

Monitoring of root-zone water content in the laboratory

Journal of Plant Nutrition and Soil Science

171, 927-935

DOI: [10.1002/jpln.200700145](https://doi.org/10.1002/jpln.200700145)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Correlation of electrical resistivity, electrical conductivity and soil parameters at a long-term fertilization experiment. <i>Near Surface Geophysics</i> , 2009, 7, 5-14.	0.6	20
2	The effect of compaction on soil electrical resistivity: a laboratory investigation. <i>European Journal of Soil Science</i> , 2010, 61, 1043-1055.	1.8	67
3	Three-Dimensional Electrical Resistivity Tomography to Monitor Root Zone Water Dynamics. <i>Vadose Zone Journal</i> , 2011, 10, 412-424.	1.3	102
4	Electrical resistivity tomography as a non-destructive method for mapping root biomass in an orchard. <i>European Journal of Soil Science</i> , 2011, 62, 206-215.	1.8	52
5	Numerical and experimental mapping of small root zones using optimized surface and borehole resistivity tomography. <i>Geophysics</i> , 2011, 76, G25-G35.	1.4	30
6	Phenotyping for drought tolerance of crops in the genomics era. <i>Frontiers in Physiology</i> , 2012, 3, 347.	1.3	448
7	Evaluating Experimental Design of ERT for Soil Moisture Monitoring in Contour Hedgerow Intercropping Systems. <i>Vadose Zone Journal</i> , 2012, 11, vzj2011.0186.	1.3	30
8	Geophysical Imaging Techniques. , 2012, , 151-188.		5
9	Design of a pipeline sensor-based platform for soil water content monitoring. <i>Biosystems Engineering</i> , 2012, 113, 1-10.	1.9	13
10	Noninvasive Monitoring of Soil Static Characteristics and Dynamic States: A Case Study Highlighting Vegetation Effects on Agricultural Land. <i>Vadose Zone Journal</i> , 2012, 11, vzj2011.0195.	1.3	42
11	Evidence for spatial variability in hydraulic redistribution within an oak-pine forest from resistivity imaging. <i>Journal of Hydrology</i> , 2012, 430-431, 69-79.	2.3	51
12	Monitoring Soil-plant Interactions in an Apple Orchard Using 3D Electrical Resistivity Tomography. <i>Procedia Environmental Sciences</i> , 2013, 19, 394-402.	1.3	19
13	Noninvasive Monitoring of Soil Water Dynamics in Mixed Cropping Systems: A Case Study in Ratchaburi Province, Thailand. <i>Vadose Zone Journal</i> , 2013, 12, 1-12.	1.3	49
14	Methane fluxes measured by eddy covariance and static chamber techniques at a temperate forest in central Ontario, Canada. <i>Biogeosciences</i> , 2013, 10, 4371-4382.	1.3	58
15	Three-dimensional monitoring of soil water content in a maize field using Electrical Resistivity Tomography. <i>Hydrology and Earth System Sciences</i> , 2013, 17, 595-609.	1.9	112
16	Drought and Heat Tolerance Evaluation in Potato (<i>Solanum tuberosum</i> L.). <i>Potato Research</i> , 2014, 57, 225-247.	1.2	28
17	Horizontal monitoring of soil water content using a novel automated and mobile electromagnetic access-tube sensor. <i>Journal of Hydrology</i> , 2014, 516, 50-55.	2.3	18
18	Plant-soil interactions in salt marsh environments: Experimental evidence from electrical resistivity tomography in the Venice Lagoon. <i>Geophysical Research Letters</i> , 2014, 41, 6160-6166.	1.5	28

#	ARTICLE	IF	CITATIONS
19	Rhizosphere Engineering by Plants: Quantifying Soil-Root Interactions. <i>Advances in Agricultural Systems Modeling</i> , 0, , 1-30.	0.3	6
20	Geophysical Methods for Field-Scale Imaging of Root Zone Properties and Processes. <i>SSSA Special Publication Series</i> , 0, , 247-282.	0.2	13
21	The use of soil electrical resistivity to monitor plant and soil water relationships in vineyards. <i>Soil</i> , 2015, 1, 273-286.	2.2	59
22	Monitoring and modelling of soil-plant interactions: the joint use of ERT, sap flow and eddy covariance data to characterize the volume of an orange tree root zone. <i>Hydrology and Earth System Sciences</i> , 2015, 19, 2213-2225.	1.9	76
23	Quantifying spatiotemporal dynamics of root-zone soil water in a mixed forest on subtropical coastal sand dune using surface ERT and spatial TDR. <i>Journal of Hydrology</i> , 2015, 523, 475-488.	2.3	47
25	Nonstationarity of the electrical resistivity and soil moisture relationship in a heterogeneous soil system: a case study. <i>Soil</i> , 2016, 2, 241-255.	2.2	12
26	Examining diel patterns of soil and xylem moisture using electrical resistivity imaging. <i>Journal of Hydrology</i> , 2016, 536, 327-338.	2.3	33
27	Breeding Strategies to Enhance Drought Tolerance in Crops. , 2016, , 397-445.		30
28	Mapping tree root system in dikes using induced polarization: Focus on the influence of soil water content. <i>Journal of Applied Geophysics</i> , 2016, 135, 387-396.	0.9	19
29	Soil-plant interaction monitoring: Small scale example of an apple orchard in Trentino, North-Eastern Italy. <i>Science of the Total Environment</i> , 2016, 543, 851-861.	3.9	39
30	Electrical resistivity and spatial variation in agriculture terraces: statistical correlation between ert and flow direction algorithms. <i>Open Agriculture</i> , 2017, 2, .	0.7	0
31	Use of small scale electrical resistivity tomography to identify soil-root interactions during deficit irrigation. <i>Journal of Hydrology</i> , 2018, 556, 310-324.	2.3	46
32	Modeling Soil-Water-Disease Interactions of Flood-Irrigated Mandarin Orange Trees: Role of Root Distribution Parameters. <i>Vadose Zone Journal</i> , 2018, 17, 170129.	1.3	10
33	Small-scale characterization of vine plant root water uptake via 3-D electrical resistivity tomography and mise-à-la-masse method. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 5427-5444.	1.9	35
34	Electrical impedance tomography as a tool for phenotyping plant roots. <i>Plant Methods</i> , 2019, 15, 49.	1.9	39
35	Imaging and functional characterization of crop root systems using spectroscopic electrical impedance measurements. <i>Plant and Soil</i> , 2019, 435, 201-224.	1.8	38
36	Impact of Maize Roots on Soil-Root Electrical Conductivity: A Simulation Study. <i>Vadose Zone Journal</i> , 2019, 18, 190037.	1.3	13
37	Electrical imaging of plant root zone: A review. <i>Computers and Electronics in Agriculture</i> , 2019, 167, 105058.	3.7	22

#	ARTICLE	IF	CITATIONS
38	Monitoring Soil Moisture Dynamics Using Electrical Resistivity Tomography under Homogeneous Field Conditions. <i>Sensors</i> , 2020, 20, 5313.	2.1	26
39	Sensing the electrical properties of roots: A review. <i>Vadose Zone Journal</i> , 2020, 19, e20082.	1.3	35
40	Time-lapse intensive geoelectrical monitoring under winter wheat. <i>Near Surface Geophysics</i> , 2020, 18, 413-425.	0.6	7
41	Potential of geoelectrical methods to monitor root zone processes and structure: A review. <i>Geoderma</i> , 2020, 365, 114232.	2.3	32
42	Time-lapse monitoring of root water uptake using electrical resistivity tomography and mise-à-la-masse: a vineyard infiltration experiment. <i>Soil</i> , 2020, 6, 95-114.	2.2	27
43	Hydrodynamic characterization of soil compaction using integrated electrical resistivity and X-ray computed tomography. <i>Vadose Zone Journal</i> , 2021, 20, e20109.	1.3	4
44	An overview of multimethod imaging approaches in environmental geophysics. <i>Advances in Geophysics</i> , 2021, , 1-72.	1.1	13
45	Multi-electrode Resistivity Imaging. , 2012, , 189-211.		3
49	Improving Quality Agricultural Practices in Tropical Environments through Integrated Geophysical Methods. <i>IOSR Journal of Applied Geology and Geophysics</i> , 2014, 2, 128-139.	0.1	3
50	A case study on water use efficiency in extreme water-saving cultivation of tomato plants. <i>European Journal of Horticultural Science</i> , 2021, 86, 556-566.	0.3	1
51	Investigation of Pedogeophysical Relationships Using in Situ Measured Electrical Resistivity and Soil Physical and Root. , 2014, , .		0
53	Combining Models of Root-Zone Hydrology and Geoelectrical Measurements: Recent Advances and Future Prospects. <i>Frontiers in Water</i> , 2021, 3, .	1.0	4
54	Monitoring spatiotemporal soil moisture changes in the subsurface of forest sites using electrical resistivity tomography (ERT). <i>Journal of Forestry Research</i> , 2022, 33, 1649-1662.	1.7	8