

Methods for the continuous measurement of O₂ consumption in nodulated legume root systems

Journal of Experimental Botany

49, 1041-1047

DOI: [10.1093/jxb/49.323.1041](https://doi.org/10.1093/jxb/49.323.1041)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Hydrogen measurements provide direct evidence for a variable physical barrier to gas diffusion in legume nodules. <i>Journal of Experimental Botany</i> , 1998, 49, 1015-1020.	4.8	47
2	Sucrose Synthase in Legume Nodules Is Essential for Nitrogen Fixation ¹ . <i>Plant Physiology</i> , 1999, 120, 867-878.	4.8	175
3	Stress-Induced Legume Root Nodule Senescence. Physiological, Biochemical, and Structural Alterations. <i>Plant Physiology</i> , 1999, 121, 97-112.	4.8	166
4	Abscisic acid induces a decline in nitrogen fixation that involves leghaemoglobin, but is independent of sucrose synthase activity. <i>Journal of Experimental Botany</i> , 2001, 52, 285-293.	4.8	24
5	Continuous CO ₂ enrichment leads to increased nodule biomass, carbon availability to nodules and activity of carbon-metabolising enzymes but does not enhance specific nitrogen fixation in pea. <i>Physiologia Plantarum</i> , 2001, 113, 33-40.	5.2	54
6	Abscisic acid induces a decline in nitrogen fixation that involves leghaemoglobin, but is independent of sucrose synthase activity. <i>Journal of Experimental Botany</i> , 2001, 52, 285-293.	4.8	68
7	Short-term metabolic responses of soybean root nodules to nitrate. <i>Journal of Experimental Botany</i> , 2002, 53, 423-428.	4.8	43
8	A Simple Model of Feedback Regulation for Nitrate Uptake and N ₂ Fixation in Contrasting Phenotypes of White Clover. <i>Annals of Botany</i> , 2002, 90, 139-147.	2.9	31
9	Effects of water stress on antioxidant enzymes of leaves and nodules of transgenic alfalfa overexpressing superoxide dismutases. <i>Physiologia Plantarum</i> , 2002, 115, 531-540.	5.2	141
10	Physiological implications of trehalase from <i>Phaseolus vulgaris</i> root nodules: partial purification and characterization. <i>Plant Physiology and Biochemistry</i> , 2005, 43, 355-361.	5.8	18
11	Evidence for carbon flux shortage and strong carbon/nitrogen interactions in pea nodules at early stages of water stress. <i>Journal of Experimental Botany</i> , 2005, 56, 2551-2561.	4.8	119
12	Trehalose metabolism in root nodules of the model legume <i>Lotus japonicus</i> in response to salt stress. <i>Physiologia Plantarum</i> , 2006, 128, 701-709.	5.2	36
13	Nitrogen Fixation Control under Drought Stress. Localized or Systemic?. <i>Plant Physiology</i> , 2007, 143, 1968-1974.	4.8	114
14	Nitrogen Fixation Control under Drought Stress. Localized or Systemic?. <i>Plant Physiology</i> , 2007, 143, 1968-1974.	4.8	114
15	<i>Medicago truncatula</i> Root Nodule Proteome Analysis Reveals Differential Plant and Bacteroid Responses to Drought Stress. <i>Plant Physiology</i> , 2007, 144, 1495-1507.	4.8	178
16	The Response of Carbon Metabolism and Antioxidant Defenses of Alfalfa Nodules to Drought Stress and to the Subsequent Recovery of Plants. <i>Plant Physiology</i> , 2007, 144, 1104-1114.	4.8	210
17	Reduced Carbon Availability to Bacteroids and Elevated Ureides in Nodules, But Not in Shoots, Are Involved in the Nitrogen Fixation Response to Early Drought in Soybean. <i>Plant Physiology</i> , 2007, 145, 539-546.	4.8	124
18	Growth and nitrogen fixation in <i>Lotus japonicus</i> and <i>Medicago truncatula</i> under NaCl stress: Nodule carbon metabolism. <i>Journal of Plant Physiology</i> , 2008, 165, 641-650.	3.5	94

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19	Nitrogen fixation is synchronized with carbon metabolism in <i>Lotus japonicus</i> and <i>Medicago truncatula</i> nodules under salt stress. <i>Journal of Plant Interactions</i> , 2008, 3, 137-144.	2.1	9
20	Evidence for Transcriptional and Post-Translational Regulation of Sucrose Synthase in Pea Nodules by the Cellular Redox State. <i>Molecular Plant-Microbe Interactions</i> , 2008, 21, 622-630.	2.6	33
21	Comparison of Galvanic and Chemiluminescent Sensors for Detecting Soil Air Oxygen in Flood-Irrigated Pecans. <i>Soil Science Society of America Journal</i> , 2008, 72, 758-766.	2.2	10
22	Carbon Metabolism and Bacteroid Functioning Are Involved in the Regulation of Nitrogen Fixation in <i>Medicago truncatula</i> Under Drought and Recovery. <i>Molecular Plant-Microbe Interactions</i> , 2009, 22, 1565-1576.	2.6	114
23	Validamycin A improves the response of <i>Medicago truncatula</i> plants to salt stress by inducing trehalose accumulation in the root nodules. <i>Journal of Plant Physiology</i> , 2009, 166, 1218-1222.	3.5	35
24	Application of sewage sludge improves growth, photosynthesis and antioxidant activities of nodulated alfalfa plants under drought conditions. <i>Environmental and Experimental Botany</i> , 2010, 68, 75-82.	4.2	69
25	Relationship between photosynthetic capacity, nitrogen assimilation and nodule metabolism in alfalfa (<i>Medicago sativa</i>) grown with sewage sludge. <i>Journal of Hazardous Materials</i> , 2010, 182, 210-216.	12.4	21
26	Comparing Symbiotic Efficiency between Swollen versus Nonswollen Rhizobial Bacteroids. <i>Plant Physiology</i> , 2010, 154, 1541-1548.	4.8	108
27	Sewage sludge application can induce changes in antioxidant status of nodulated alfalfa plants. <i>Ecotoxicology and Environmental Safety</i> , 2010, 73, 436-442.	6.0	16
28	Effect of salinity on nodulation, nitrogen fixation and growth of common bean (<i>Phaseolus vulgaris</i>) inoculated with rhizobial strains isolated from the Haouz region of Morocco. <i>Symbiosis</i> , 2011, 55, 69-75.	2.3	34
29	Different strategies for salt tolerance in determined and indeterminate nodules of <i>Lotus japonicus</i> and <i>Medicago truncatula</i> . <i>Archives of Agronomy and Soil Science</i> , 2012, 58, 1061-1073.	2.6	9
30	Impact of arbuscular mycorrhizal fungi (AMF) and atmospheric CO ₂ concentration on the biomass production and partitioning in the forage legume alfalfa. <i>Symbiosis</i> , 2012, 58, 171-181.	2.3	30
31	Developmental effects on ureide levels are mediated by tissue-specific regulation of allantoinase in <i>Phaseolus vulgaris</i> L.. <i>Journal of Experimental Botany</i> , 2012, 63, 4095-4106.	4.8	43
32	Ascorbate oxidase: The unexpected involvement of a "wasteful enzyme" in the symbioses with nitrogen-fixing bacteria and arbuscular mycorrhizal fungi. <i>Plant Physiology and Biochemistry</i> , 2012, 59, 71-79.	5.8	26
33	John Featherstone Witty. <i>Plant and Soil</i> , 2012, 356, 291-293.	3.7	1
34	Alfalfa yield under elevated CO ₂ and temperature depends on the <i>Sinorhizobium</i> strain and growth season. <i>Environmental and Experimental Botany</i> , 2012, 77, 267-273.	4.2	37
35	Salicylic acid improves the salinity tolerance of <i>Medicago sativa</i> in symbiosis with <i>Sinorhizobium meliloti</i> by preventing nitrogen fixation inhibition. <i>Plant Science</i> , 2013, 208, 75-82.	3.6	113
36	Nodule carbohydrate metabolism and polyols involvement in the response of <i>Medicago sativa</i> to salt stress. <i>Environmental and Experimental Botany</i> , 2013, 85, 43-49.	4.2	29

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37	Is N-feedback involved in the inhibition of nitrogen fixation in drought-stressed <i>Medicago truncatula</i> ? <i>Journal of Experimental Botany</i> , 2013, 64, 281-292.	4.8	38
38	Development of Tools for the Biochemical Characterization of the Symbiotic Receptor-Like Kinase DMI2. <i>Molecular Plant-Microbe Interactions</i> , 2013, 26, 216-226.	2.6	11
39	Effect of Long-Term Irrigation with Treated Wastewater on the Root Zone Environment. <i>Vadose Zone Journal</i> , 2013, 12, 1-10.	2.2	51
40	Nodule carbohydrate catabolism is enhanced in the <i>Medicago truncatula</i> A17-Sinorhizobium medicae WSM419 symbiosis. <i>Frontiers in Microbiology</i> , 2014, 5, 447.	3.5	24
41	Unravelling the mechanisms that improve photosynthetic performance of N ₂ -fixing pea plants exposed to elevated [CO ₂]. <i>Environmental and Experimental Botany</i> , 2014, 99, 167-174.	4.2	19
42	Involvement of abscisic acid in the response of <i>Medicago sativa</i> plants in symbiosis with <i>Sinorhizobium meliloti</i> to salinity. <i>Plant Science</i> , 2014, 223, 16-24.	3.6	31
43	Long-term non-invasive and continuous measurements of legume nodule activity. <i>Plant Journal</i> , 2015, 81, 637-648.	5.7	12
44	Performance of <i>Bradyrhizobium</i> and <i>Bradyrhizobium</i> "Azospirillum in Alleviating the Effects of Water-Restrictive Conditions During the Early Stages of <i>Arachis hypogaea</i> Growth. <i>Journal of Plant Growth Regulation</i> , 2019, 38, 1362-1374.	5.1	10
45	A novel biosensor to monitor proline in pea root exudates and nodules under osmotic stress and recovery. <i>Plant and Soil</i> , 2020, 452, 413-422.	3.7	8
46	Oxygen Diffusion, Production Of Reactive Oxygen And Nitrogen Species, And Antioxidants In Legume Nodules. , 2008, , 321-362.		6
47	Long-Term Effects of CO ₂ Enrichment on Nitrogen Fixation and Nodule Metabolism in <i>Pisum sativum</i> L. <i>Plants</i> . , 2002, , 110-110.		0
48	Quality control of <i>Bradyrhizobium</i> inoculant strains: detection of nosZ and correlation of symbiotic efficiency with soybean leaf chlorophyll levels. <i>Frontiers in Agronomy</i> , 0, 6, .	3.3	0