pheromone Component from Leucoptera sinuella (Lepidoptera: Lyonetiidae). *Journal of Chemical Ecology* 46(9) doi: 10.1007/s10886-020-01208-z

7. Alvarado L, Saa S, Cuneo I, Pedreschi R, Morales J, Larach A, **Barros-Parada W**, Guajardo J, 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(3); doi: 10.1094/PDIS-03-19-0455-RE
8. Heidy Herrera, **Wilson Barros-Parada**, Jan Bergmann (2019) Linoleic acid and stearic acid are biosynthetic precursors of (7Z,10Z)-7,10-hexadecadienal, the major component of the sex pheromone of Chilecomadia valdiviana (Lepidoptera: Cossidae). *Plos One* 14(4): e0215769; doi: 10.1371/journal.pone.0215769
9. **Barros-Parada W**, Ammagarahalli B, Basoalto E, Fuentes-Contreras E, Gemeni C (2018). Captures of oriental fruit moth, grapholita molesta (Lepidoptera: Tortricidae), in traps baited with host-plant volatiles in Chile. *Applied Entomology and Zoology* 53(2); doi: 10.1007/s13355-017-0543-7
10. Mujica V, Preti M, Basoalto E, Cichon L, Fuentes-Contreras E, **Barros-Parada W**, Krawczyk G, Nunes M, Walgenbach J, Hansen R, Knight A (2018). Improved monitoring of oriental fruit moth (Lepidoptera: Tortricidae) with terpinyl acetate plus acetic acid membrane lures. *Journal of Applied Entomology* 142(8); doi: 10.1111/jen.12528
11. Herrera H, **Barros-Parada W**, Fernanda Flores M, Fuentes-Contreras E, Bergmann J (2018). Synthesis and field test of a pheromone analog of chilecomadia valdiviana. *Journal of the Chilean Chemical Society* 63(2); doi: 10.4067/s0717-97072018000204019
12. Tasin M, Larsson S, Knight A, **Barros-Parada W**, Fuentes Contreras E, Pertot I (2018). Volatiles of Grape Inoculated with Microorganisms: Modulation of Grapevine Moth Oviposition and Field Attraction. *Microbial Ecology* 76(3); doi: 10.1007/s00248-018-1164-6
13. Lapointe S, **Barros-Parada W**, Fuentes-Contreras E, Herrera H, Kinsho T, Miyake Y, Niedz R, Bergmann, J (2017). Use of Mixture Designs to Investigate Contribution of Minor Sex Pheromone Components to Trap Catch of the Carpenterworm Moth, Chilecomadia valdiviana. *Journal of Chemical Ecology* 43(11-12); doi: 10.1007/s10886-017-0906-0
14. Yang X, Z Wu, Y Zhang & **W Barros-Parada** (2016) Toxicity of six insecticides on codling moth (Lepidoptera: Tortricidae) and effect on expression of detoxification genes. *Journal of Economic Entomology* 109: 320-326; doi: <http://dx.doi.org/10.1093/jee/tov297>

15. Herrera H, **W Barros-Parada**, MF Flores, W Francke, E Fuentes-Contreras, M Rodriguez, F Santis, P Zarbin & J Bergmann (2016) Identification of a novel moth sex pheromone component from *Chilecomadia valdiviana* (Lepidoptera: Cossidae). *Journal of Chemical Ecology* 42: 908-918; doi: 10.1007/s10886-016-0761-4
16. **Barros-Parada W**, E Fuentes-Contreras, E Basoalto, L Cichon & A Knight (2016) Acetic acid lure placement within traps affects moth catches of codling moth (Lepidoptera: Tortricidae). *Journal of Applied Entomology* 140: 786- 795; doi: 10.1111/jen.12311
17. Reyes M, **W Barros-Parada**, C Ramírez & E Fuentes-Contreras (2015) Organophosphate resistance and its main mechanism in populations of *Cydia pomonella* (Lepidoptera: Tortricidae) from central Chile. *Journal of Economic Entomology* 108: 277-285; doi: 10.1093/jee/tou001
18. Knight A, **W Barros-Parada**, D Bosch, LA Escudero-Colomar, E Fuentes-Contreras, J Hernandez, Y Kim, OB Kovanci, A Levi, P Lo, F Molinari, J Valls & C Gemeni (2015) Similar worldwide patterns in the sex pheromone signal and response in the oriental fruit moth, *Grapholita molesta* (Lepidoptera: Tortricidae). *Bulletin of Entomological Research* 105: 23-31; doi: 10.1017/S0007485314000637.
19. **Barros-Parada W**, E Fuentes-Contreras & A Knight (2015) Modeling codling moth (Lepidoptera: Tortricidae) phenology and predicting egg hatch in apple orchards of the Maule Region, Chile. *Chilean Journal of Agricultural Research* 75: 57-62; doi: 10.4067/S0718-58392015000100008

II. EXPERIENCIA EN PROYECTOS DE INVESTIGACION (2015 – presente)

Proyectos con fondos concursables

2019 – 2022 **Investigador responsable FONDECYT DE INICIACIÓN N°11190436.** Development a mass trapping system for males and females capture, based on pheromone and kairomones, to reduce the damage of *Chilecomadia valdiviana* (Philipi) (Lepidoptera: Cossidae) on apple orchards

2018 – 2021 **Co-investigador CONCURSO DE FORTALECIMIENTO DE CENTROS REGIONALES R18F10004. CERES-PUCV.** Evaluación de nuevos semioquímicos para el manejo de plagas en frutales y viñas. Diseño y validación de estrategias para la reducción del daño económico causado por *Bragada hilaris* en brasicas, mediante unidades de biodiversidad funcional tipo puch pull, orientadas a

la pequeña horticultura de la región de Valparaíso.

2018 – 2021 **Co-investigador CONCURSO FIC REGIÓN DE O'HIGGINS.**
UNIVERSIDAD DE TALCA Transferencia del manejo integrado de la polilla del álamo.

2018 – 2019 **Co-investigador CONICYT 318999.** Diseño y validación de estrategias para la reducción del daño económico causado por Bagrada hilaris en brásicas, mediante unidades de biodiversidad funcional tipo push-pull, orientadas a la pequeña horticultura de la Región de Valparaíso.

2017 – 2018 **Co-investigador DID REGULAR – UNIVERSIDAD AUSTRAL DE CHILE.** Combinaciones más efectivas de feromonas sexuales y volátiles de plantas hospederas (kairomonas) para el monitoreo de enrolladores nativos en huertos de arándanos.

2016 – 2018 **Investigador Asociado CONICYT 150152.** International network for the study and development of semiochemicals for pest management in fruit crops.