# Jing Yan College of Tropical Agriculture and Human Resources Department of Tropical Plant and Soil Sciences

FTE Distribution: 40%I; 60%R; 0%E

#### Education

<u>Degree</u>	<u>University</u>	<u>Major</u>

PhD University of Delaware Plant and Soil Sciences
BE Lanzhou University Environmental Engineering

# **Professional Appointments**

<u>Title</u>	<b>Employer</b>	<b>Dates Employed</b>
Assistant Professor	University of Hawaii	2024 to Present
Postdoctoral scholar	University of Delaware	2021 to 2024
Postdoctoral scholar	University of California, Merced	2017 to 2020

## **Courses Taught**

Course ID and name (credits)

TPSS 460 Soil Plant Environment (3)

## **Publications (reverse chronological order)**

### Refereed Journal Publications

- Li, Weila, Jing Yan, Mohammad Afsar, and Yan Jin. 2024. "Size-dependent Mobility of Soil Colloids and Associated Organic Carbon Loading Capacity Following Stepwise Decreases in Redox Potential." *Geoderma* 448, 116955. https://doi.org/10.1016/j.geoderma.2024.116955
- Liu., Chun., Chunhua He, Scott X. Chang, Xinli Chen, Shaoshan An, Dong Wang, Jing Yan, Yuheng Zhang, Ping Li. 2024. "Fertilization and Tillage Influence on Soil Organic Carbon Fractions: A Global Meta-analysis." *CATENA*, 246, 108404. https://doi.org/10.1016/j.catena.2024.108404
- Afsar, Mohammad, Jing Yan, Bruce Vasilas, and Yan Jin. 2023. "Redox Oscillations Destabilize and Mobilize Colloidal Soil Organic Carbon." *Science of the Total Environment* 2023, 864, 161153. https://doi.org/10.1016/j.scitotenv.2022.161153.
- Longbottom, Todd, Leila Wahab, Kyungjin Min, Anna Jurusik, Kimber Moreland, Manisha Dolui, Touyee Thao, Melinda Gonzales, Yulissa Perez Rojas, Jennifer Alvarez, Zachary Malone, Jing Yan, Teamrat A. Ghezzehei, Asmeret Berhe. 2022. "What's Soil Got to Do with Climate Change?" *GSAT* 32, 4–10. https://doi.org/10.1130/GSATG519A.1
- Liu, Chun, Zhongwu Li, Bill X. Hu, Jing Yan, Haibing Xiao. 2020. "Identifying Eroded Organic Matter Sources in Sediments at Fluvial System Using Multiple Tracers on the Loess Plateau of China." *CATENA*, 193, 104623. https://doi.org/10.1016/j.catena.2020.104623
- Yan, Jing, Nathaniel A. Bogie, and Teamrat A. Ghezzehei, 2020. "Root Uptake Under Mismatched Distributions of Water and Nutrients in the Root Zone." *Biogeosciences*, 17(24), 6377–6392. https://doi.org/10.5194/bg-17-6377-2020
- Yan, Jing, Ronald Manelski, Bruce Vasilas, and Yan Jin. 2018. "Mobile Colloidal Organic Carbon: An Underestimated Carbon Pool in Global Carbon Cycles?" *Frontiers in Environmental Science*, 6. https://doi.org/10.3389/fenvs.2018.00148

Yan, Jing, Meng Xia, and Yan Jin. 2017. "Size-Dependent Turbidimetric Quantification of Suspended Soil Colloids." *Vadose Zone Journal*, 16(5). https://doi.org/10.2136/vzj2016.10.0098

Yan, Jing, Volha Lazouskaya, and Yan Jin. 2016. "Soil Colloid Release Affected by Dissolved Organic Matter and Redox Conditions." *Vadose Zone Journal*, 15(vzj2015.02.0026). https://doi.org/10.2136/vzj2015.02.0026

Wang, Dengjun, Deb P. Jaisi, Jing Yan, Yan Jin and Dongmei Zhou. 2015. "Transport and Retention of Polyvinylpyrrolidone-Coated Silver Nanoparticles in Natural Soils." *Vadose Zone Journal*, 14(vzj2015.01.0007). https://doi.org/10.2136/vzj2015.01.0007

Zhu, Heyong, Taibao Yang, Biao Zeng, and Jing Yan. 2011. "Current Pollution and Control Countermeasures of Industrial Solid Waste in Lanzhou." *Safety and Environmental Engineering*, 18(4), 77-79. (in Chinese)

Wang, Xiuna., Taibao Yang, Jing Yan, Shan Jiang, and Qingsen Jin. 2011. "Characteristic Analysis and Prediction for Water Pollution in Lanzhou City." *Water Resources Protection*, 27(6), 32–35. (in Chinese)

#### **Graduate Students**

<u>Category</u> <u>Current Number of Students</u> <u>Number Graduated (Career)</u>

Member of PhD Committees 1

**Grant Support** 

<u>Title of Grant:</u> 2024 ICEMHH (Microbiome COBRE) Core Bucks Program

Source of Grant: Pacific Biosciences Research Center, University of Hawai'i at Manoa

Total Dollar Value: \$3,650 Dates of Grant: 2024-2025

Role: PI

Presentations at Conferences (from 2021 to 2025)

Title: Microbial Contact Line Pinning: How Bacillus subtilis Reshapes Salt Precipitation and

Evaporation

Authors: Yan, J., Zheng W., Knight B., Bais H., Jin Y.\*

Name of Conference: European Geosciences Union General Assembly

Location: Vienna, Austria.

Date of Presentation: April 27-May 2, 2025

Title: Bacillus Subtilis Affects the Onset and Morphology of Salt Crystallization during

Saltwater Evaporation

Authors: Yan, J.\*, Zheng W., Knight B., Bais H., Jin Y.

Name of Conference: W5188: Soil, Water, and Environmental Physics to Sustain Agriculture and

Natural Resources

Location: Las Vegas, Nevada.

Date of Presentation: January 2-3, 2025

Title: Long-term Trends in Reference Evapotranspiration in California's Agricultural Regions

Authors: Ghezzehei T. A.\*, Yan, J., Li, X.

Name of Conference: American Geophysical Union Annual Meeting

Location: Washington, D.C.

Date of Presentation: December 9-13, 2024

<u>Title</u>: Bacillus Subtilis Affects the Onset and Morphology of Salt Crystallization during

Saltwater Evaporation

Authors: Yan, J., Zheng W., Knight B., Bais H., Jin Y.\*

Name of Conference: American Geophysical Union Annual Meeting

Location: Washington, D.C.

Date of Presentation: December 9-13, 2024

<u>Title</u>: Effects of plant growth-promoting rhizobacteria (PGPR) on saltwater evaporation: a

case study using Bacillus Subtilis

Authors: Yan, J., Zheng W., Knight B., Bais H., Jin Y.\*

Name of Conference: European Geosciences Union General Assembly

Location: Vienna, Austria.

Date of Presentation: April 14-19, 2024

Title: Using stable water isotopes to estimate source water contribution in a tidal marshland

Authors: Bradach S.\*, Yan J., Joshi S., Afsar M., Jin Y.

Name of Conference: European Geosciences Union General Assembly

Location: Vienna, Austria.

Date of Presentation: April 14-19, 2024

Title: Compensating for high evaporation: the role of vertical textural contrast in saltwater

evaporation

Authors: Yan, J.\*, Zheng W., Jin Y.

Name of Conference: Soil Science Society of America annual meeting

Location: St. Louis, Missouri.

Date of Presentation: October 29-November 1, 2023

Title: Effects of plant growth-promoting rhizobacteria (PGPR) on saltwater evaporation: a

case study using Bacillus Subtilis

Authors: Yan, J.\*, Zheng W., Knight B., Bais H., Jin Y.

Name of Conference: Soil Science Society of America annual meeting

Location: St. Louis, Missouri.

Date of Presentation: October 29-November 1, 2023

Title: Salinity and redox oscillation induced phosphorus cycling in tidal salt marsh sediments

Authors: Joshi, S.\*, Afsar, M., Yan, J., Gu, C., Przywara D., Fishel, M., Jin, Y., Sparks, D.

Name of Conference: Soil Science Society of America annual meeting

Location: St. Louis, Missouri.

Date of Presentation: October 29-November 1, 2023

Title: The effects of sea water intrusion on evaporation in porous media with vertical texture

contrast

Authors: Yan, J.\*, Zheng W., Jin Y.

Name of Conference: Soil Science Society of America annual meeting

Location: Baltimore, Maryland.

Date of Presentation: November 6-9, 2022

Title: Mechanisms for nutrient uptake and cycling in nutrient-rich but dry near-surface layers

Authors: Ghezzehei T. A.\*, Yan, J.

Name of Conference: Soil Science Society of America annual meeting

Location: Baltimore, Maryland.

<u>Date of Presentation</u>: November 6-9, 2022

<u>Title</u>: Mechanisms for nutrient uptake and cycling in nutrient-rich but dry near-surface layers

Authors: Yan, J.\*, Joshi S. R., Ghezzehei T. A., Jin Y.

Name of Conference: Soil Science Society of America annual meeting

Location: Salt Lake City, Utah.

Date of Presentation: November 7-10, 2021

<u>Title</u>: Predict net solar radiation with minimum weather inputs: a case study for regions in the

western US.

Authors: Yan, J.\*, Ghezzehei T.A.

Name of Conference: Soil Science Society of America annual meeting

<u>Location</u>: Salt Lake City, Utah.

<u>Date of Presentation</u>: November 7-10, 2021