Rodney B Thompson

List of Publications by Year
in descending order

97	3,583	101543 36	149698 56
papers	citations	h-index	g-index

100	100	100	2343
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Identification of irrigation and N management practices that contribute to nitrate leaching loss from an intensive vegetable production system by use of a comprehensive survey. Agricultural Water Management, 2007, 89, 261-274.	5.6	209
2	Fate of nitrogen in cattle slurry following surface application or injection to grassland. Journal of Soil Science, 1987, 38, 689-700.	1.2	177
3	Using plant water status to define threshold values for irrigation management of vegetable crops using soil moisture sensors. Agricultural Water Management, 2007, 88, 147-158.	5.6	141
4	Effects of salinity on fruit yield and quality of tomato grown in soil-less culture in greenhouses in Mediterranean climatic conditions. Agricultural Water Management, 2008, 95, 1041-1055.	5.6	140
5	Measurement and estimation of plastic greenhouse reference evapotranspiration in a Mediterranean climate. Irrigation Science, 2010, 28, 497-509.	2.8	140
6	Proximal Optical Sensors for Nitrogen Management of Vegetable Crops: A Review. Sensors, 2018, 18, 2083.	3.8	136
7	Evaluation of optical sensor measurements of canopy reflectance and of leaf flavonols and chlorophyll contents to assess crop nitrogen status of muskmelon. European Journal of Agronomy, 2014, 58, 39-52.	4.1	103
8	Ammonia volatilization from cattle slurry following surface application to grassland. Plant and Soil, 1990, 125, 119-128.	3.7	89
9	Ammonia emission from grassland and livestock production systems in the UK. Environmental Pollution, 1987, 48, 173-184.	7.5	86
10	Threshold values of canopy reflectance indices and chlorophyll meter readings for optimal nitrogen nutrition of tomato. Annals of Applied Biology, 2015, 166, 271-285.	2.5	74
11	Consideration of total available N supply reduces N fertilizer requirement and potential for nitrate leaching loss in tomato production. Agriculture, Ecosystems and Environment, 2015, 200, 62-70.	5.3	72
12	Reducing gaseous losses of nitrogen from cattle slurry applied to grassland by the use of additives. Journal of the Science of Food and Agriculture, 1990, 50, 141-153.	3.5	71
13	Prescriptiveâ€“corrective nitrogen and irrigation management of fertigated and drip-irrigated vegetable crops using modeling and monitoring approaches. Agricultural Water Management, 2013, 119, 121-134.	5.6	65
14	Management Factors Affecting Ammonia Volatilization from Landâ€Applied Cattle Slurry in the Midâ€Atlantic USA. Journal of Environmental Quality, 2002, 31, 1329-1338.	2.0	63
15	Evaluation of the Watermark sensor for use with drip irrigated vegetable crops. Irrigation Science, 2006, 24, 185-202.	2.8	62
16	Different Responses of Various Chlorophyll Meters to Increasing Nitrogen Supply in Sweet Pepper. Frontiers in Plant Science, 2018, 9, 1752.	3.6	61
17	Decision support systems and models for aiding irrigation and nutrient management of vegetable crops. Agricultural Water Management, 2020, 240, 106209.	5.6	61
18	Determination of lower limits for irrigation management using in situ assessments of apparent crop water uptake made with volumetric soil water content sensors. Agricultural Water Management, 2007, 92, 13-28.	5.6	59

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19	Prototype decision support system based on the VegSyst simulation model to calculate crop N and water requirements for tomato under plastic cover. Irrigation Science, 2014, 32, 237-253.	2.8	58
20	The ALFAM2 database on ammonia emission from field-applied manure: Description and illustrative analysis. Agricultural and Forest Meteorology, 2018, 258, 66-79.	4.8	57
21	Ammonia volatilization from cattle slurry following surface application to grassland. Plant and Soil, 1990, 125, 109-117.	3.7	54
22	Shoot and root physiological responses to localized zones of soil moisture in cultivated and wild lettuce (Lactuca spp.). Plant, Cell and Environment, 1996, 19, 1169-1178.	5.7	54
23	Short-term net N mineralization from plant residues and gross and net N mineralization From soil organic-matter after rewetting of a seasonally dry soil. Soil Research, 1995, 33, 961.	1.1	53
24	Simulation of transpiration, drainage, N uptake, nitrate leaching, and N uptake concentration in tomato grown in open substrate. Agricultural Water Management, 2009, 96, 1773-1784.	5.6	51
25	Irrigation management of European greenhouse vegetable crops. Agricultural Water Management, 2020, 242, 106393.	5.6	51
26	Proximal optical sensing of cucumber crop N status using chlorophyll fluorescence indices. European Journal of Agronomy, 2016, 73, 83-97.	4.1	49
27	Use of stem diameter variations to detect plant water stress in tomato. Irrigation Science, 2006, 24, 241-255.	2.8	48
28	Revised VegSyst model to calculate dry matter production, critical N uptake and ETc of several vegetable species grown in Mediterranean greenhouses. Agricultural Systems, 2016, 146, 30-43.	6.1	48
29	Denitrification in slurry-treated soil: Occurrence at low temperatures, relationship with soil nitrate and reduction by nitrification inhibitors. Soil Biology and Biochemistry, 1989, 21, 875-882.	8.8	47
30	VegSyst, a simulation model of daily crop growth, nitrogen uptake and evapotranspiration for pepper crops for use in an on-farm decision support system. Irrigation Science, 2013, 31, 465-477.	2.8	45
31	Evaluation of the VegSyst model with muskmelon to simulate crop growth, nitrogen uptake and evapotranspiration. Agricultural Water Management, 2011, 101, 107-117.	5.6	44
32	Assessing crop N status of fertigated vegetable crops using plant and soil monitoring techniques. Annals of Applied Biology, 2015, 167, 387-405.	2.5	43
33	Derivation of sufficiency values of a chlorophyll meter to estimate cucumber nitrogen status and yield. Computers and Electronics in Agriculture, 2017, 141, 54-64.	7.7	43
34	Rapid On-Farm Analysis of Manure Nutrients Using Quick Tests. Journal of Production Agriculture, 1999, 12, 215-224.	0.4	39
35	Water use and production of a greenhouse pepper crop under optimum and limited water supply. Journal of Horticultural Science and Biotechnology, 2005, 80, 87-96.	1.9	39
36	Monitoring nitrogen status of vegetable crops and soils for optimal nitrogen management. Agricultural Water Management, 2020, 241, 106356.	5.6	39

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37	Effect of N uptake concentration on nitrate leaching from tomato grown in free-draining soilless culture under Mediterranean conditions. Scientia Horticulturae, 2013, 150, 387-398.	3.6	38
38	Simulation of tomato growth, water and N dynamics using the EU-Rotate_N model in Mediterranean greenhouses with drip irrigation and fertigation. Agricultural Water Management, 2014, 132, 46-59.	5.6	38
39	Influence of time of day on measurement with chlorophyll meters and canopy reflectance sensors of different crop N status. Precision Agriculture, 2019, 20, 1087-1106.	6.0	35
40	Tools and Strategies for Sustainable Nitrogen Fertilisation of Vegetable Crops. Advances in Olericulture, 2017, , 11-63.	0.4	34
41	Evaluation of rapid analysis systems for on-farm nitrate analysis in vegetable cropping. Spanish Journal of Agricultural Research, 2009, 7, 200.	0.6	31
42	Salinity Effects on Soil Moisture Measurement Made with a Capacitance Sensor. Soil Science Society of America Journal, 2007, 71, 1647-1657.	2.2	30
43	Gaseous nitrogen losses and ammonia volatilization measurement following land application of cattle slurry in the mid-Atlantic region of the USA. Plant and Soil, 2005, 266, 231-246.	3.7	29
44	Sustainable irrigation and nitrogen management of fertigated vegetable crops. Acta Horticulturae, 2017, , 363-378.	0.2	29
45	Sweet pepper and nitrogen supply in greenhouse production: Critical nitrogen curve, agronomic responses and risk of nitrogen loss. European Journal of Agronomy, 2020, 117, 126046.	4.1	26
46	EFFECT OF APPLIED N CONCENTRATION IN A FERTIGATED VEGETABLE CROP ON SOIL SOLUTION NITRATE AND NITRATE LEACHING LOSS. Acta Horticulturae, 2006, , 221-224.	0.2	26
47	Feasibility of vermicomposting residues from olive oil production obtained using two stage centrifugation. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 1998, 33, 1491-1506.	1.7	25
48	Response of stem diameter variations to water stress in greenhouse-grown vegetable crops. Journal of Horticultural Science and Biotechnology, 2006, 81, 483-495.	1.9	25
49	Computer Programs That Calculate Manure Application Rates. Journal of Production Agriculture, 1997, 10, 58-69.	0.4	24
50	Determination of sufficiency values of canopy reflectance vegetation indices for maximum growth and yield of cucumber. European Journal of Agronomy, 2017, 84, 1-15.	4.1	23
51	Responses of soil properties, crop yield and root growth to improved irrigation and N fertilization, soil tillage and compost addition in a pepper crop. Scientia Horticulturae, 2017, 225, 422-430.	3.6	23
52	Feasibility of vermicomposting dairy biosolids using a modified system to avoid earthworm mortality. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 1999, 34, 151-169.	1.5	22
53	Use of EU-Rotate_N and CropSyst models to predict yield, growth and water and N dynamics of fertigated leafy vegetables in a Mediterranean climate and to determine N fertilizer requirements. Agricultural Systems, 2016, 149, 150-164.	6.1	22
54	Fate of urea nitrogen in sheep urine applied to soil at different times of the year in the pasture - wheat rotation in south Western Australia. Australian Journal of Agricultural Research, 1998, 49, 495.	1.5	22

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55	Water and fertilization management of vegetables: state of art and future challenges. European Journal of Horticultural Science, 2018, 83, 306-318.	0.7	21
56	Reducing nitrate leaching losses from vegetable production in Mediterranean greenhouses. Acta Horticulturae, 2020, , 105-118.	0.2	20
57	Pulse-labelling a cover crop with 13C to follow its decomposition in soil under field conditions. Plant and Soil, 1996, 180, 49-55.	3.7	18
58	The Use of Chlorophyll Meters to Assess Crop N Status and Derivation of Sufficiency Values for Sweet Pepper. Sensors, 2019, 19, 2949.	3.8	17
59	Assessing Performance of Vegetation Indices to Estimate Nitrogen Nutrition Index in Pepper. Remote Sensing, 2020, 12, 763.	4.0	16
60	Nitrogen and carbon mineralization in soil of vermiâ€composted and unprocessed dry olive cake ("Orujo Seco") produced from twoâ€stage centrifugation for olive oil extraction. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 1999, 34, 917-928.	1.5	14
61	Adaptation of the VegSyst model to outdoor conditions for leafy vegetables and processing tomato. Agricultural Systems, 2019, 171, 51-64.	6.1	14
62	Modelling nitrogen, phosphorus, potassium, calcium and magnesium uptake, and uptake concentration, of greenhouse tomato with the VegSyst model. Scientia Horticulturae, 2021, 279, 109862.	3.6	13
63	ASSESSING RISK OF NITRATE LEACHING FROM THE HORTICULTURAL INDUSTRY OF ALMERIA, SPAIN. Acta Horticulturae, 2002, , 243-248.	0.2	12
64	Use of a Portable Rapid Analysis System to Measure Nitrate Concentration of Nutrient and Soil Solution, and Plant Sap in Greenhouse Vegetable Production. Agronomy, 2021, 11, 819.	3.0	11
65	Effects of soil microbial communities associated to different soil fertilization practices on tomato growth in intensive greenhouse agriculture. Applied Soil Ecology, 2021, 162, 103896.	4.3	11
66	UPTAKE CONCENTRATIONS OF A TOMATO CROP IN DIFFERENT SALINITY CONDITIONS. Acta Horticulturae, 2005, , 365-369.	0.2	10
67	Simulation of agronomic and nitrate pollution related parameters in vegetable cropping sequences in Mediterranean greenhouses using the EU-Rotate_N model. Agricultural Water Management, 2018, 199, 175-189.	5.6	10
68	Strategies for optimal fertiliser management of vegetable crops in Europe. Acta Horticulturae, 2018, , 129-140.	0.2	10
69	Showcasing a fertigation management strategy for increasing water and nitrogen use efficiency in soil-grown vegetable crops in the FERTINNOWA project. Acta Horticulturae, 2019, , 17-24.	0.2	10
70	Soil Monitoring Methods to Assess Immediately Available Soil N for Fertigated Sweet Pepper. Agronomy, 2020, 10, 2000.	3.0	10
71	Crop response of greenhouse soil-grown cucumber to total available N in a Nitrate Vulnerable Zone. European Journal of Agronomy, 2020, 114, 125993.	4.1	10
72	Effect of Cultivar on Chlorophyll Meter and Canopy Reflectance Measurements in Cucumber. Sensors, 2020, 20, 509.	3.8	10

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73	Optimizing nitrogen and water inputs for greenhouse vegetable production. Acta Horticulturae, 2015, , 15-30.	0.2	8
74	Reference values for phenological phases of chlorophyll meter readings and reflectance indices for optimal N nutrition of fertigated tomato. Acta Horticulturae, 2018, , 65-72.	0.2	8
75	Petiole sap nitrate concentration to assess crop nitrogen status of greenhouse sweet pepper. Scientia Horticulturae, 2021, 285, 110157.	3.6	8
76	Arsenic and Cadmium Accumulation in Soil as Affected by Continuous Organic Fertilizer Application: Implications for Clean Production. Agronomy, 2021, 11, 2272.	3.0	8
77	RESPONSE OF STEM DIAMETER TO WATER STRESS IN GREENHOUSE-GROWN VEGETABLE CROPS. Acta Horticulturae, 2004, , 253-260.	0.2	7
78	MANAGEMENT FACTORS CONTRIBUTING TO NITRATE LEACHING LOSS FROM A GREENHOUSE-BASED INTENSIVE VEGETABLE PRODUCTION SYSTEM. Acta Horticulturae, 2006, , 179-184.	0.2	7
79	Recovery of 15N Labeled Nitrogen Fertilizer by Fertigated and Drip Irrigated Greenhouse Vegetable Crops. Agronomy, 2020, 10, 741.	3.0	7
80	VegSyst-DSS software to calculate N and irrigation requirements for seven vegetable species grown with fertigation in greenhouses in SE Spain. Acta Horticulturae, 2017, , 65-72.	0.2	5
81	Recent advances in water and nutrient management of soil-grown crops in Mediterranean greenhouses. Acta Horticulturae, 2017, , 31-44.	0.2	5
82	Use of fluorescence indices as predictors of crop N status and yield for greenhouse sweet pepper crops. Precision Agriculture, 2022, 23, 278-299.	6.0	5
83	Using calcium carbide with the acetylene inhibition technique to measure denitrification from a sprinkler irrigated vegetable crop. Plant and Soil, 1996, 179, 9-16.	3.7	4
84	Mineralisation of nitrogen contained in mature subterranean clover, capeweed and annual ryegrass, and subsequent nitrogen use by wheat in dryland farming systems in southern Australia. Soil Research, 2002, 40, 299.	1.1	4
85	Denitrification from Cattle Slurry Applied to Grassland. , 1989, , 247-260.		4
86	Root and crop responses of sweet pepper (Capsicum annuum) to increasing N fertilization. Scientia Horticulturae, 2020, 273, 109645.	3.6	3
87	Integrated Crop-Nitrogen Management Improves Tomato Yield and Root Architecture and Minimizes Soil Residual N. Agronomy, 2022, 12, 1617.	3.0	3
88	IRRIGATION SCHEDULING OF DRIP-IRRIGATED VEGETABLE CROPS GROWN IN GREENHOUSES USING CONTINUOUS SOIL MOISTURE MONITORING. Acta Horticulturae, 2004, , 653-660.	0.2	2
89	Use of the VegSyst model to calculate crop N uptake and crop evapotranspiration of autumn- and spring-grown cucumber in Mediterranean greenhouses. Acta Horticulturae, 2017, , 47-54.	0.2	2
90	EFFECTS OF INCREASING SALINITY ON FRUIT DEVELOPMENT AND GROWTH OF TOMATO GROWN IN SOILLESS CULTURE. Acta Horticulturae, 2003, , 235-240.	0.2	1

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91	Production and water use in lettuces under variable water supply. Irrigation Science, 1996, 16, 125-137.	2.8	1
92	Use of the VegSyst model to calculate crop N uptake and ETc of different vegetable species grown in Mediterranean greenhouses. Acta Horticulturae, 2018, , 105-112.	0.2	0
93	Modelling greenhouse-grown vegetable crops for optimisation of irrigation and nitrogen management. Acta Horticulturae, 2020, , 241-256.	0.2	0
94	Tillage effects on soil properties, crop responses and root density of sweet pepper (Capsicum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622	0.6	0
95	Use of the VegSyst model to calculate crop N uptake and ETc of different vegetable species grown in Mediterranean greenhouses. Acta Horticulturae, 2017, , 105-112.	0.2	0
96	Reference values for phenological phases of chlorophyll meter readings and reflectance indices for optimal N nutrition of fertigated tomato. Acta Horticulturae, 2017, , 65-72.	0.2	0
97	Twentieth-century Arthurian Romance. , 0, , 454-471.		0