

# Murray J Unkovich

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8689777/publications.pdf>

Version: 2024-02-01

45  
papers

2,582  
citations

201674  
27  
h-index

243625  
44  
g-index

46  
all docs

46  
docs citations

46  
times ranked

2436  
citing authors

#	ARTICLE	IF	CITATIONS
1	An appraisal of recent field measurements of symbiotic N <sub>2</sub> fixation by annual legumes. <i>Field Crops Research</i> , 2000, 65, 211-228.	5.1	321
2	Potential precision of the $\delta^{15}\text{N}$ natural abundance method in field estimates of nitrogen fixation by crop and pasture legumes in south-west Australia. <i>Australian Journal of Agricultural Research</i> , 1994, 45, 119.	1.5	161
3	Variability in Harvest Index of Grain Crops and Potential Significance for Carbon Accounting. <i>Advances in Agronomy</i> , 2010, 105, 173-219.	5.2	150
4	Prospects and problems of simple linear models for estimating symbiotic N <sub>2</sub> fixation by crop and pasture legumes. <i>Plant and Soil</i> , 2010, 329, 75-89.	3.7	145
5	Net nitrogen balances for cool-season grain legume crops and contributions to wheat nitrogen uptake: a review. <i>Australian Journal of Experimental Agriculture</i> , 2001, 41, 347.	1.0	118
6	$^{15}\text{N}$ natural abundance of plant and soil components of a Banksia woodland ecosystem in relation to nitrate utilization, life form, mycorrhizal status and N <sub>2</sub> -fixing abilities of component species. <i>Plant, Cell and Environment</i> , 1993, 16, 365-373.	5.7	115
7	Nitrogen fixation by annual legumes in Australian Mediterranean agriculture. <i>Australian Journal of Agricultural Research</i> , 1997, 48, 267.	1.5	112
8	Interactions between water and nitrogen in Australian cropping systems: physiological, agronomic, economic, breeding and modelling perspectives. <i>Crop and Pasture Science</i> , 2016, 67, 1019.	1.5	102
9	Productivity and sustainability of a spring wheat–field pea rotation in a semi-arid environment under conventional and conservation tillage systems. <i>Field Crops Research</i> , 2008, 107, 43-55.	5.1	95
10	Methodologies for estimating nitrogen transfer between legumes and companion species in agro-ecosystems: A review of $^{15}\text{N}$ -enriched techniques. <i>Soil Biology and Biochemistry</i> , 2014, 73, 10-21.	8.8	87
11	Factors affecting soil acidification under legumes. III. Acid production by N <sub>2</sub> -fixing legumes as influenced by nitrate supply. <i>New Phytologist</i> , 1999, 143, 513-521.	7.3	82
12	Isotope discrimination provides new insight into biological nitrogen fixation. <i>New Phytologist</i> , 2013, 198, 643-646.	7.3	79
13	Characteristics of inorganic nitrogen assimilation of plants in fire-prone Mediterranean-type vegetation. <i>Plant, Cell and Environment</i> , 1993, 16, 351-363.	5.7	74
14	Selection of reference plants for $^{15}\text{N}$ natural abundance assessment of N <sub>2</sub> fixation by crop and pasture legumes in south-west Australia. <i>Australian Journal of Agricultural Research</i> , 1994, 45, 133.	1.5	68
15	Can differences in $^{15}\text{N}$ natural abundance be used to quantify the transfer of nitrogen from legumes to neighbouring non-legume plant species?. <i>Soil Biology and Biochemistry</i> , 2015, 87, 97-109.	8.8	67
16	Farming systems of the Loess Plateau, Gansu Province, China. <i>Agriculture, Ecosystems and Environment</i> , 2008, 124, 13-23.	5.3	62
17	Measurement of asymbiotic N <sub>2</sub> fixation in Australian agriculture. <i>Soil Biology and Biochemistry</i> , 2008, 40, 2915-2921.	8.8	58
18	Nitrogen benefits of lupins, field pea, and chickpea to wheat production in south-eastern Australia. <i>Australian Journal of Agricultural Research</i> , 1997, 48, 39.	1.5	52

#	ARTICLE	IF	CITATIONS
19	The Nitrogen Cycle in Terrestrial Ecosystems. , 2007, , 37-64.		50
20	Soil water, soil nitrogen and productivity of lucerneâ€“wheat sequences on deep silt loams in a summer dominant rainfall environment. Field Crops Research, 2009, 111, 97-108.	5.1	47
21	Nitrogen Balance of Field Pea Crops in South Western Australia, Studied Using the 15N Natural Abundance Technique. Functional Plant Biology, 1994, 21, 533.	2.1	45
22	Field measurements of bare soil evaporation and crop transpiration, and transpiration efficiency, for rainfed grain crops in Australia â€“ A review. Agricultural Water Management, 2018, 205, 72-80.	5.6	41
23	Nitrogen fixation in Australian dairy systems: review and prospect. Crop and Pasture Science, 2012, 63, 787.	1.5	35
24	Insufficient nitrogen supply from symbiotic fixation reduces seasonal crop growth and nitrogen mobilization to seed in highly productive soybean crops. Plant, Cell and Environment, 2020, 43, 1958-1972.	5.7	35
25	Effects of grazing on plant and soil nitrogen relations of pasture-crop rotations. Australian Journal of Agricultural Research, 1998, 49, 475.	1.5	35
26	Fertilizer nitrogen in fertigated coffee crop: Absorption changes in plant compartments over time. Field Crops Research, 2011, 124, 369-377.	5.1	34
27	Responses of native woody taxa in Banksia woodland to incursion of groundwater and nutrients from bordering agricultural land. Australian Journal of Botany, 2000, 48, 777.	0.6	28
28	Water use, competition, and crop production in low rainfall, alley farming systems of south-eastern Australia. Australian Journal of Agricultural Research, 2003, 54, 751.	1.5	28
29	Preparation of plant samples for high precision nitrogen isotope ratio analysis. Communications in Soil Science and Plant Analysis, 1993, 24, 2093-2106.	1.4	27
30	Symbiotic effectiveness and tolerance to early season nitrate in indigenous populations of subterranean clover rhizobia from S.W. Australian pastures. Soil Biology and Biochemistry, 1998, 30, 1435-1443.	8.8	23
31	Symbiotic N2 fixation and nitrate utilisation in irrigated lucerne (Medicago sativa) systems. Biology and Fertility of Soils, 2011, 47, 377-385.	4.3	23
32	Agriculture in central Tibet: an assessment of climate, farming systems, and strategies to boost production. Crop and Pasture Science, 2009, 60, 627.	1.5	22
33	Diversity and Evolution of Rainfed Farming Systems in Southern Australia. , 2011, , 715-754.		20
34	Assessing N2 Fixation in Annual Legumes using 15N Natural Abundance. Current Plant Science and Biotechnology in Agriculture, 2001, , 103-118.	0.0	19
35	Nitrogen mineralisation and plant nitrogen acquisition in a nitrogen-limited calcareous grassland. Environmental and Experimental Botany, 1998, 40, 209-219.	4.2	16
36	Which crops should be included in a carbon accounting system for Australian agriculture?. Crop and Pasture Science, 2009, 60, 617.	1.5	15

#	ARTICLE	IF	CITATIONS
37	Challenges and opportunities for grain farming on sandy soils of semi-arid south and south-eastern Australia. <i>Soil Research</i> , 2020, 58, 323.	1.1	15
38	Measuring Symbiotic Nitrogen Fixation by Legumes. <i>Agronomy</i> , 2015, , 125-170.	0.2	13
39	Nitrogen isotope fractionation in the fodder tree tagasaste ( <i>Chamaecytisus proliferus</i> ) and assessment of N <sub>2</sub> fixation inputs in deep sandy soils of Western Australia. <i>Functional Plant Biology</i> , 2000, 27, 921.	2.1	10
40	Second harvest“Is there sufficient stubble for biofuel production in Australia?. <i>GCB Bioenergy</i> , 2012, 4, 654-660.	5.6	8
41	Reliable quantification of N <sub>2</sub> fixation by non-legumes remains problematic. <i>Nutrient Cycling in Agroecosystems</i> , 2020, 118, 223-225.	2.2	8
42	Sustainability of Grazing Systems: Feed Base, Critical Grazing Pressure and Variability. <i>International Journal of Agricultural Sustainability</i> , 2003, 1, 95-107.	3.5	6
43	Soils, crop nutrient status and nutrient dynamics on small-holder farms in central Tibet, China. <i>Plant and Soil</i> , 2011, 348, 219-229.	3.7	6
44	Mineral nitrogen supply from pastures to cereals in three northern Victorian environments. <i>Australian Journal of Experimental Agriculture</i> , 2006, 46, 59.	1.0	5
45	John Featherstone Witty. <i>Plant and Soil</i> , 2012, 356, 291-293.	3.7	1