David F Herridge

List of Publications by Year in Descending Order

86 papers	4,682 citations	37 h-index	67 g-index
86 ext. papers	5,190 ext. citations	4.6 avg, IF	5.29 L-index

#	Paper	IF	Citations
86	Reliable quantification of N2 fixation by non-legumes remains problematic. *Nutrient Cycling in Agroecosystems*, **2020**, 118, 223-225	3.3	6
85	Benchmarks for improved productivity and profitability of monsoon rice in lower Myanmar. *Field Crops Research*, **2019**, 233, 59-69	5.5	4
84	The cropping systems of the Central Dry Zone of Myanmar: Productivity constraints and possible solutions. *Agricultural Systems*, **2019**, 169, 31-40	6.1	15
83	Rainfall-related opportunities, risks and constraints to rainfed cropping in the Central Dry Zone of Myanmar as defined by soil water balance modelling. *Agricultural Systems*, **2018**, 164, 47-57	6.1	6
82	Greenhouse gas emission reductions in subtropical cereal-based cropping sequences using legumes, DMPP-coated urea and split timings of urea application. *Soil Research*, **2018**, 56, 724	1.8	4
81	Validation of NBudget for estimating soil N supply in Australia's northern grains region in the absence of soil test data. *Soil Research*, **2017**, 55, 590	1.8	4
80	A Mixed-Effects Regression Modeling Approach for Evaluating Paddy Soil Productivity. *Agronomy Journal*, **2017**, 109, 2302-2311	2.2	
79	Soil mineral nitrogen benefits derived from legumes and comparisons of the apparent recovery of legume or fertiliser nitrogen by wheat. *Soil Research*, **2017**, 55, 600	1.8	30
78	Greenhouse gas (N2O and CH4) fluxes under nitrogen-fertilised dryland wheat and barley on subtropical Vertosols: risk, rainfall and alternatives. *Soil Research*, **2016**, 54, 634	1.8	19
77	Cradle-to-farmgate greenhouse gas emissions for 2-year wheat monoculture and break crop–wheat sequences in south-eastern Australia. *Crop and Pasture Science*, **2016**, 67, 812	2.2	13
76	Enhanced biological N2 fixation and yield of faba bean (Vicia faba L.) in an acid soil following biochar addition: dissection of causal mechanisms. *Plant and Soil*, **2015**, 395, 7-20	4.2	75
75	Measuring Symbiotic Nitrogen Fixation by Legumes. *Agronomy*, **2015**, 125-170	0.8	8
74	Soil N2O emissions under N2-fixing legumes and N-fertilised canola: A reappraisal of emissions factor calculations. *Agriculture, Ecosystems and Environment*, **2015**, 202, 232-242	5.7	49
73	Naturalised populations of mesorhizobia in chickpea (Cicer arietinum L.) cropping soils: effects on nodule occupancy and productivity of commercial chickpea. *Plant and Soil*, **2015**, 387, 233-249	4.2	19
72	Influence of source and quality of plant residues on emissions of N2O and CO2 from a fertile, acidic Black Vertisol. *Biology and Fertility of Soils*, **2014**, 50, 499-506	6.1	41
71	Rhizobial counts in peat inoculants vary amongst legume inoculant groups at manufacture and with storage: implications for quality standards. *Plant and Soil*, **2014**, 380, 327-336	4.2	5
70	Crop-available water and agronomic management, rather than nitrogen supply, primarily determine grain yield of commercial chickpea in northern New South Wales. *Crop and Pasture Science*, **2014**, 65, 442	2.2	7

69	Greenhouse gas emissions profile for 1 tonne of wheat produced in Central Zone (East) New South Wales: a life cycle assessment approach. *Crop and Pasture Science*, **2012**, 63, 319	2.2	42
68	The contributions of nitrogen-fixing crop legumes to the productivity of agricultural systems. *Symbiosis*, **2009**, 48, 1-17	3	457
67	Global inputs of biological nitrogen fixation in agricultural systems. *Plant and Soil*, **2008**, 311, 1-18	4.2	976
66	Foreword to VApplication of Rhizobial Inoculants to Australian AgricultureV *Australian Journal of Experimental Agriculture*, **2005**, 45, ii		2
65	Lime pelleting inoculated serradella (Ornithopus spp.) increases nodulation and yield. *Soil Biology and Biochemistry*, **2004**, 36, 1289-1294	7.5	2
64	Effects of below-ground nitrogen on N balances of field-grown fababean, chickpea, and barley. *Australian Journal of Agricultural Research*, **2003**, 54, 333		60
63	Contribution of chickpea nitrogen fixation to increased wheat production and soil organic fertility in rain-fed cropping. *Biology and Fertility of Soils*, **2003**, 38, 59-64	6.1	22
62	Crop residue and fertiliser N effects on nitrogen fixation and yields of legumeDcereal rotations and soil organic fertility. *Field Crops Research*, **2003**, 83, 1-11	5.5	115
61	Fababean (Vicia faba) in AustraliaVs northern grains belt: canopy development, biomass, and nitrogen accumulation and partitioning. *Australian Journal of Agricultural Research*, **2002**, 53, 227		24
60	Timing of xylem sampling for ureide analysis of nitrogen fixation. *Plant and Soil*, **2002**, 238, 57-67	4.2	20
59	Quantifying below-ground nitrogen of legumes. 2. A comparison of 15N and non isotopic methods. *Plant and Soil*, **2002**, 239, 277-289	4.2	74
58	Quantifying below-ground nitrogen of legumes. *Plant and Soil*, **2002**, 245, 327-334	4.2	48
57	Calibrating the xylem-solute method for nitrogen fixation measurement of ureide-producing legumes: cowpea, mungbean, and black gram. *Communications in Soil Science and Plant Analysis*, **2002**, 33, 425-437	1.5	9
56	Nitrogen fixation and soil nitrate interactions in field-grown chickpea (Cicer arietinum) and fababean (Vicia faba). *Australian Journal of Agricultural Research*, **2002**, 53, 599		43
55	Relating particulate organic matter-nitrogen (POM-N) and non-POM-N with pulse crop residues, residue management and cereal N uptake. *Agronomy for Sustainable Development*, **2002**, 22, 777-787		8
54	Improving nitrogen fixation of crop legumes through breeding and agronomic management: analysis with simulation modelling. *Australian Journal of Experimental Agriculture*, **2001**, 41, 391		25
53	Factors regulating the contributions of fixed nitrogen by pasture and crop legumes to different farming systems of eastern Australia. *Plant and Soil*, **2001**, 228, 29-41	4.2	113
52	On-farm measurements of nitrogen fixation by winter and summer legumes in the Hill and Terai regions of Nepal. *Field Crops Research*, **2001**, 70, 209-221	5.5	54

51	Breeding for enhanced nitrogen fixation in crop legumes. *Field Crops Research*, **2000**, 65, 229-248	5.5	114
50	Evaluation of genotypes of navy and culinary bean (Phaseolus vulgaris L.) selected for superior growth and nitrogen fixation. *Australian Journal of Experimental Agriculture*, **1999**, 39, 975		9
49	Does nitrogen fixation of commercial, dryland chickpea and faba bean crops in north-west New South Wales maintain or enhance soil nitrogen?. *Australian Journal of Experimental Agriculture*, **1998**, 38, 61		71
48	Chickpea in wheat-based cropping systems of northern New South Wales. II. Influence on biomass, grain yield, and crown rot in the following wheat crop. *Australian Journal of Agricultural Research*, **1998**, 49, 401		39
47	Chickpea in wheat-based cropping systems of northern New South Wales. III. Prediction of N2 fixation and N balance using soil nitrate at sowing and chickpea yield. *Australian Journal of Agricultural Research*, **1998**, 49, 409		23
46	Evaluation of the xylem ureide method for measuring N2 fixation in six tree legume species. *Soil Biology and Biochemistry*, **1996**, 28, 281-289	7.5	26
45	Application of 15N and xylem ureide methods for assessing N2 fixation of three shrub legumes periodically pruned for forage. *Plant and Soil*, **1996**, 182, 125-137	4.2	44
44	Chickpea increases soil-N fertility in cereal systems through nitrate sparing and N2 fixation. *Soil Biology and Biochemistry*, **1995**, 27, 545-551	7.5	103
43	Field assessment of supernodulating genotypes of soybean for yield, N2 fixation and benefit to subsequent crops. *Soil Biology and Biochemistry*, **1995**, 27, 563-569	7.5	49
42	Heritability and Repeatability of Enhanced N2 Fixation in Early and Late Inbreeding Generations of Soybean. *Crop Science*, **1994**, 34, 360-367	2.4	27
41	Nitrogen fixation, growth and yield of soybean grown under saturated soil culture and conventional irrigation. *Field Crops Research*, **1993**, 32, 257-268	5.5	21
40	Screening techniques and improved biological nitrogen fixation in cool season food legumes. *Euphytica*, **1993**, 73, 95-108	2.1	21
39	Low nodulation and N2 fixation limits yield of pigeonpea on alkaline vertisols of northern N.S.W.: effect of iron, rhizobia and plant genotype. *Australian Journal of Agricultural Research*, **1993**, 44, 137		7
38	Production of summer crops in northern New South Wales. II. Effects of tillage and crop rotation on yields of sorghum. *Australian Journal of Agricultural Research*, **1992**, 43, 123		10
37	Production of summer crops in northern New South Wales. I. Effects of tillage and double cropping on growth, grain and N yields of six crops. *Australian Journal of Agricultural Research*, **1992**, 43, 105		22
36	Effects of N fertilization on N2 fixation and N balances of soybean grown after lowland rice. *Plant and Soil*, **1992**, 147, 235-242	4.2	29
35	Erratic nodulation and nitrogen fixation in field-grown pigeonpea [Cajanus cajan (L.) Millsp.]. *Australian Journal of Experimental Agriculture*, **1991**, 31, 653		9
34	Prediction of nitrogen fertilizer requirement in cotton using petiole and sap nitrate. *Communications in Soil Science and Plant Analysis*, **1991**, 22, 1315-1324	1.5	12

33	Correlation between xylem ureide levels and nodulation in field-grown Phaseolus vulgaris. *Australian Journal of Experimental Agriculture*, **1991**, 31, 679		9
32	Nitrogen Fixation by Legumes in Tropical and Subtropical Agriculture. *Advances in Agronomy*, **1990**, 155-223	7.7	158
31	Measurement of nitrogen fixation by soybean in the field using the ureide and natural N abundance methods. *Plant Physiology*, **1990**, 93, 708-16	6.6	108
30	Ureide assay for measuring nitrogen fixation by nodulated soybean calibrated by N methods. *Plant Physiology*, **1990**, 93, 495-503	6.6	127
29	Effect of tillage on yield, nodulation and nitrogen fixation of soybean in far north-coastal New South Wales. *Australian Journal of Experimental Agriculture*, **1989**, 29, 671		42
28	Development of the Xylem Ureide Assay for the Measurement of Nitrogen Fixation by Pigeonpea (Cajanus cajan (L.) Millsp.). *Journal of Experimental Botany*, **1989**, 40, 535-542	7	25
27	Field evaluation of soybean genotypes selected for enhanced capacity to nodulate and fix nitrogen in the presence of nitrate. *Plant and Soil*, **1988**, 110, 129-135	4.2	45
26	Measurement of N2 fixation in maize (Zea mays L.)–cowpea (Vigna unguiculata [Thunb.] Ohwi and Ohashi) intercrops. *Plant and Soil*, **1988**, 108, 125-135	4.2	73
25	Adaptation of methods for evaluating N2 fixation in food legumes and legume cover crops. *Plant and Soil*, **1988**, 108, 143-150	4.2	22
24	Contributions of fixed nitrogen and soil nitrate to the nitrogen economy of irrigated soybean. *Soil Biology and Biochemistry*, **1988**, 20, 711-717	7.5	55
23	The Xylem Ureide Assay of Nitrogen Fixation: Sampling Procedures and Sources of Error. *Journal of Experimental Botany*, **1988**, 39, 12-22	7	31
22	The narrow-leafed lupin (Lupinus angustifolius L.) as a nitrogen-fixing rotation crop for cereal production. II. Estimates of fixation by field-grown crops. *Australian Journal of Agricultural Research* , **1988**, 39, 1017		24
21	The narrow-leafed lupin (Lupinus angustifolius L.) as a nitrogen-fixing rotation crop for cereal production. III. Residual effects of lupins on subsequent cereal crops. *Australian Journal of Agricultural Research*, **1988**, 39, 1029		23
20	Studies on alternative means of legume inoculation: microbiological and agronomic appraisals of commercial procedures for inoculating soybeans with Bradyrhizobium japonicum. *Australian Journal of Agricultural Research*, **1988**, 39, 965		29
19	The narrow-leafed lupin (Lupinus angustifolius L.) as a nitrogen-fixing rotation crop for cereal production. I. Indices of nitrogen fixation. *Australian Journal of Agricultural Research*, **1988**, 39, 1003		7
18	Translocation of Nitrogenous Compounds in Symbiotic and Nitrate-Fed Amide-Exporting Legumes. *Journal of Experimental Botany*, **1987**, 38, 567-579	7	50
17	Population dynamics of Rhizobium japonicum strains used to inoculate three successive crops of soybean. *Australian Journal of Agricultural Research*, **1987**, 38, 61		60
16	Effects of Nitrate and Plant Development on the Abundance of Nitrogenous Solutes in Root-Bleeding and Vacuum-Extracted Exudates of Soybean1. *Crop Science*, **1984**, 24, 173-179	2.4	86

15	Effect of rhizobia and soil nitrate on the establishment and functioning of the soybean symbiosis in the field. *Australian Journal of Agricultural Research*, **1984**, 35, 149		63
14	Relative abundance of ureides and nitrate in plant tissues of soybean as a quantitative assay of nitrogen fixation. *Plant Physiology*, **1982**, 70, 1-6	6.6	106
13	Use of the ureide technique to describe the nitrogen economy of field-grown soybeans. *Plant Physiology*, **1982**, 70, 7-11	6.6	56
12	Synthesis, Storage, and Utilization of Amino Compounds in White Lupin (Lupinus albus L.). *Plant Physiology*, **1981**, 67, 37-42	6.6	44
11	Partitioning and Utilization of Net Photosynthate in a Nodulated Annual Legume. *Journal of Experimental Botany*, **1978**, 29, 401-412	7	70
10	Allantoin and Allantoic Acid in the Nitrogen Economy of the Cowpea (Vigna unguiculata [L.] Walp.). *Plant Physiology*, **1978**, 62, 495-8	6.6	142
9	Utilization of net photosynthate for nitrogen fixation and protein production in an annual legume. *Plant Physiology*, **1977**, 60, 759-64	6.6	107
8	Variation in colony characteristics and symbiotic effectiveness of Rhizobium. *Journal of Applied Bacteriology*, **1975**, 38, 19-27		37
7	Influence of combined nitrogen on the symbiosis between single colony isolates of Rhizobium CB756 and Macrotyloma axillare. *Journal of Applied Bacteriology*, **1975**, 38, 75-8		
6	Nodulation of and nitrogen fixation by Lablab purpureus under field conditions. *Australian Journal of Experimental Agriculture*, **1975**, 15, 264		5
5	Studies on seed pelleting as an aid to legume seed inoculation. 4. Examination of preinoculated seed. *Australian Journal of Experimental Agriculture*, **1975**, 15, 780		19
4	Criteria and methods for comparing the effectiveness of Rhizobium strains for pasture legumes under field conditions. *Plant and Soil*, **1974**, 40, 511-524	4.2	6
3	Survival of some slow-growing Rhizobium on inoculated legume seed. *Plant and Soil*, **1974**, 40, 441-444	4.2	9
2	Quantifying country-to-global scale nitrogen fixation for grain legumes: I. Reliance on nitrogen fixation of soybean, groundnut and pulses. *Plant and Soil*,1	4.2	5
1	Quantifying country-to-global scale nitrogen fixation for grain legumes II. Coefficients, templates and estimates for soybean, groundnut and pulses. *Plant and Soil*,1	4.2	4