

Curriculum Vitae Raúl Silvio LAVADO

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ESTUDIOS UNIVERSITARIOS

- **Grado:** Ingeniero Agrónomo. Facultad de Agronomía y Veterinaria, UBA. Diciembre 1968.
- **Postgrado:** Diplomado en Edafología y Biología Vegetal. Universidad de Granada. España. 1971.

PRINCIPALES EXPERIENCIAS DE ENTRENAMIENTO/PERIODOS POSDOCTORALES

- 1979. Solonchic Soil Research Substation. Vegreville, Alberta, Canada.
- 1980. U.S. Salinity Laboratory. Riverside, California, U.S.A.

CARGOS

1968-1974: Estación Experimental de Riego y Cultivos del IDEVI, Viedma, Río Negro. Técnico en fertilidad de suelos.

1975-1978: Facultad de Agronomía de la Universidad Nacional de La Pampa, Santa Rosa (La Pampa).

1978-1982: Instituto de Geomorfología y Suelos de la Facultad de Ciencias Naturales y Museo. Universidad Nacional de La Plata, La Plata.

1983-1998: PROSAG (Programa CONICET/Facultad de Agronomía (UBA), actualmente IFEVA. Miembro asociado del IFEVA (1999-2005).

1995-2010: Profesor Titular, Cátedra de Fertilidad y Fertilizantes. Facultad de Agronomía,

2010- presente: Profesor Consulto, UBA.

Desde 1975: Investigador CONICET, desde 2010 investigador Superior (actualmente ad honorem).

PUESTOS EXECUTIVOS

- Director Instituto de investigaciones en Biociencias Agrícolas y Ambientales: INBA
- Presidente de la Red Argentina de la Salinidad (2015-2019).

ACTIVIDADES EN ORGANISMOS

- Miembro de varios comités y Miembro de la Junta de calificaciones del CONICET (1986-2017).
- Miembro Consejo Directivo de la Facultad de Agronomía de la UBA.
- Miembro del Directorio del IFEVA (1994-95),
- Miembro del Comité de acreditación de Facultades de Agricultura, Forestación y recursos naturales (MERCOSUR – Brasil, Uruguay, Paraguay and Argentina, más Bolivia and Chile).
- Miembro de otros Comités Consultivos.

ACTIVIDAD EN REVISTAS CIENTÍFICAS

- Associated Editor J. of Soil and Water Conservation Society, EE.UU. (2007-2015).
- Associated Editor revista Phytton, (2011-) (Argentina/ EE.UU)
- Editor Asociado revista Agronomía y Ambiente (2012-).
- Miembro del Editorial Board of varias Conferencias y Congresos
- Reviewer de múltiples revistas
- Creador de Ciencia del Suelo y primer Editor (1982-1989).

PUBLICACIONES

En revistas incluidas en el Science Citation Index (ordenadaspor temas)

Presencia y efectos de elementos tóxicos (metales pesados y otros) en suelos, cultivos y microorganismos. Fitorremediación.

1. Spagnoletti F.N, M. Carmona, K. Balestrasse, V. Chiocchio, R. Giacometti, R.S. Lavado. 2021. Arbuscular mycorrhiza *Rhizophagus intraradices* can reduce root rot caused by *Fusarium pseudograminearum* in wheat. *Rhizosphere*. 19: doi.org/10.1016/j.rhisph.2021.100369
2. Ureta Suelgaray, F.J., D.M. Aguilar Beltramo, R.S. Lavado, V.M. Chiocchio. Dark Septate Endophytes (DSE): potential promoters of bioremediation of oil derivatives. *International J. of Phytoremediation* (en prensa).
3. Ureta Suelgaray F.J., D.M. Aguilar Beltramo, R.S. Lavado, V.M. Chiocchio. 2020. Dark Septate Endophytes (DSE) fungi: potential promoters of bioremediation of oil derivatives. Submitted to *International microbiology*.
4. Ferreyroa, G. V., J. Gelma, M. D. Sosa, M.A. Orellana Benítez, M. B. Tudino, R.S. Lavado and F. V. Molina. 2018. *Brassica napus* growth in lead polluted soil: bioaccumulation in plant organs at different ontogenetic stages and speciation in soil. *Water, Air, and Soil Pollution*. 229: 213-224.
5. Bustingorri, C., G. Noriega, R. S. Lavado and K. Balestrasse. 2017. Protective effect exerted by soil phosphorus on soybean subjected to arsenic and fluoride. *Redox Report*, 22: 352-360
6. Ferreyroa, G.V., M.G. Lagorio, M.A. Trinelli, R.S. Lavado, F.V. Molina. 2017. Lead effects on *Brassica napus* photosynthetic organs. *Ecotoxicology and Environmental Safety*.140: 123–130
7. Spagnoletti, F., Carmona, M., Tobar Gómez, N.E., Chiocchio, V, Lavado, R.S. 2017. Arbuscular mycorrhiza reduces the negative effects of *M. phaseolina* on soybean plants in arsenic-contaminated soils. *Journal: Applied Soil Ecology* 121: 41-47.
8. Spagnoletti, F.N., K. Balestrasse, R.S. Lavado and R. Giacometti. 2016. Arbuscular mycorrhiza detoxifying response against arsenic and pathogenic fungus in soybean. *Ecotoxicology and Environmental Safety*. 133: 47-56
9. Bustingorri, C. and R.S. Lavado. 2015. Soybean as affected by high concentrations of arsenic and fluoride in irrigation water in controlled conditions. *Agricultural Water Management*. 144: 134-139
10. Ferreyroa, G.V., A. C. Montenegro, M.B. Tudino, R.S. Lavado and F.V. Molina. 2015, Time evolution of Pb (II) speciation in Pampa soil fractions. *Chemical Speciation and Bioavailability*. 26 (4): 210-218
11. Spagnoletti, F., Lavado, R.S. 2015. The arbuscular mycorrhiza *Rhizophagus intraradices* reduces the negative effects of arsenic on soybean plants. *Agronomy* 5: 188-199.

12. Montenegro, A. C, G.V. Ferreyroa, M.E. Parolo, M.B. Tudino, R.S. Lavado and F.V. Molina. 2015. Copper speciation in soil: time evolution and effect of clay amendment. *Water, Air, & Soil Pollution* 226: 293-303
13. Spagnoletti, F.; Tobar, N.; Chiochio, V.; Lavado, R.S. 2015. Mycorrhizal inoculation and high arsenic concentrations in the soil increase the survival of soybean plants subjected to strong water stress. *Communication in Soil Science and Plant Analysis*. 46: 2837-2846
14. Bustingorri, C. K. Balestrasse and R.S. Lavado. 2015. Effects of high arsenic and fluoride soil concentrations on soybean plants. *Phyton*, 84: 407-415.
15. Orroño, D.I., V. Schindler, R.S. Lavado. 2012. Heavy metal availability in *Pelargonium hortorum* rhizosphere: interactions, uptake and plant accumulation. *Journal of Plant Nutrition* 35: 1374-1386.
16. Zubillaga, M.S., E. Bressan, and R. S. Lavado. 2012. Effects of phytoremediation and application of organic amendment on the mobility of heavy metals in a polluted soil profile. *International Journal of Phytoremediation* 14 (3), 212-220.
17. Orroño D.I. and R. S. Lavado. 2011. Heavy metal accumulation in geranium (*Pelargonium hortorum*) and effects on growth and quality of plants. *Agrochimica LV* (2): 116-128
18. Orroño D.I. y R. S. Lavado. 2009. Heavy metal accumulation in *Pelargonium hortorum*: effects on growth and development. *Phyton* 78: 4-11
19. Orroño, D.; H. Benítez and R.S. Lavado. 2009. Effects of heavy metals in soils on biomass production and plant element accumulation of *Pelargonium* and *Chrysanthemum* species. *Agrochimica* 53: 168-176.
20. Orroño, D.I. and R. S. Lavado. 2009. Distribution of extractable Heavy Metals in different Soil Fractions. *Chemical Speciation and Bioavailability*. 21: 193-198.
21. Torri, S. I. and Lavado, R.S. 2008. Dynamics of Cd, Cu and Pb added to soil through different kinds of sewage sludge. *Journal of Waste Management* 28: 831-842.
22. Zubillaga M. S. and R. S. Lavado. 2008. Accumulation and movement of four potentially toxic elements in soils throughout five years, during and after biosolid application. *American J. of Environmental Sciences* 4(6): 576-582.
23. Zubillaga, M.S., E. Bressan and R.S. Lavado. 2008. Heavy metal mobility in polluted soils: effect of different treatments. *American Journal of Environmental Sciences* 4(6): 620-624.
24. Lavado R.S., M. Rodríguez, R. Alvarez, M.A. Taboada and M.S. Zubillaga. 2007. Transfer of potentially toxic elements from biosolid-treated soils to maize and wheat crops. *Agriculture, Ecosystems & Environment* 118: 312-318.
25. Lavado, R.S. 2006. Concentration of Potentially Toxic Elements in field crops grown near or far from cities of the Pampas (Argentina) *Journal of Environmental Management*. 80: 116-119.
26. Lavado, R.S., M. B. Rodríguez and M. A. Taboada. 2005. Treatment with biosolids affects soil availability and plant uptake of potentially toxic elements. *Agriculture, Ecosystems & Environment* 109: 360-364
27. Lavado, R.S., M.S. Zubillaga, R. Alvarez and M.A. Taboada. 2004. Baseline levels of potentially toxic elements in pampas soils. *Soil & Sediment Contamination : an International Journal*, 13 (5): 329-339.

28. Zubillaga M.S. and R.S. Lavado. 2002. Heavy metal content in lettuce plants grown in biosolids compost. 2001. *Compost Sci. & Utilization* 10 (4): 363-367
29. Lavado, R.S, C.A. Porcelli and R. Álvarez. 2001. Nutrient and heavy metal concentration and distribution in corn, soybean and wheat as affected by different tillage systems in the Argentine Pampas. *Soil & Tillage Res.* 62: 55-60.
30. Lavado R.S. and C.A. Porcelli. 2000. Contents and main fractions of trace elements in Typic Argiudolls of the Argentinean Pampas. *Chemical Speciation and Bioavailability.* 12(2): 67-70.
31. Lavado, R.S., M.B. Rodríguez, J.D. Scheiner, M.A. Taboada, G. Rubio, R. Alvarez, M. Alconada and M.S. Zubillaga. 1998. Heavy metals in soils of Argentina: Comparison between urban and agricultural soils. *Communications in Soil Science and Plant Analysis* 29: 1913-1917.
32. Troiani, R.M.; Sanchez, T.M. and Lavado, R.S. 1987. Soil response and alfalfa fluoride content as affected by irrigation water. *Fluoride* 20 (1): 14-17.
33. Lavado, R.S. and Reinaudi, N.B. 1986. Wind-blown dust from salty areas as a source of fluoride for plants. *Fluoride* 19(1): 14-18.
34. Lavado, R.S. and Reinaudi, N.B. 1985. "Fluoride distribution in two salt affected soils". *Fluoride* 18(1): 36-40.
35. Lavado, R.S. and Reinaudi, N.B. 1983. Fluoride retention and leach possibility in Argentina salt-affected soils. *Fluoride* 16(4): 247-251.
36. Lavado, R.S. and Reinaudi, N.B. 1979. Fluoride in salt-affected soils of La Pampa (Rep. Argentina). *Fluoride* 12(1): 28-32.
37. Lavado, R.S.; González Quintana, J.A. and Hevia, G. 1978. Content and distribution of lithium in La Pampa soils. *Communications in Soil Sci. and Plant Analysis* 9(4): 299-319.

Ciclo de la materia orgánica del suelo. Usos de biosólidos y otros residuos orgánicos. Compostaje.

1. Rimski-Korsakov, H., C.A. Alvarez and R.S. Lavado. 2015. Cover crops in the agricultural systems of the Argentine Pampas. *Journal of Soil and Water Conservation*, 70 (6): 112A-118A
2. Pagani, A., Molinari, J., Lavado, R.S.; Di Benedetto, A. 2015. Behavior of *Impatiens wallerana* Hook. *F* in alternative pot substrates: mechanisms involved and research perspectives. *Journal of Plant Nutrition*, 38: 2185-2203.
3. Giubergia, J.P., E. Martellotto. R.S. Lavado. 2013. Complementary irrigation and direct drilling have little effect on soil organic carbon content in semiarid Argentina, *Soil and Tillage Research* 134: 147-152.
4. Thibaud J., T. Mc. Loughlin, A. Pagani, R.S. Lavado and A, Di Benedetto. 2012. Alternative substrates and fertilization routine relationships for bedding pot plants: *Impatiens wallerana*. *European Journal of Horticultural Science* 77: 182-191
5. Torri, S.I. and R. S. Lavado. 2009. Plant absorption of trace elements in sludge amended soils and correlation with soil chemical speciation. *Journal of Hazardous Materials* 166: 1469-1465.
6. Torri, S.I. and R. S. Lavado. 2008. Zinc distribution in soils amended with different kinds of sewage sludge. *Journal of Environmental Management.* 88: 1371-1379

7. Marchese, N., Di Benedetto, A., Lavado, R.S. 2006. The possibilities of river waste and Argentinean peat as a plug growing media for *Verbena x hybrida*. *International Journal of Agricultural Research* 1(2) 142-150.
8. Lavado, R.S. 2006. Effects of sewage sludge application on soils and sunflower yield: quality and toxic element accumulation. *Journal of Plant Nutrition* 29: 975-984.
9. Zubillaga M.S. and R S Lavado. 2006. Phytotoxicity of biosolid compost of different maturity degree compared with biosolids and animal manures. *Compost Sci. and Utilization*. 14 (4): 267-270.
10. Rodríguez, M.B. and R.S. Lavado. 2004. Uptake and distribution of trace elements by soybean from a physically degraded soil treated with biosolids. *Agrochimica*. 48: (1-2): 1-10.
11. Zubillaga M.S. and R. S. Lavado. 2003. Stability Indexes of Sewage Sludge Compost Obtained with Different Proportion of a Bulking Agent. *Comm. Soil Sci. And Plant Analysis* 34: 581-591.
12. Torri, S., R. Alvarez, R. Lavado. 2003. Mineralization of carbon from Sewage Sludge in three soils of the Argentine Pampas. *Comm. Soil Sci. and Plant Analysis*. 34: 2035-2043.
13. Zubillaga, M.S. and R.S. Lavado. 2001. Biosolids compost as component of potting media for bedding plants. *Gartenbauwissenschaft* 66(6): 304-309.
14. Álvarez, R., M. Alconada, R.S. Lavado. 1999. Sewage sludge effects on carbon dioxide-carbon production from a desurfaced soil. *Communications in Soil Science and Plant Analysis* 30: 1861-1866.
15. Álvarez, R. and R.S. Lavado. 1998. Climate, organic matter and clay content relationships in the Pampa and Chaco soils. *Geoderma* 83: 127-141.
16. Álvarez, C.R.; R. Álvarez; M.S. Grigera and R.S. Lavado. 1998. Associations between organic matter fractions and the active microbial biomass. *Soil Biology and Biochemistry* 30: 767-773.

Dinámica del nitrógeno, efectos de los fertilizantes, pérdidas de amoníaco y lixiviación de nitratos.

1. Pescie, M.A., M. Fradkin, R.S. Lavado and V.M. Chiocchio. Endophytic fungi in blueberry varieties, in three production areas of Argentina. *Physiological and Molecular Plant Pathology* (en prensa).
2. Pescie, M.A., M.P. Borda, D.P. Ortiz, M.R. Landriscini, R.S. Lavado. 2018. Absorption, distribution and accumulation of nitrogen applied at different phenological stages in southern highbush blueberry (*Vaccinium corymbosum* interspecific hybrid). *Scientia Horticulturae* 230: 11-17
3. Rimski-Korsakov, H, M.S. Zubillaga, M.R. Landriscini and R.S. Lavado. 2016. Maize and cover crop sequence in the Pampas: effect of fertilization and water stress on the fate of nitrogen. *J. of Soil and Water Conservation*, 71:12-20
4. San Martino, L., San Martino, S., Lavado, R.S. 2014. Soil Nitrate Profiles and the Risk of Nitrate Leaching in Sweet Cherry Orchards Subjected to Different Management Schemes. *International Journal of Fruit Science*. 14 (4): 424-436
5. Rimski-Korsakov H, Rubio G, Lavado RS. 2012. Fate of the nitrogen from fertilizers in field-grown maize. *Nutrient Cycling in Agroecosystems* 93: 253-263.
6. San Martino, L., G. O. Sozzi, S. San Martino and R. S. Lavado. 2010. Isotopically labelled nitrogen uptake and partitioning in sweet cherry as influenced by timing of fertilizer application. *Scientia Horticulturae*. 126: 42-49.

7. Rubio, G, Gutiérrez Boem F.H. and Lavado, R.S. 2010. Responses of C3 and C4 grasses to application of nitrogen and phosphorus fertilizer at two dates in the spring. *Grass and Forage Science* 65: 102-109
8. Rimski-Korsakov, H., G. Rubio and R.S. Lavado. 2009. Effect of the water stress in the maize crop production and nitrogen fate. *Journal of Plant Nutrition* 32: 565- 578.
9. Delgado J.A., M. Shaffer, C. Hu, R. Lavado, J. Cueto-Wong, P. Joosse, D. Sotomayor, W. Colon, R. Follett, S. DelGrosso, S, X. Li and H. Rimski-Korsakov. 2008. An index approach to assess nitrogen losses to the environment. *Ecological Engineering* 32: 108-120.
10. Civeira, G. and R.S. Lavado. 2008. Nitrate losses, nutrients and heavy metal accumulation from substrates assembled for urban soils reconstruction. *Journal of Environmental Management* 88: 1619-1623
11. Rodriguez, M.B., A. Godeas and R.S. Lavado. 2008. Soil acidity changes in bulk soil and maize rhizosphere in response to nitrogen fertilization. *Communication in Soil Science and Plant Analysis* 39: 2597-2607
12. Chavez, W., A. Di Benedetto, G. Civeira and R.S. Lavado. 2008. Alternative soilless media for growing *Petunia x hybrida* and *Impatiens wallerana*: physical behavior, effect of fertilization and nitrate losses. *Bioresource Technology* 99: 8082-8087
13. Alvarez, C, H. Rimski-Korsakov, P. Prystupa and R. S. Lavado. 2007. Nitrogen dynamics and losses in direct drilled maize systems. *Communication in Soil Science and Plant Analysis* 38: 1-15.
14. Delgado, JA; Shaffer, M; Hu, CGS; Lavado, RS; Wong, JC; Joosse, P; Li, XX; Rimski-Korsakov, H; Follett, R; Colon, W; Sotomayor, D. 2006. A decade of change in nutrient management: A new nitrogen index. *Journal of Soil and Water Conservation*, 61 (2): 62-75.
15. Zubillaga, M.S., H. Rimski-Korsakov, G. Travería and R.S. Lavado. 2005. Ammonia volatilization from different organic amendments during storage and after land application. *Agrochimica* 49 (5-6) 169-174.
16. Gutiérrez-Boem, F.H., J.D. Scheiner, H. Rimski-Korsakov and R.S. Lavado. 2004. Late season nitrogen fertilization of soybeans: effects on leaf senescence, yield and environment. *Nutrient Cycling in Agroecosystems* 68:109-115.
17. Rimski-Korsakov, H., G. Rubio and R. S. Lavado. 2004. Potential losses of nitrate by leaching in soils of the Pampas Argentina. *Agricultural Water management* 65: 83-94.
18. Rodríguez, M.B.; L. Maggi; M. Etchepareborda, M.A. Taboada y R.S. Lavado. 2003. Nitrogen availability for maize from a Rolling Pampa soil after addition of biosolids. *Journal of Plant Nutrition* 26: 431-441.
19. Scheiner, J.D., F.H. Gutierrez Boem & R.S. Lavado. 2002. Sunflower nitrogen requirement and 15N fertilizer recovery in Western Pampas, Argentina. *European Journal of Agronomy* 17 (1): 73-79.
20. Zubillaga, M.S., M.M. Zubillaga, S. Urricariet, R.S. Lavado. 2002. Effect of nitrogen sources on ammonia volatilization, grain yield and soil nitrogen losses in no-till wheat in an Argentine soil. *Agrochimica*, 46 (3-4): 100-107
21. Chaneton, E.J., J.H. Lemcoff and R.S. Lavado. 1996. Nitrogen and phosphorus cycling in grazed and ungrazed plots of a temperate subhumid grassland in Argentina. *Journal of Applied Ecology* 33: 291-302.

22. Rubio, G. and R.S. Lavado. 1994. Non-exchangeable ammonium behavior of a grassland soil of the Flooding Pampa under water logging Communications in Soil Science and Plant Analysis 25(13-14): 2455-2465.
23. Cairns, R.R.; Lavado, R.S. and Webster, G.R. 1980. Calcium nitrate compared with ammonium nitrate as a fertilizer and amendment for solonchic soils. Canadian J. Soil Science. 60: 587-589.

Uso de fertilizantes. Nutrientes en la sostenibilidad de la agricultura y la ganadería.

1. Spagnoletti, F. N, Cornero, M., Chiocchio, V., Lavado, R. S. and Roberts. I. N. 2019. Arbuscular mycorrhiza protects soybean plants against *Macrophomina phaseolina* even under nitrogen fertilization. European Journal of Plant Pathology. doi.org/10.1007/s10658-020-01934-w
2. Spagnoletti, F.N., M. Leiva, V. M. Chiocchio and R.S. Lavado, 2018. Phosphorous fertilization reduces the severity of charcoal rot (*Macrophomina phaseolina*) and the arbuscular mycorrhizal protection in soybean. Journal of Plant Nutrition and Soil Science.
3. Barresi, O., Chiocchio, V.M., Lavado, R.S. 2018. Changes in soil phosphorus fractions caused by cropping without nutrient reposition. A case study. Phyton 87 (2): 14-17
4. Spagnoletti, F.N., Tobar, N.E., Fernández Di Pardo, A., Chiocchio, V.M., Lavado, R.S. 2017. Dark septate endophytes present different potential to solubilize calcium, iron and aluminum phosphates. Applied Soil Ecology.111: 26-32
5. Miretti, M.C.; Imhoff, S.; Pires da Silva, A.; Lavado, R.S. 2010. Soil structure degradation in patches of alfalfa fields in Santa Fe – Argentina. Scientia Agricola, 67: 604-610.
6. Lavado, R.S., M. A. Taboada. 2009. The Argentinean Pampas: A key region with a negative nutrient balance and soil degradation needs better nutrient management and conservation programs to sustain its future viability as a world agresource. J. of Soil and Water Conservation 64(5):150A-153A.
7. Urricariet, S.; R.S. Lavado and L. Martín. 2004. Corn Response to Fertilization and SR, DRIS and PASS Interpretation of Leaf and Grain Analysis. Communication in Soil Science and Plant Analysis 35 (3-4) 413-425.
8. Scheiner, J.D., F.H. Gutierrez Boem, R.S. Lavado. 2000. Root growth and phosphorus uptake in wide and narrow-row soybeans. Journal of Plant Nutrition, 23 (9): 1241-1249.
9. Rubio, G. and Lavado, R.S. 1999. Acquisition and allocation of resources in two water logging-tolerant grasses. New Phytologist. 143: 539-546.
10. Maddonni, G.A., S. Urricariet, C.M. Ghersa and R.S. Lavado. 1999. Assessing soil quality with soil properties and maize crop in the Rolling Pampa. Agronomy Journal 91: 280-287.
11. Lavado, R.S, C.A. Porcelli and R. Álvarez. 1999. Concentration and distribution of extractable elements in a soil as affected by tillage and fertilization. The Science of the Total Environment 232: 185-191.
12. Scheiner, J.D. and R.S. Lavado. 1999. Soil water content, absorption of nutrient elements, and responses to fertilization of sunflower: a case study. Journal of Plant Nutrition 22(2): 369-377.

13. Taboada, M.A.; R.S. Lavado; H. Svartz and A.M.I. Segat. 1999. Structural stability changes in a grazed grassland Natraquoll of the Flooding Pampa (Argentina). *Wetlands* 19: 50-55.
14. Taboada, M.A., F.G. Micucci, D.J. Cosentino and R. S. Lavado. 1998. Comparison of compaction induced by conventional and zero tillage in two soils of the Rolling Pampa of Argentina. *Soils and Tillage Research* 49: 57-63.
15. Taboada, M.A.; G. Rubio and R.S. Lavado. 1998. The deterioration of tall Wheatgrass pastures in saline sodic soils. *Journal of Range Management* 51(2): 241-246.
16. Rodriguez, D., M.M. Zubillaga, E.D. Ploschuk, W.G. Keltjens, J. Goudriaan and R.S. Lavado. 1998. Leaf area expansion and assimilate production in sunflower (*Heliantus annuus* L.) growing under low phosphorus conditions. *Plant and Soil* 202: 133-147.
17. Scheiner J.D. and R.S. Lavado. 1998. The role of fertilization on phosphorus stratification in non-tilled soils. *Communications in Soil Science and Plant Analysis* 29: 2705-2711.
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19. Chaneton, E.J. and R.S. Lavado. 1996. Soil nutrients and salinity after long-term exclusion in a Flooding Pampa grassland. *Journal of Range Management* 49: 182-187.
20. Lavado, R.S.; J.O. Sierra and P.N. Hashimoto. 1996. Impact of grazing on soil nutrients in a pampean grassland. *J. of Range Management* 49: 452-457
21. Rubio, G.; Lavado, R.S.; Rendina, A.; Bargiela, M.; Porcelli, C.A. and de Iorio, A.F. 1995. Effect of water logging on organic phosphorus fractions in a toposequence of soils. *Wetlands* 15 (4): 386-391.
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23. Urricariet, S., M.S. Zubillaga, M.M. Zubillaga and Lavado, R.S. 1995. Nitrogen, phosphorus and potassium uptake for two rapeseed cultivars in an Argentinean soil. *Journal of Plant Nutrition* 18 (2): 305-315.
24. Rubio, G.; Casasola, G. and Lavado, R.S. 1995. Adaptations and biomass production of two grasses in response to water logging and soil nutrients enrichment *Oecologia* 102 (1): 102-105
25. Lavado, R.S. and Alconada, M. 1994. Soil properties behavior on grazed and ungrazed plots of a grassland sodic soil. *Soil Technology* 7(1): 75-81.
25. Alconada, M.; Ansin, O.E.; Lavado, R.S.; Deregibus V.A.; Rubio, G. and Gutiérrez, F.H. 1993. "Effect of run-off water retention and grazing on soil and vegetation characteristics of a temperate humid grassland. *Agricultural Water Management* 23(3): 233-246.
26. Taboada, M.A. and Lavado R.S. 1993. Influence of cattle trampling on soil porosity under alternate dry and ponded conditions. *Soil Use and Management* 9: 139-143.
27. Dreccer, M.F. and Lavado, R.S. 1993. "Influence of cattle trampling on the preferential flow paths in alkaline soils" *Soil Use and Management* 9: 143-148.
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Otros efectos antrópicos en suelo y cultivo: salinidad.

1. Hopmans, J.W., A. S. Qureshi, I. Kisekka, R. Munns, S.R. Grattan, P. Rengasamy, A. Ben-Gal, S. Assouline, M. Javaux, P.S. Minhas, P.A.C. Raats, T. Skaggs, G. Wang, Q. De Jong van Lier, H. Jiao, R.S. Lavado, N. Lazarovitch, B. Li, and E. Taleisnik. 2021. Critical Knowledge Gaps and Research Priorities in Global Soil Salinity. *Advances in Agronomy*. En prensa.
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Trabajos científicos: 44

Trabajos técnicos: 26

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1. Taleisnik, E. and R.S. Lavado. 2020. *Saline and Alkaline Soils in Latin America - Natural Resources, management and Productive Alternatives*. Springer Nature. In press. ISBN 978-3-030-52592-7

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1. Rodríguez, D.M., Schulz, G.A., Tenti Vuegen, L.M., Angelini, M.E., Olmedo, G.F., Lavado, R.S. 2020. Salt-affected soils in Argentina. En: *FAO Global Status of Salt-Affected Soils*. FAO, Rome, 2021.
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 8. Spagnoletti, F. N., V. M. Chiocchio, R. S. Lavado. 2017. Mycorrhizal Inoculation Improves the Performance of Soybean Subjected to Biotic and Abiotic Stresses. In "Soybeans: Cultivation, Nutritional Properties and Effects on Health". (Ed) Bruce Fletcher. Nova Science Publishers, Inc., Hauppauge, NY 11788. 85-118 pp. 276p.
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Libros y capítulos de libros de edición nacional, en español:

Libros: 10

Capítulos: 35

SUBSIDIOS PARA PROYECTOS DE INVESTIGACIÓN

CONICET: 16.
UBACyT: 15.
ANPCyT): 3
CIC Pvia. Bs. As.: 8
Otros: 2

PROYECTOS TECNOLOGICOS CON EMPRESAS

NIDERA (2), MALTEUROP, AGUAS ARGENTINAS (2), ENRESS, AGUAS ANDINAS (Chile), PROINDER, BUNGE

Los proyectos con Aguas Argentinas fueron los más importantes que recibió la Facultad durante varios años.

PARTICIPATION IN INTERNATIONAL PROJECTS

Proyecto con la Universidad de Iquique, Chile.

Miembro del the international network for the development of the NLEAP model, with headquarter in the University of Colorado and USDA.

Otros.

CONSULTORÍA

Varios informes desde 1990. Algunos presentados también oralmente

OTRAS ACTIVIDADES

Asistencia a congresos y talleres

- Local Congress and workshops: 55
- International Congresses and workshops abroad: 33

Premios

- Premio a la investigación Científica y Tecnológica de la U.B.A., durante los años que tuvo lugar (1992- 1995).
- Integrante del grupo seleccionado por unanimidad como ganador del Premio Vilfrid Baron 1993-95, Academia Nacional de Agronomía y Veterinaria.
- Designado Socio Honorario de la Asociación Argentina de la Ciencia del Suelo (2014).
- Nominado para el XVII premio a la Excelencia Agropecuaria (2019)
- Ganador del Premio “Andrés Aguilar Santelises”, Sociedad Latinoamericana de la Ciencia del Suelo (2019).
- Programa de Incentivo a los Docentes Investigadores, de la Secretaría de Políticas Universitarias del Ministerio de Cultura y Educación.
- Categorizado en clase A, 1994-1995, en clase I, de 1998 a 2010.

ACTIVIDADES ACADEMICAS

Cursos de grado y posgrado: Numerosos cursos y clases de graduados entre 1973 to 2012 y cursos y clases de posgrados desde 1986 al presente.

DIRECTOR DE TESIS DE POSGRADO

Maestría.

1. Margarita Alconada (1991).
2. Miguel A. Taboada (1991).

3. Flavio H. Gutiérrez Boem (1995).
4. Carina R. Álvarez (1998).
5. Javier D. Scheiner (1999).
6. Alicia S. Urricariet (2000).
7. Silvana I. Torri (2001).
8. Gabriela Civeira (2006).
9. Enrique Alberto Frusso (2013).
10. Juan Pablo Giubergia (2013).
11. Osvaldo Barresi (2020).
12. Fernando J. Ureta Suelgaray (in progress).

Doctorados.

1. Gerardo Rubio (1997).
2. Mónica B. Rodríguez (2006).
3. Liliana San Martino (2010).
4. Daniela I. Orroño (2011).
5. Marta S. Zubillaga (2011).
6. Helena Rinski-Korsakov (2014).
7. Federico Spagnoletti (2016).
8. Gisele Ferreyroa (2016).
9. Maria Angeles Pescie (2020)
10. Marcos A. Orellana Benítez (in progress)

Postdoctorales:

1. Andrea Montenegro (2011)