

Academic Personnel Services Unit (APSU) Biography Form

TO BE FILLED OUT BY DEPARTMENT AP

Department: Botany and Plant Science	Position Title (include Rank and Step): Adjunct Professor
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TO BE FILLED OUT BY THE EMPLOYEE

Last Name, First Name and Middle Initial (exactly as it appears on your Passport or Social Security Card): Ferreira, Jorge FS			
Business/School E-mail: Jorge.Ferreira@usda.gov		Personal E-mail:	
Current Address, City, State, and Zip Code: 759 Hacienda Dr., Riverside, CA 92507		Permanent/Foreign Address, City/Province, State/Country, and Zip/Postal Code: N/A	
Business/School Phone Number:		Preferred Phone Number: (951) 522-4892	
US Citizen: <input checked="" type="checkbox"/> Yes or <input type="checkbox"/> No Birthdate:		Visa Type:	Visa Expiration:
Do you have any family members employed by UCR? <input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No		Name:	Relationship: Department:

Educational Background: Please list in chronological order, beginning with the most recent degree first.

Degree	Date Awarded (MM/DD/YYYY)	Institution: Purdue University
Ph.D.	12/17/1994	Specialization: Plant Physiology and Biochemistry
Degree	Date Awarded (MM/DD/YYYY)	Institution: Universidade Federal de Lavras (Lavras, MG, Brazil)
MS	1985	Specialization: Agronomy (Tropical Fruticulture with a thesis on citrus propagation)

Previous Applicable Employment: Please show a full account of your time from the date of your first academic employment up to the present with most recent position first. **Please include all previous UC experience.** If needed, please insert more rows, or attach an additional page.

Dates (MM/DD/YYYY)	Institution, Organization and Location	Rank, Title or Position
FROM: 2002 TO: 2003	Southern Illinois University	Assistant professor
FROM: TO:		
FROM: TO:		

Research Specialization: Current (from 2012 on): physiological, ionic, and biochemical responses of crops to salinity stress. Past (previous to 2012): physiology, biochemistry and chromatographic method development for medicinal plants. Alternative control of parasitic gastrointestinal parasites in vitro and in small ruminants (sheep and goats), poultry, and laboratory animals (rats and gerbils).

Signature JORGE FERREIRA	Digitally signed by JORGE FERREIRA Date: 2023.06.29 12:45:44 -07'00'	Date 06/29/2023
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Biographical Sketch

JORGE F.S. FERREIRA, US Salinity Lab (USDA-ARS), 450 W Big Springs Rd., Riverside, CA
Research Plant Physiologist, Email: jorge.ferreira@ars.usda.gov Tel.-(951)369-4830

a) **Bio:** Born in Belém, Pará, Brazil on May 25, 1960

b) **Educational Background:**

1979 – 1983 Faculdade de Ciências Agrárias do Pará (FCAP), Belém, Pará, Brazil. Bachelor of Science In Agricultural Engineer awarded in 1983

1983 - 1985 Escola Superior de Agricultura de Lavras (ESAL), Lavras, MG, Brazil. Major in Plant Physiology, Master's Degree (MS) awarded in 1985. Thesis: *Effect of pruning on the production of budsticks from the spring growth flush of Citrus sp.*

1989 – 1994 Purdue University, West Lafayette, IN, USA. Major in Plant Physiology and Biochemistry; Ph.D. awarded in 1994. Thesis: *Production and detection of artemisinin (qinghaosu) in Artemisia annua L.*

1994 - Purdue University. Post-doctoral associate.

1995 – 1998 - USDA-ARS/Jamie Whitten Weed Science Laboratory, Stoneville, MS. Post-doctoral associate. Published 4 manuscripts.

c) **Research/work Experience**

1983 – 1985 Propagation and physiology of propagules (buds) from *Citrus* spp. Universidade Federal de Lavras. Lavras, Minas Gerais, Brazil. (M.S. work).

1990 - 1994 Propagation and micropropagation of medicinal and horticultural plants, extraction, purification, and analysis of plant metabolites (artemisinin, ethylene). Purdue University (Ph.D. work).

1994 Post-doctoral research associate. Purdue University. Hormonal and morphological aspects of artemisinin production in *Artemisia annua*. Purdue University.

1995 – 1998 Post-doctoral Research Associate. USDA-ARS (Jamie Whitten Research Center), Mississippi, USA. Control of coca plants (*Erythroxylum coca* and *E. novogranatense*) with glyphosate. Localization of tropane alkaloid in tissues and cells of coca plants. Morphological study (SEM) of trichomes in flowers of *Artemisia annua* wild-type and mutant biotypes, and of coca plant flowers (SEM) for species identification.

1998 – 2002 Research Scientist for Aventis/Bayer CropSciences in the areas of residue chemistry and plant metabolism. Extraction, purification, analysis, and profiling of agrochemical residual compounds from plant and animal matrices.

2002 – 2003 Assistant Professor in plant biology and phytochemistry at Southern Illinois University. Production and analysis of artemisinin from *Artemisia annua*, ginsenosides from *Panax quinquefolium*, and biological activity of compounds from liverworts (*Radula* sp., *Blasia* sp., and *Pallavicinia* sp.), and *Lespedeza cuneata*.

2003 – 2012 Research Scientist, Ph.D., for the USDA-ARS/ Appalachian Farming Systems Research Center working on improving small ruminant health and gastro intestinal parasite control in a meat goat production system with alternative forages and medicinal plants rich in bioactive secondary metabolites (e.g., sesquiterpenes, tannins, flavonoids).

2012 – Present Research Plant Physiologist, Ph.D. for the US Salinity Laboratory (USDA-ARS).

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d) Professional affiliations and services

2000-on –Founding/Current Member for ACMAP (American Council for Medicinally-Active Plants)

2010-2012 – Editorial Board Member of Phytochemical Analysis

2014-on – Editorial Board Member for AGRIAMBI (Brazilian Journal for Agricultural and Environmental Engineering).

2017-2018 – Academic Guest Editor for the journal **Agriculture**, special issue on **Response and Tolerance of Agricultural Crops to Salinity Stress**

2018-on – International Society of Horticultural Sciences

2000-on – American Chemical Society

e) Honors, Awards, and Grants:

1. \$20,000.00 for a MS degree sponsored by the National Program for Academic Tutoring Improvement (CAPES/PICD) (1983-1985).
2. \$100,000.00 for a Ph.D.degree fellowship by the Brazilian National Center for Research Development (CNPq) (1989-1993).
3. \$ 12,000.00 by the Purdue University New Crops Program for graduate studies, and \$ 10,000.00 for a six-month post-doctoral program.
4. \$ 1,500.00 on the 2003 competition of the Undergrad Research/Creative Activity Award to guide an undergraduate with the project: *Antimicrobial activity of liverwort extracts*.
5. \$13,000.00 (SIU-Carbondale) for training an undergraduate student on *laboratory research in phytochemistry (medicinal plants)* 20 hours a week. Job Posting # 199 (2003 – 2004).
6. Expert Advisor for the USAID: the cultivation of *A. annua* in Kenya and Tanzania and for artemisinin production (2004) and as evaluator of medicinal plant projects irrigated with recycled water supervised by ICARDA (Tunis) in Tunisia (2004 and 2006).
7. Co-PI on a \$1,400.00 grant (Life Science Discovery Fund) for the study of artemisinin as an anti-cancer drug and the use of *Artemisia annua* to control coccidial parasites in poultry with University of Washington, Seattle, WA (2010-2013).
8. Co-PI on a CDFA \$298,062 grant with UC Davis and USDA colleagues on Decision Support Tools for Spatiotemporal Integration of Citrus Virtual Orchard and Soil Sensing (2018).
9. Co-PI in a US\$193,400 grant for a 2-year research project to understand genetic and physiologic basis of almond rootstocks to salinity (July 2016-June 2018).
10. Co-PI on an AMR/ATA \$82,740 project entitled “Dissemination of Anthropogenically Induced Antibiotic Resistance in Agricultural Environments” (2019)
11. Co-PI on an Almond Board of California Year 3 (2018/19) for \$108,150 on “Linking performance of almond rootstocks to underlying physiological and genetic

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determinants of salinity tolerance”.

12. Co-PI Almond Board of California; 218,230 (2020-2023).

13. Co-PI on a USDA,NIFA,AFRI US\$ 996,323.00 project grant on Dissemination and Risk of Anthropogenically Induced Antimicrobial Resistance in the Agricultural Environment in collaboration with UC Riverside. USDA to receive US\$487,329.00.

***Ad hoc* reviewer for several scientific journals, including but not limited to:**

- Journal of Industrial Crops and Products
- Journal of Herbs, Spices, and Medicinal Plants
- Journal of Chemical Ecology
- Current Science
- Journal of Agricultural and Food Chemistry.
- Journal of Allelopathy.
- International Journal of Plant Sciences.
- SBIR-USDA (Small Business Innovation Research Program – USDA).
- Merit reviewer for grant proposals submitted to the USDA- ARS.
- Bioresource Technology.
- Israel Journal of Plant Sciences.
- WOTRO (The Netherlands Foundation for the Advancement of Tropical Research).
- Veterinary Parasitology
- Journal of Agricultural and Food Chemistry (ACS)
- Molecules (MDPI)
- Agriculture (MDPI)
- Biomedical Chromatography
- Journal of Ethnopharmacology
- Irrigation and Drainage
- Analytical Chemistry
- Plant and Soil
- American Chemical Society Books
- PLOS ONE
- Several others (from Elsevier, Frontiers, ACS, MDPI, etc)

Academic advisory work

Mentoring of graduate students (from 2000-Present):

Advised 22 graduate students (Masters and Doctorate) from Australia, Belgium, Brazil, France, Mozambique, India, and the United States including the Department of Plant Biology (SIU-Carbondale, USA), Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA, USA), Sam Houston University (SHU), TX, and other institutions abroad

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(University de Picardie Jules Verne-UPJV, France; Jawaharlal Nehru Technological University – JNTU), Hyderabad, India; Universidade Estadual Paulista - UEP, Brazil; Universidade Federal do Ceará (UFC, Brazil), Universidade Federal da Paraíba (UFPB, Brazil), University of Ghent, Belgium, and University of West Virginia in Morgantown (UWV).

f) Journal article Publications

Peer-Reviewed Journal Articles

1. **Ferreira, J.F.S.** and Silva, C.R.R.. 1988. Effect of pruning on the production of budsticks from the spring growth flush of citrus (*Citrus* spp). *Ciência e Prática* 12(2):146-157.
2. **Ferreira, J.F.S.**, Charles, D.J., Wood, K.V., Janick, J. and Simon, J.E. 1994. A comparison of gas chromatography and high-performance liquid chromatography for artemisinin analysis. *Phytochemical Analysis* 5:116-120.
3. **Ferreira, J.F.S.**, Simon, J.E., and Janick, J. 1995. Developmental studies of *Artemisia annua*, L.: flowering and artemisinin production under greenhouse and field conditions. *Planta Medica* 61:167-170.
4. **Ferreira, J.F.S.**, Simon, J.E., and Janick, J. 1995. Relationship of artemisinin content of tissue-cultured, greenhouse-grown, and field-grown plants of *Artemisia annua* L. *Planta Medica* 61:351-355.
5. **Ferreira, J.F.S.** and Janick, J. 1995. Floral morphology of *Artemisia annua* with special reference to trichomes. *International Journal of Plant Science* 156:807-815.
6. **Ferreira, J.F.S.** and Janick, J. 1995. Production and detection of artemisinin from *A. annua* L. *Acta Horticulturae* 390:41-49.
7. **Ferreira, J.F.S.** and Janick, J. 1996. Immunoquantitative analysis of artemisinin from *Artemisia annua* using polyclonal antibodies. *Phytochemistry* 41:97-104.
8. **Ferreira, J.F.S.** and Janick, J. 1996. Roots as an enhancing factor for the production of artemisinin in shoot cultures of *Artemisia annua* L. *Plant Cell, Tissue and Organ Culture* 44:211-217.
9. **Ferreira, J.F.S.**, Simon, J.E., and Janick, J. 1997. *Artemisia annua*: Botany, Horticulture, Pharmacology. IN: *Horticultural Reviews*. J. Janick (Ed.) John Wiley & Sons, Inc. Vol. 19:319-371.
10. **Ferreira, J.F.S.**, Smeda, R.J. and Duke, S.O. 1997. Control of coca plants (*Erythroxylum coca* and *E. novogranatense*) with glyphosate. *Weed Science* 45:551-556.
11. **Ferreira, J.F.S.** and Duke, S.O. 1997. Approaches for maximising biosynthesis of medicinal plant secondary metabolites. *AgBiotech News and Information* 9:309N-316N.
12. **Ferreira, J.F.S.**, Duke, S.O. and Vaughn, K.C. 1998. Histochemical and immunocytochemical localization of tropane alkaloids in *Erythroxylum coca* var. *coca* and *E. novogranatense* var. *novogranatense*. *International Journal of Plant Sciences* 159:492-503.

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13. **Ferreira, J.F.S.** and Reddy, K.N. 2000. Absorption and translocation of glyphosate in *Erythroxylum coca* and *E. novogranatense*. *Weed Science* 48:193-199.
14. **Ferreira, J.F.S.** and Janick, J. 2004. Allelopathic effects of *Artemisia* spp. *Journal of Allelopathy* 14(2):167-176.
15. *Corbit, R. M., Ferreira, J.F.S., Ebbs, S.D. and Murphy, L.L.* 2005. Simplified Extraction of Ginsenosides from American Ginseng (*Panax quinquefolius* L.) for High-Performance Liquid Chromatography-Ultraviolet Analysis. *Journal of Agricultural and Food Chemistry*. 53(26):9867-9873.
16. **Ferreira, J.F.S.**, Laughlin, J.C., Delabays, N. and Magalhães, P.M. de. 2005. Cultivation and genetics of *Artemisia annua* L. for increased production of the antimalarial artemisinin. *Plant Genetic Resources* 3(2):206-229.
17. Ritchey, K.D. and **Ferreira, J.F.S.** 2006. Short-term response of *Artemisia annua* to lime, P, K, and N in a dystrophic soil. *Journal of Herbs, Spices and Medicinal Plants*. 12 (1/2): 49-59.
18. *Peng, C.A., Ferreira, J.F.S. and Wood, A.J.* 2006. Direct analysis of artemisinin from *Artemisia annua* L. using high-performance liquid chromatography with evaporative light scattering detector, and gas chromatography with flame ionization detector. *Journal of Chromatography A* 1133:254-258.
19. **Ferreira, J.F.S.** 2007. Nutrient deficiency in the production of artemisinin, dihydroartemisinic acid, and artemisinic acid in *Artemisia annua* L. *Journal of Agricultural and Food Chemistry* 55 (5):1686-1694.
20. *Millar, K.D., Crandall-Stotler, B.J., Ferreira, J.F.S. and Wood, K.V.* 2007. Antimicrobial properties of three liverworts: *Radula obconica*, *Blasia pusilla*, and *Pallavicinia lyellii*. *Cryptogamie, Bryologie* 28 (3):197-210.
21. Liu, S., Tian, N., Liu, Z., Huang, J., Li, J., and **Ferreira, J.F.S.** 2008. Affordable and sensitive determination of artemisinin in *Artemisia annua* L. by gas chromatography with electron-capture detection. *Journal of Chromatography A* 1190:302-306.
22. **Ferreira, J.F.S.** and Gonzalez, J.M. 2008. Chemical and biological stability of artemisinin in rumen fluid and its kinetics in goats. *Brazilian Journal of Veterinary Parasitology* 17 (Suppl. 1):103-109.
23. **Ferreira, J.F.S.** and Gonzalez, J.M. 2009. Analysis of underivatized artemisinin and related sesquiterpene lactones by high-performance liquid chromatography with ultraviolet detection. *Phytochemical Analysis* 20:91-97
24. *Brisibe, E.A.; Uyoh, E.A., Brisibe, F.; Magalhaes, P.M.; and Ferreira, J.F.S.* 2008. Building a golden triangle for the production and use of artemisinin derivatives against falciparum malaria in Africa. *African Journal of Biotechnology* 7(25): 4884-4896.
25. *Brisibe, E.A., Umoren, E.U., Brisibe, F., Magalhaes, P.M., and Ferreira, J.F.S. (co-senior author), Luthria, D., Wu, X., and Prior, R.* 2009. Nutritional characterisation and antioxidant capacity of different tissues of *Artemisia annua* L. *Food Chemistry* 115: 1240-1246.

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26. **Ferreira, J.F.S.**; Luthria, D.L. 2010. Drying affects artemisinin, dihydroartemisinic acid, artemisinic acid, and the antioxidant activity of *Artemisia annua* L. leaves. *Journal of Agricultural and Food Chemistry*. 58 (3):1691-1698.
 27. **Ferreira, J.F.S.**; Luthria, D.L.; Sazaki, T.; Heyerick, A. 2010. Flavonoids from *Artemisia annua* L. as antioxidants and their potential synergism with artemisinin against malaria and cancer. *Molecules* 15:3135-3170.
 28. Marchese, J.A.; **Ferreira, J.F.S.**; Rehder, V.L.G.; Rodrigues, O. 2010. Water deficit effect on the accumulation of biomass and artemisinin in annual wormwood (*Artemisia annua* L., Asteraceae). *Brazilian Journal of Plant Physiology* 22(1):1-9
 29. *Squires, J.M.*; **Ferreira, J.F.S.** (co-senior author); Lindsay, D.S.; Zajac, A.M. 2011. Effects of artemisinin and *Artemisia* extracts on *Haemonchus contortus* in gerbils (*Meriones unguiculatus*). *Veterinary Parasitology* 175:103-108.
 30. **Ferreira, J.F.S.**; Peaden, P.; Keiser, J. 2011. In vitro trematocidal effects of crude alcoholic extracts of *Artemisia annua*, *A. absinthium*, *Asimina triloba*, and *Fumaria officinalis*. *Parasitology Research* 109:1585–1592.
 31. Singh, N.P.; **Ferreira, J.F.S.** (co-senior author), Park, J.S.; Lai, H.C. 2011. Cytotoxicity of ethanolic extracts of *Artemisia annua* to Molt-4 human leukemia cells. *Planta Medica* 77:1788-1793.
 32. *Katiki, L.M.*; **Ferreira, J.F.S.** (co-senior author); Zajac, A.M.; Masler, C.; Lindsay, D.S.; Chagas, A.C.S.; Amarante, A.F.T. 2011. *Caenorhabditis elegans* as a model to screen plant extracts and compounds as natural anthelmintics for veterinary use. *Veterinary Parasitology*. 182:264-268.
 33. Tekippe, J.A.; Hristov, A.N.; Heyler, K.S.; Cassidy, T.W.; Zheljzkov, V.D.; **Ferreira, J.F.S.**; Karnati, S.K.; Varga, G.A. 2011. Rumen fermentation and production effects of *Origanum vulgare* L. leaves in lactating dairy cows. *Journal of Dairy Science*, 94 :5065–5079.
 34. *Katiki, L.M.*; Chagas, A.C.S.; Bizzo, H.R.; **Ferreira, J.F.S.**; Amarante, A.F.T. 2011. Anthelmintic activity of *Cymbopogon martinii*, *Cymbopogon schoenanthus* and *Mentha piperita* essential oils evaluated in four different in vitro tests. *Veterinary Parasitology* 183:103– 108.
 35. *De Almeida, G.F.*, Horsted, K., Thamsborg, S.M., Kyvsgaard, N.C., **Ferreira, J.F.S.**, Hermansen, J.E. 2012. Use of *Artemisia annua* as a natural anticoccidiostat in free-range broilers and its effects on infection dynamics and performance. *Veterinary Parasitology* 186:178–187.
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36. *Katiki, L.M.*, Chagas, A.C.S., Takahira, R.K., Juliani, H.R., **Ferreira, J.F.S.**, Amarante, A.F.T. 2012. Evaluation of *Cymbopogon schoenanthus* essential oil in lambs experimentally infected with *Haemonchus contortus*. *Veterinary Parasitology* 186:312– 318.

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37. Brisibe, E.A., Udensi, O., Chukwuraha, P.N., Magalhães, P.M., Figueira, G.M., **Ferreira, J.F.S.** 2012. Adaptation and agronomic performance of *Artemisia annua* L. under lowland humid tropical conditions. *Industrial Crops and Products* 39:190– 197.
38. Tekippe, J. A., Hristov, A.N., Heyler, K.S., Zheljzakov, V.D., **Ferreira, J.F.S.**, Varga, G.A. 2012. Effects of plants and essential oils on ruminal in vitro batch culture methane production and fermentation. *Canadian Journal of Animal Science*. 92: 395-408.
39. *Katiki, L.M.*; **Ferreira, J.F.S.** (co-senior author); Gonzalez, J.M.; Zajac, A.M.; Lindsay, D.S.; Chagas, A.C.S.; Amarante, A.F.T. 2013. Anthelmintic effects of plant extracts containing condensed and hydrolyzable tannins on *Caenorhabditis elegans* and their antioxidant activity. *Veterinary Parasitology* 192:218– 227.
40. Dragan, L., Gyorke, A., **Ferreira, J.F.S.**, Oprea, O., Pop, I.A., Dragan, M., Dan, I., Pop, L., Pastiu, I.A., Mircean, V., Magdas, C., Cozma, V. 2013. Performance and infection dynamics with *Eimeria* spp. in broilers medicated with *Artemisia annua* in comparison with lasalocid and kept in field conditions. *Lucrari Stiintifice Medicina Veterinara-Timisoara*. XLVI(3):51-61.
41. **Ferreira, J.F.S.**, Zheljzakov, V.D., Gonzalez, J.M. 2013. Artemisinin concentration and antioxidant capacity of *Artemisia annua* distillation byproduct. *Industrial Crops and Products* 41:294– 298.
42. *Cala, A.C.*, **Ferreira, J.F.S.**, Chagas, A.C.S., Gonzalez, J.M., Rodrigues, R.A.F., Foglio, M.A., Oliveira, M.C.S., Sousa, I.M.O., Magalhães, P.M., Barioni Júnior, W. 2014. Anthelmintic activity of *Artemisia annua* L. extracts and artemisinin in sheep naturally infected with gastrointestinal nematodes. *Parasitology Research* 113:2345– 2353.
43. Dragan, L., Gyorke, A., **Ferreira, J.F.S.**, Pop, I.A., Dunca, I., Dragan, M., Mircean, V., Dan, I., Cozma, V. 2014. Effects of *Artemisia annua* and *Foeniculum vulgare* on chickens highly infected with *Eimeria tenella* (Phylum Apicomplexa). *Acta Veterinaria Scandinavica* 56(22):1-7.
44. Wetzstein, H.Y., Porter, J.A., Janick, J., **Ferreira, J.F.S.** 2014. Flower morphology and floral sequence in *Artemisia annua* (Asteraceae). *American Journal of Botany*. 101(5):875-885.
45. *De Almeida, G.F.*, Thamsborg, S.M., Horsted, K., Madeira, A.M.B.N., **Ferreira, J.F.S.**, Magalhães, P.M. de, Filho, L.C.D., Horsted, K., Hermansen, J.E. 2014. The effects of combining *Artemisia annua* and *Curcuma longa* ethanolic extracts in broilers challenged with infective oocysts of *Eimeria acervulina* and *E. Maxima*. *Parasitology* 141:347-355.
46. **Ferreira, J.F.S.**; Cornacchione, M.V.; Liu, X.; Suarez, D.L. 2015. Nutrient composition, forage parameters, and antioxidant capacity of alfalfa (*Medicago sativa*, L.) in response to saline irrigation water. *Agriculture* 5:577-597.
47. *Lacerda, C.F.*; **Ferreira, J.F.S.**; Liu, X.; Suarez, D.L. 2016. Evapotranspiration as a criterion to estimate nitrogen requirement of maize under salt stress. *Journal of Agronomy and Crop Science* 202:192–202.

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48. Dias, N.S., **Ferreira, J.F.S.**, Liu, X., Suarez, D.L., 2016. Jerusalem artichoke (*Helianthus tuberosus*, L.) maintains high inulin, tuber yield, and antioxidant capacity under moderately-saline irrigation waters. *Industrial Crops and Products* 94, 1009-1024.
49. Ibekwe, A.M., Ors, S., **Ferreira, J.F.S.**, Liu, X., Suarez, D.L., 2017. Seasonal induced changes in spinach rhizosphere microbial community structure with varying salinity and drought. *Science of The Total Environment* 579, 1485-1495.
50. Lima, B.L.C., Lacerda, C.F., Ferreira Neto, M., **Ferreira, J.F.S.**, Bezerra, A.M.E., Marques, E.C., 2017. Physiological and ionic changes in dwarf coconut seedlings irrigated with saline water. *Rev Bras Eng Agr Amb* 21, 122-127.
51. Sandhu, D., Cornacchione, M.V., **Ferreira, J.F.S.**, Suarez, D.L., 2017. Variable salinity responses of 12 alfalfa genotypes and comparative expression analyses of salt-response genes. *Scientific Reports* 7, 42958.
52. Liu, S., **Ferreira, J.F.S.** (co-senior author), Liu, L., Tang, Y., Tian, D., Liu, Z., Tian, N. Isolation of dihydroartemisinic acid from *Artemisia annua*, L. by-product by combining ultrasound-assisted extraction with response surface methodology. 2017. *Chemical and Pharmaceutical Bulletin (Pharmaceutical Society of Japan)*. Vol. 65:746-753.
53. Katiki, L.M., Barbieri, A.M.E., Araujo, R.C., Veríssimo, C.J. Louvadini, H., **Ferreira, J.F.S.**, 2017. Synergistic interaction of ten essential oils against *Haemonchus contortus* *in vitro*. *Veterinary Parasitology* 243:47-51.
54. Katiki, L.M., Gomes, A.C.P., Barbieri, A.M.E., Pacheco, P.A., Rodrigues, L., Veríssimo, C.J., Gutmanis, G., Piza, A.M., Louvadini, H., **Ferreira, J.F.S.** 2017. *Terminalia catappa*: chemical composition, *in vitro* and *in vivo* effect on *Haemonchus contortus*. *Veterinary Parasitology* 246:118-123.
55. Anderson, R.G., **Ferreira, J.F.S.**, Jenkins, D.L., Dias, N.S., and Suarez, D.L. 2017. Incorporating field wind data to improve crop evapotranspiration parameterization in heterogeneous regions. *Irrigation Science*. Published online 16 September 2017.
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JORGE F.S. FERREIRA, US Salinity Lab (USDA-ARS), 450 W Big Springs Rd., Riverside, CA
Research Plant Physiologist, Email: jorge.ferreira@ars.usda.gov Tel.-(951)369-4830

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JORGE F.S. FERREIRA, US Salinity Lab (USDA-ARS), 450 W Big Springs Rd., Riverside, CA
Research Plant Physiologist, Email: jorge.ferreira@ars.usda.gov Tel.-(951)369-4830

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JORGE F.S. FERREIRA, US Salinity Lab (USDA-ARS), 450 W Big Springs Rd., Riverside, CA
Research Plant Physiologist, Email: jorge.ferreira@ars.usda.gov Tel.-(951)369-4830

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JORGE F.S. FERREIRA, US Salinity Lab (USDA-ARS), 450 W Big Springs Rd., Riverside, CA
Research Plant Physiologist, Email: jorge.ferreira@ars.usda.gov Tel.-(951)369-4830

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JORGE F.S. FERREIRA, US Salinity Lab (USDA-ARS), 450 W Big Springs Rd., Riverside, CA
Research Plant Physiologist, Email: jorge.ferreira@ars.usda.gov Tel.-(951)369-4830

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Biographical Sketch

JORGE F.S. FERREIRA, US Salinity Lab (USDA-ARS), 450 W Big Springs Rd., Riverside, CA
Research Plant Physiologist, Email: jorge.ferreira@ars.usda.gov Tel.-(951)369-4830

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Biographical Sketch

JORGE F.S. FERREIRA, US Salinity Lab (USDA-ARS), 450 W Big Springs Rd., Riverside, CA
Research Plant Physiologist, Email: jorge.ferreira@ars.usda.gov Tel.-(951)369-4830

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