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I. PUBLICACIONES (2015 – presente)

Publicaciones en revistas indexadas (ISI)

1. Silambarasan, S. (Corr. Auth.), Logeswari, P., Vangnai, A.S., **Cornejo, P.** 2022. Rhodotorula mucilaginosa CAM4 improved selenium uptake in Spinacia oleracea L. and soil enzymatic activities under abiotic stresses. *Environmental Science and Pollution Research In Press*. <https://doi.org/10.1007/s11356-022-21935-y>
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8. Alarcón, S., Tereucán, G., **Cornejo, P.**, Contreras, B., Ruiz, A. (Corr. Auth.). 2022. Metabolic and antioxidant effects of inoculation with arbuscular mycorrhizal fungi in crops of flesh-coloured *Solanum tuberosum* treated with fungicides. *Journal of the Science of Food and Agriculture* 102:2270-2280. DOI: 10.1002/jsfa.11565
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(Phaseolus vulgaris L.). *Chilean Journal of Agricultural and Animal Sciences (Agrociencia)* 36: 181-189. DOI: 10.29393/chjaas36-16ctfm80016

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

Proyectos con fondos concursables

2022-2023. **Investigador Asociado. ANID/FSEQ210002.** Tecnologías, metodologías CRHIAM, y guía de buenas prácticas para la sostenibilidad hídrica de las industrias mineras y agrícolas.

2021-2023. **Director General. InES19-VRIP-UFRO, MINEDUC.** Interacción biotecnología-ambiente-agricultura para la mitigación del cambio climático: Hacia la sustentabilidad productiva y resiliencia de los recursos naturales.

2021-2025. **Investigador Responsable. FONDECYT Regular 1210964, ANID.** How the management of rhizosphere microbiota can enhance plant production under drought stress: Developing a scientific basis for the design of next generation biofertilizers.

2020-2021. **Co-Director. Súmate a Innovar 20SN-139512, CORFO.** Obtención de líneas de papas ricas en proteínas de origen vegetal y antioxidantes como superalimento.

2019-2023. **Investigador Asociado. ANID/FONDAP/15130015.** Centro de

Recursos Hídricos para la Agricultura y Minería, CRHIAM.

2019-2023. **Co-Investigador. FONDECYT Regular 1190585, ANID.** Can the directed inoculation of arbuscular mycorrhizal fungi modify the profiles and quantity of antioxidant compounds in flesh-colored potatoes cropped under drought and P starvation conditions?

2019-2022. **Co-Investigador FONDECYT Regular 1191551, ANID.** How precedent non-mycorrhizal crops affect soil P bioavailability, physiological root traits, and mycorrhizal symbiosis of wheat in a rotation system in volcanic soils of Chile.

2018. **Co-Director. Voucher de Innovación 17VIP87872, CORFO.** Valorización del residuo de papas de pulpa coloreada tras la extracción de pigmentos para su potencial utilización industrial.

2018-2021. **Investigador Titular. ACM170002 Anillos de Investigación en Ciencia y Tecnología en tópicos de Minería, ANID.** Sustainable management of mining tailings using native plants and biofertilizers to recover the landscape, mitigate the socioenvironmental impact and create bases for its valorization.

2017-2018. **Director. MEC folio 80170023, ANID.** Estudio comparativo de las adaptaciones y simbiosis radicales Micorrizas Arbusculares, Rhizobio-Leguminosa y Raíces Proteoideas en especies agrícolas y nativas chilenas: Hacia un uso eficiente de fósforo retenido en Andisoles del sur de Chile.

2017-2021. **Co-Investigador. FONDECYT Regular 1170931, ANID.** Contribution of native bacteria and fungi to alleviate stress in soil degraded by heavy metals and drought: evaluation of plant growth promotion, tolerance mechanisms and rhizosphere interactions.

2017-2021. **Investigador Responsable. FONDECYT Regular 1170264, ANID.** Influence of drought on the efficiency of arbuscular mycorrhizal symbiosis in phosphorus acquisition by plants growing in Andisols from Southern Chile: wheat as a crop model.

2017-2020. **Supervisor. FONDECYT Postdoctorado 3170089, ANID.** Efecto de las asociaciones vegetales y de la incidencia de incendios forestales sobre las comunidades de hongos micorrícicos arbusculares asociados a la rizosfera de *Araucaria araucana*.

2017-2020. **Supervisor. FONDECYT Postdoctorado 3170123, ANID.** Development of climate-resilient bio-inoculants of plant growth promoting yeast to improve the production of horticultural crops in La Araucanía Region.

2017-2019. **Co-Director. PYT-2016-0674, FIA.** Obtención de pigmentos de papas coloreadas para su uso como colorante de alimentos procesados.

2016-2019. **Supervisor. FONDECYT Postdoctorado 3160699, CONICYT.** Study of the tolerance mechanisms and plant growth promotion in rhizosphere microorganisms associated to autochthonous plants growing in áreas with hydric restrictions.

2016-2019. **Supervisor. FONDECYT Postdoctorado 3160513, CONICYT.** DOES THE ANOXIC-ABIOTIC CONDITION INFLUENCE THE RHIZOSPHERE PRIMING EFFECT IN ALLOPHANIC AND METAMORPHIC SOILS DEVELOPED UNDER TEMPERATE RAINFOREST?

2015-2017. **Director-Tutor. VIU-FONDEF-CONICYT VIU15P0073.** Diseño de biofertilizantes en base a hongos micorrícico arbusculares nativos del sur de Chile para su utilización en la agricultura