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I. PUBLICACIONES

Publicaciones en revistas indexadas (ISI)

1. Delgadillo V, J Verdejo, P Mondaca, G Verdugo, H Gaete, ME Hodson & **A Neaman** (2017). Proposed modification to avoidance test with *Eisenia fetida* to assess metal toxicity in agricultural soils affected by mining activities. ***Ecotoxicology and Environmental Safety*** 140: 230-234; doi: 10.1016/j.ecoenv.2017.02.038
2. Mondaca P, J Catrin, J Verdejo, S Sauve & **A Neaman** (2017) Advances on the determination of thresholds of Cu phytotoxicity in field-contaminated soils in central Chile. ***Environmental Pollution*** 223: 146-152; doi: 10.1016/j.envpol.2016.12.076
3. Otto S, **A Neaman**, B Richards & A Mario (2016) Explaining the ambiguous relations between income, environmental knowledge, and environmentally significant behavior. ***Society & Natural Resources*** 29: 628-632; doi: 10.1080/08941920.2015.1037410
4. Verdejo J, R Ginocchio, S Sauve, P Mondaca & **A Neaman** (2016). Thresholds of copper toxicity to lettuce in field-collected agricultural soils exposed to copper mining activities in Chile. ***Journal of Soil Science and Plant Nutrition*** 16: 154-158.
5. Díaz-Siefer P, **A Neaman**, E Salgado, JL Celis-Diez & S Otto (2015) Human-environment system knowledge: A correlate of pro-environmental behavior. ***Sustainability*** 7: 15510-15526; doi: 10.3390/su71115510.
6. Mondaca P, **A Neaman**, S Sauv e, E Salgado & M Bravo (2015) Solubility, partitioning and activity of copper in contaminated soils in a semiarid zone. ***Journal of Plant Nutrition and Soil Science*** 178: 452-459; doi: 10.1002/jpln.201400349
7. Verdejo J, R Ginocchio, S Sauv e, E Salgado & **A Neaman** (2015) Thresholds of copper phytotoxicity in field-collected agricultural soils exposed to copper mining activities in Chile. ***Ecotoxicology and Environmental Safety*** 122: 171-177; doi: 10.1016/j.ecoenv.2015.07.026

8. Olivares Y, H Gaete & **A Neaman** (2015) Evaluación de la fitotoxicidad y la genotoxicidad de suelos agrícolas de zonas con actividades mineras de cobre de la cuenca del Río Aconcagua (Chile central). **Revista Internacional de Contaminación Ambiental** 31: 237-243.
9. Bustos V, P Mondaca, J Verdejo, S Sauvé, H Gaete, JL Celis-Diez & **A Neaman** (2015) Thresholds of arsenic toxicity to *Eisenia fetida* in field-collected agricultural soils exposed to copper mining activities in Chile. **Ecotoxicology and Environmental Safety** 122: 448-454; doi: 10.1016/j.ecoenv.2015.09.009
10. Vargas C, W Quiroz, M Bravo & **A Neaman** (2015) Stability of arsenic during soil treatment and storage. **Journal of the Chilean Chemical Society** 60: 3045-3048
11. Gonzalez I & **A Neaman** (2015) Assessment of copper tolerance of two populations of *Oenothera picensis* Phil. subsp *picensis* (Onagraceae). **Gayana Botanica** 72: 240-249.
12. Gonzalez I, **A Neaman**, P Rubio & A Cortes (2014) Spatial distribution of copper and pH in soils affected by intensive industrial activities in central Chile. **Journal of Soil Science and Plant Nutrition** 14: 943-953
13. Norambuena M, **A Neaman**, MC Schiappacasse & E Salgado (2014) Effect of liquid humus and calcium sulphate on soil aggregation. **Journal of Soil Science and Plant Nutrition** 14: 701-709; doi: 10.4067/S0718-95162014005000056
14. Barazarte R, **A Neaman**, F Vallejo & P García (2014) El conocimiento ambiental y el comportamiento pro-ambiental de los estudiantes de la enseñanza media, en la Región de Valparaíso (Chile). **Revista de Educación** 364: 12-34; doi: 10.4438/1988-592X-RE-2014-364-255
15. González I, **A Neaman**, A Cortés & P Rubio (2014) Effect of compost and biodegradable chelate addition on phytoextraction of copper by *Oenothera picensis* grown in Cu-contaminated acid soils. **Chemosphere** 95: 111-115, doi: 10.1016/j.chemosphere.2013.08.046
16. Ginocchio R, V Cárcamo, E Bustamante, E Trangolao, LM de la Fuente & **A Neaman** (2013) Efficacy of fresh and air-dried biosolids as amendments for remediation of acidic and metal-polluted soils: A short-term laboratory assay. **Journal of Soil Science and Plant Nutrition** 13: 855-869
17. Olivares D, M Bravo, J Feldmann, A Raa, **A Neaman** & W Quiroz (2012) Development of an analytical method for antimony speciation in vegetables by HPLC hydride generation-atomic fluorescence spectrometry. **Journal of AOAC International** 95: 1176-1182; doi: 10.5740/jaoacint.11-278

18. Ulriksen C, R Ginocchio, M Mench & **A Neaman** (2012) Lime and compost promote plant re-colonization of metal-polluted, acidic soils. ***International Journal of Phytoremediation*** 14: 820-833; doi: 10.1080/15226514.2011.628716
19. Cárcamo V, E Bustamante, E Trangolao, LM de la Fuente, M Mench, **A Neaman** & R Ginocchio (2012) Simultaneous immobilization of metals and arsenic in acidic polluted soils near a copper smelter in central Chile. ***Environmental Science and Pollution Research*** 19:1131-1143, doi: 10.1007/s11356-011-0673-3
20. **Neaman A**, S Huerta & S Sauv e (2012) Effects of lime and compost on earthworm (*Eisenia fetida*) reproduction in copper and arsenic contaminated soils from the Puchuncav  Valley, Chile. ***Ecotoxicology and Environmental Safety*** 80: 386-392; doi: 10.1016/j.ecoenv.2012.04.013
21. Cataldo J, ME Hidalgo, **A Neaman** & H Gaete (2011) Use of molecular biomarkers in *Eisenia foetida* to assess copper toxicity in agricultural soils affected by mining activities. ***Journal of Soil Science and Plant Nutrition*** 11: 57-70; doi: 10.4067/S0718-95162011000300005
22. Aguilar R, C Hormaz bal, H Gaete & **A Neaman** (2011) Spatial distribution of copper, organic matter and pH in agricultural soils affected by mining activities. ***Journal of Soil Science and Plant Nutrition*** 11: 125-145; doi: 10.4067/S0718-95162011000300010
23. C rdova S, **A Neaman**, I Gonz lez, R Ginocchio & P Fine (2011) The effect of lime and compost amendments on the potential for the revegetation of metal-polluted, acidic soils. ***Geoderma*** 166: 135-144; doi: 10.1016/j.geoderma.2011.07.022
24. Gonz lez I, A Cortes, **A Neaman** & P Rubio (2011) Biodegradable chelate enhances the phytoextraction of copper by *Oenothera picensis* grown in copper-contaminated acid soils. ***Chemosphere*** 84: 490-496; doi: 10.1016/j.chemosphere.2011.03.015
25. Goecke P, R Ginocchio, M Mench & **A Neaman** (2011) Amendments promote the development of *Lolium perenne* in soils affected by historical copper smelting operations. ***International Journal of Phytoremediation*** 13: 552-566; doi: 10.1080/15226514.2010.495150
26. Youlton C, P Espejo, J Biggs, M Norambuena, M Cisternas, **A Neaman** & E Salgado (2010) Quantification and control of runoff and soil erosion on avocado orchards on ridges along steep-hillslopes. ***Ciencia e Investigaci n Agraria*** 37: 113-123.

27. Gaete H, ME Hidalgo, **A Neaman** & G Ávila (2010) Assessment of copper toxicity in soils using biomarkers of oxidative stress in *Eisenia foetida*. **Química Nova** 33: 566-570; doi: 10.1590/S0100-40422010000300014
28. Muena V, I González & **A Neaman** (2010) Effects of liming and nitrogen fertilization on the development of *Oenothera affinis* in a soil affected by copper mining. **Journal of Soil Science and Plant Nutrition** 10: 21-32; doi: 10.4067/S0718-27912010000200002
29. Espinoza G & **A Neaman** (2010) Advances in diagnosis of iron deficiency in avocado. **Journal of Plant Nutrition** 33: 38-45; doi: 10.1080/01904160903391065
30. Muena V, I González & **A Neaman** (2010) Effects of liming and nitrogen fertilization on the development of *Oenothera affinis* in a soil affected by copper mining. **Revista de la Ciencia del Suelo y Nutrición Vegetal** 10: 102-114
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32. **Neaman A**, L Reyes, F Trolard, G Bourrie & S Sauve (2009) Copper mobility in contaminated soils of the Puchuncavi valley, central Chile. **Geoderma** 150: 359-366; doi: 10.1016/j.geoderma.2009.02.017
33. Avila G, H Gaete, S Sauve & **A Neaman** (2009) Organic Matter reduces copper toxicity for the earthworm *Eisenia fetida* in soils from mining areas in central Chile. **Chilean Journal of Agricultural Research** 69: 252-259
34. Stuckey JW, **A Neaman**, R Ravella, S Komarneni & CE Martinez (2009). Highly charged swelling mica reduces Cu bioavailability in Cu-contaminated soils **Environmental Pollution** 157: 12-16; doi: 10.1016/j.envpol.2008.09.009
35. Stuckey JW, **A Neaman**, R Ravella, S Komarneni & CE Martinez (2008) Highly charged swelling mica reduces free and extractable Cu levels in Cu-contaminated soils. **Environmental Science & Technology** 42: 9197-9202; doi: 10.1021/es801799s
36. González I, V Muena, M Cisternas & **A Neaman** (2008) Copper accumulation in a plant community affected by mining contamination in Puchuncavi valley, central Chile. **Revista Chilena de Historia Natural** 81: 279-291.
37. **Neaman A**, CE Martínez, F Trolard & G Bourrié (2008) Trace element associations with Fe- and Mn-oxides in soil nodules: Comparison of selective dissolution with electron probe microanalysis. **Applied Geochemistry** 23: 778-782; doi: 10.1016/j.apgeochem.2007.12.025

38. Ávila G, H Gaete, M Morales & **A Neaman** (2007) Reproduction of *Eisenia foetida* in agricultural soils from mining areas contaminated with copper and arsenic. ***Pesquisa Agropecuária Brasileira*** 42: 435-441.
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40. **Neaman A**, J Chorover & SL Brantley (2006) Effects of organic ligands on granite dissolution in batch experiments at pH 6. ***American Journal of Science*** 306: 451-473; doi: 10.2475/06.2006.03
41. Hausrath EM, **A Neaman** & SL Brantley (2005) Basalt and granite dissolution rates in the presence of citrate. ***Geochimica et Cosmochimica Acta*** 69: A692-A692
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43. **Neaman A**, J Chorover & SL Brantley (2005) Implications of the evolution of organic acid moieties for basalt weathering over geological time. ***American Journal of Science*** 305: 147-185; doi: 10.2475/ajs.305.2.147
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50. Guillaume D, **A Neaman**, M Cathelineau, R Mosser-Ruck, C Peiffert, M Abdelmoula, J Dubessy, F Villieras, A Baronnet & N Michau (2003) Experimental synthesis of chlorite from smectite at 300 degrees C in the presence of metallic Fe. ***Clay Minerals*** 38: 281-302; doi: 10.1180/0009855033830096
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She'an Valleys. *Australian Journal of Soil Research* 37: 913-928; doi: 10.1071/SR98118

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Sadzawka A, MA Carrasco, R Demanet, R Flores, R Grez, M Mora, **A Neaman**, G Romeny & E Zagal (2015) Guía para la validación de los métodos de análisis de lodos y de suelos receptores de lodos. Sociedad Chilena de la Ciencia del Suelo, Universidad de Concepción, Chillán, Chile. Pp. 24.

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Otras Publicaciones no indexadas

Neaman A & A Marió (2015) Prosociality and proenvironmentalism as components of sustainable behavior: Toward an integrated approach to sustainability education. *Journal of Natural Resources and Development* 5: 14-16.

Hormazábal C, R Aguilar R, M Cisternas & **A Neaman** (2013) Modelo predictivo de la distribución espacial de cobre en suelos agrícolas de la cuenca del Río Aconcagua. *Investigaciones Geográficas* 46: 79-92.

Neaman A & A Marió (2012) New focus of environmental education programs. *Journal of Natural Resources and Development* 3: 121-122.

González I, M Cisternas, U Kelm & **A Neaman** (2010) Metalofitas en El Teniente y su potencial para la remediación de suelos contaminados por cobre. *Ciencia Ahora* 25: 29-35.

II. EXPERIENCIA EN PROYECTOS DE INVESTIGACION

Proyectos con fondos concursables

- 2016 - (2018) PI FONDECYT 1160018. Soil, house dust, locally grown vegetables, and drinking water as environmental media of human exposure to trace elements in Puchuncaví
- 2015 - (2017) Co-I FONDECYT 1150503. Microbial properties as indicator of quality of metal-contaminated agricultural soil
- 2013 – (2016) IR FONDECYT 1130041. Ecotoxicological assessment of soil quality: use for legislative regulations concerning metal-contaminated soils.
- 2012 PI DI - PUCV. Conocimiento ambiental y comportamiento pro-ambiental de los estudiantes de enseñanza media: Estudio exploratorio en colegios de la Región de Valparaíso
- 2008 – (2011) PI FONDECYT 1085005. In situ metal immobilization and phytostabilization of contaminated soils in the Puchuncaví valley.
- 2005 – (2008) PI FONDECYT 1050403. Determination of speciation and bioavailability of copper in agricultural soils in Aconcagua River basin: Generating a map of copper toxicity for crops and soil organisms
- 2005 PI DI – PUCV. The use of zeolites as low-cost soil amendments for mitigation of environmental impact of copper mining

III. PRESENTACIONES EN REUNIONES CIENTIFICAS

- 2015 **Neaman A**, J Verdejo, V Bustos, P Mondaca. Thresholds of copper and arsenic toxicity in field-collected agricultural soils exposed to copper mining activities in Chile. International Soil Science Congress, 19-23 de octubre, Sochi, Rusia,
- 2015 **Neaman A**, P Mondaca, J Verdejo & V Bustos. Ecotoxicological assessment of metal-polluted soils. Simposio Nacional de la Ciencia del Suelo: Contaminación y remediación de suelos, 7-9 de octubre de 2015, Santiago, Chile.
- 2015 Ginocchio R & **A Neaman**. Contaminación de suelos con metales y metaloides en Chile y alternativas de remediación. Simposio Nacional de la Ciencia del Suelo: Contaminación y remediación de suelos, 7-9 de octubre de 2015, Santiago, Chile.

- 2014 **Neaman A**, P Mondaca & S Sauvé. Effect of soil organic matter and dissolved organic carbon on copper solubility in semiarid soils. Congreso "Sustancias Húmicas en la Biósfera", 6-9 de octubre, Syktyvkar, Rusia,
- 2014 Rivero JC, **A Neaman**, W Quiroz & M Bravo. Determinación de la biodisponibilidad de As en suelos contaminados de la Región de Valparaíso, utilizando como biosensor a *Eisenia fetida*. VII Congreso Iberoamericano de Física y Química Ambiental, XII Encuentro de Química Analítica y Ambiental, 6-10 de octubre, Viña del Mar, Chile.
- 2014 Gaete H, V Montenegro, M Ulloa & **A Neaman**. Evaluación ecotoxicológica de suelos a través de bioensayos de evasión con *Eisenia fetida* y crecimiento con *Lactuca sativa*. VII Congreso Iberoamericano de Física y Química Ambiental, XII Encuentro de Química Analítica y Ambiental, 6-10 de octubre, Viña del Mar, Chile.
- 2013 **Neaman A** & B Richards. Exploring environmental knowledge and pro-environmental behavior of Chilean adult population. 1st Conference on Natural Resources and Development, 25-28 de noviembre, Viña del Mar, Chile.
- 2013 **Neaman A** & B Richards. Exploring environmental knowledge and pro-environmental behavior of Chilean adult population. 64º Congreso de la Sociedad Agronómica de Chile, 23-26 de septiembre, Viña del Mar, Chile.
- 2013 González I, A Cortés, **A Neaman** & P Rubio. Efecto de un quelante biodegradable sobre la extracción de cobre por *Oenothera affinis* en suelos ácidos contaminados por cobre. 64º Congreso de la Sociedad Agronómica de Chile, 23-26 de septiembre, Viña del Mar, Chile.
- 2011 Rojas C, **A Neaman** & C Yáñez. Caracterización molecular de comunidades bacterianas de suelos contaminados con cobre y bajo remediación. XXXIII Congreso Chileno de Microbiología, 29 de noviembre – 2 de diciembre, Olmué, Chile.
- 2010 Ginocchio R, V Cárcamo, LM de la Fuente, E Bustamante, E Trangolao & **A Neaman**. Fitoestabilización de Suelos Ácidos y Contaminados con Metales en las Cercanías de una Fundición de Cobre en Chile Central: Evaluación de Laboratorio. X Congreso Latinoamericano de Botánica, 4-10 de octubre, La Serena, Chile
- 2010 Córdova MS, R Ginocchio & **A Neaman**. Efecto de la cal y el compost sobre la productividad vegetal bajo condiciones de revegetación asistida y espontánea, en suelos impactados por una fundición de cobre. X Congreso Latinoamericano de Botánica, 4-10 de octubre, La Serena, Chile
- 2010 González MI, **A Neaman** & A Cortes. Variación temporal de la acumulación de cobre en cuatro especies provenientes de un sector afectado por la

- actividad de la Fundación Ventanas. X Congreso Latinoamericano de Botánica, 4-10 de octubre, La Serena , Chile
- 2010 **Neaman A**, S Córdova, I González & R Ginocchio. The Effect of Lime and Compost on the Revegetation Ability of Soils Affected by Atmospheric Deposition from a Copper Smelter. 4th International Conference on Plants and Environmental Pollution, 8-11 de diciembre, Lucknow, India
- 2010 **Neaman A**, B Richards & A Marió. Environmental education: knowing and acting do not always go hand in hand. 4th International Conference on Plants and Environmental Pollution, 8-11 de diciembre, Lucknow, India
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- 2008 Muenza V, I González & **A Neaman**. Phytostabilization of contaminated soils in the Puchuncaví valley, central Chile. 5th World Congress of the Society of Environmental Toxicology and Chemistry (SETAC), 3-7 de agosto, Sydney, Australia.
- 2008 **Neaman A**, G Ávila, H Gaete & S Sauvé. Soil organic matter affects copper toxicity to earthworms in the avoidance test. 5th International Symposium of Interactions of Soil Minerals with Organic Components and Microorganisms (ISMOM), 24-28 de noviembre, Pucón, Chile.
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- 2008 Cornejo P, S Meier, I González, **A Neaman** & F Borie. Mycorrhizal fungal propagules in a Mediterranean ecosystem polluted by a copper smelter in central Chile. 5th International Symposium of Interactions of Soil Minerals with Organic Components and Microorganisms (ISMOM), 24-28 de noviembre, Pucón, Chile.
- 2007 **Neaman A**, R Aguilar, G Ávila, H Gaete & M Cisternas. Copper distribution and toxicity in agricultural soils of the Aconcagua river basin, Chile. Pp. 643-644. In: Zhu, Y., Lepp, N., Naidu, R., Biogeochemistry of trace elements: Environmental Protection, Remediation and Human Health. Tsinghua University Press, Beijing, China. International Conference on Biogeochemistry of Trace elements, July 14-19, Beijing, China.

- 2007 Mueña V, I González, M Cisternas & **A Neaman**. Fitoestabilización de suelos contaminados por cobre en Los Maitenes, comuna de Puchuncaví. Segundo Simposio Internacional: Suelos, Ecología y Medioambiente. Universidad de la Frontera, 8-9 de noviembre, Temuco, Chile.
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- 2006 **Neaman A**, G Ávila, H Gaete & M Cisternas. Assessment of copper biotoxicity in agricultural soils of the Aconcagua River basin (Chile), 18th World Congress of Soil Science, 9-15 de julio, Philadelphia, EEUU.
- 2006 **Neaman A**, R Aguilar, C Hormazabal, H Gaete & M Cisternas. Distribución de la concentración de cobre en suelos agrícolas de la cuenca del Aconcagua. 57º Congreso Agronómico de Chile, 17-20 de octubre, Santiago, Chile.
- 2006 **Neaman A**, G Ávila, H Gaete & M Cisternas. Disminución en la reproducción de la lombriz de tierra expuesta a suelos agrícolas provenientes de áreas mineras. 57º Congreso Agronómico de Chile, 17-20 de octubre, Santiago, Chile.