

PPS Keyword List: Keywords related to nitrogen from PPS vol. 1 - 20

NITROGEN (202)

Keyword		Article title (downloadable pdf link)	Author	Year	DOI
%Ndfa (1)		Alteration in Intra-plant Distribution of $\delta^{15}\text{N}$ in Response to Shading in Legumes	Khadka J, et al.	2006	10.1626/pps.9.219
^{15}N (14)	^{15}N (3)	Characteristics of Nitrogen Uptake, Use and Transfer in a Wheat-Maize-Soybean Relay Intercropping System	Yong TW, et al.	2015	10.1626/pps.18.388
		Fate of ^{15}N -labeled Inorganic Fertilizer in an Upland Soil Applied with Sweet Sorghum Bagasse and N Uptake Efficiency by Komatsuna Plants	Asagi N, et al.	2015	10.1626/pps.18.535
		Nitrate-Induced Inhibition of Root Nodule Formation and Nitrogenase Activity in the Peanut (<i>Arachis hypogaea</i> L.)	Daimon H, et al.	1999	10.1626/pps.2.81
	^{15}N labeled ammonium sulfate (1)	Recovery of ^{15}N -labeled Ammonium by Barley and Maize Grown on the Soils with Long-Term Application of Chemical and Organic Fertilizers	Li K, et al.	2001	10.1626/pps.4.29
	^{15}N natural abundance (1)	Yield of sugarcane varieties and their sugar quality grown in different soil types and inoculated with a diazotrophic bacteria consortium	Schultz N, et al.	2017	10.1080/1343943X.2017.1374869
	^{15}N natural abundance method (1)	Difference in $\delta^{15}\text{N}$ Signatures among Plant Parts of Perennial Species Subjected to Drought Stress with Special Reference to the Contribution of Symbiotic N_2 -fixation to Plant N	Khadka J, et al.	2006	10.1626/pps.9.115
	^{15}N -labeled (1)	Rice Uptake and Recovery of Nitrogen with Different Methods of Applying ^{15}N -Labeled Chicken Manure and Ammonium Sulfate	Liu J, et al.	2008	10.1626/pps.11.271
	^{15}N -labeled milk vetch (1)	Nitrogen Cycling in an Ecological Farming System of Milk Vetch Culture- Pig-Raising- Biogas Fermentation- Rice Culture	Liu JR, et al.	2002	10.1626/pps.5.65
	^{15}N -rice chaff (1)	Effect of a Bio-decomposer on Utilization by Rice (<i>Oryza sativa</i> L.) of ^{15}N Derived from Rice Chaff or Straw	Hossain KA, et al.	1999	10.1626/pps.2.65
	^{15}N -rice straw (1)	Effect of a Bio-decomposer on Utilization by Rice (<i>Oryza sativa</i> L.) of ^{15}N Derived from Rice Chaff or Straw	Hossain KA, et al.	1999	10.1626/pps.2.65
	Natural ^{15}N abundance (1)	Characteristics of the Relationship between Natural ^{15}N Abundances in Organic Rice and Soil	Nishida M, et al.	2015	10.1626/pps.18.180
	Natural ^{15}N abundance method (1)	Alteration in Intra-plant Distribution of $\delta^{15}\text{N}$ in Response to Shading in Legumes	Khadka J, et al.	2006	10.1626/pps.9.219
	$\delta^{15}\text{N}$ (2)		Difference in $\delta^{15}\text{N}$ Signatures among Plant Parts of Perennial Species Subjected to Drought Stress with Special Reference to the Contribution of Symbiotic N_2 -fixation to Plant N	Khadka J, et al.	2006
Alteration in Intra-plant Distribution of $\delta^{15}\text{N}$ in Response to Shading in Legumes			Khadka J, et al.	2006	10.1626/pps.9.219
Ammonium nitrogen (1)		Characteristics as Fertilizer of Feces of Aigamo Ducks for Rice Plant (<i>Oryza sativa</i> L.)	Isobe K, et al.	2005	10.1626/pps.8.203
C/N ratio (6)		Role of Belowground Parts of Green Manure Legumes, <i>Crotalaria spectabilis</i> and <i>Sesbania rostrata</i> , in N Uptake by the Succeeding Tendergreen Mustard Plant	Choi B, et al.	2008	10.1626/pps.11.116
		Evaluation of Mixed Cropping of Oat and Hairy Vetch as Green Manure for Succeeding Corn Production	Tarui A, et al.	2013	10.1626/pps.16.383
		Field Evaluation of Coffee Grounds Application for Crop Growth Enhancement, Weed Control, and Soil Improvement	Yamane K, et al.	2014	10.1626/pps.17.93
		Possibility of Introducing Winter Legumes, Hairy Vetch and Faba Bean, as Green Manures to Turmeric Cropping in Temperate Region	Yamawaki K, et al.	2014	10.1626/pps.17.173
		Rice yield and soil carbon dynamics over three years of applying rice husk charcoal to an Andosol paddy field	Koyama S, et al.	2017	10.1080/1343943X.2017.1290506
		Dry-Matter Partitioning and Accumulation of Carbon and Nitrogen during Ripening in a Female-Sterile Line of Rice	Kato M, et al.	2006	10.1626/pps.9.185

Canopy spectrum-based nitrogen optimization algorithm (CSNOA) (1)		Comparison of Five Nitrogen Dressing Methods to Optimize Rice Growth	Chen QC, et al.	2014	10.1626/pps .17.66
Fate of nitrogen (1)		Nitrogen Cycling in an Ecological Farming System of Milk Vetch Culture- Pig-Raising- Biogas Fermentation- Rice Culture	Liu JR, et al.	2002	10.1626/pps .5.65
High nitrogen (2)		Effects of High Nitrogen Supply on the Susceptibility to Coolness at the Young Microspore Stage in Rice (<i>Oryza sativa</i> L.): Gene Expression Analysis in Mature Anthers	Hayashi T, et al.	2009	10.1626/pps .12.271
		Susceptibility to Coolness at the Young Microspore Stage under High Nitrogen Supply in Rice (<i>Oryza Sativa</i> L.). Proteome Analysis of Mature Anthers	Hayashi T, et al.	2006	10.1626/pps .9.212
Leaf nitrogen (12)	Leaf nitrogen (2)	Responses of a Supernodulating Soybean Genotype, Sakukei 4 to Nitrogen Fertilizer	Maekawa T, et al.	2003	10.1626/pps .6.206
		Correlation of Leaf Nitrogen, Chlorophyll and Rubisco Contents with Photosynthesis in a Supernodulating Soybean Genotype Sakukei 4	Maekawa T, et al.	2005	10.1626/pps .8.419
	Leaf nitrogen accumulation (1)	Influence of Nitrogen Enrichment during Reproductive Growth Stage on Leaf Nitrogen Accumulation and Seed Yield in Soybean	Zhao X, et al.	2014	10.1626/pps .17.209
	Leaf nitrogen concentration (3)	Analysis of Common Canopy Reflectance Spectra for Indicating Leaf Nitrogen Concentrations in Wheat and Rice	Zhu Y, et al.	2007	10.1626/pps .10.400
		Extracting Red Edge Position Parameters from Ground- and Space-Based Hyperspectral Data for Estimation of Canopy Leaf Nitrogen Concentration in Rice	Tian Y, et al.	2011	10.1626/pps .14.270
		Effect of Leaf Phosphorus and Potassium Concentration on Chlorophyll Meter Reading in Rice	Peng S, et al.	1999	10.1626/pps .2.227
	Leaf nitrogen content (6)	Spatial Distribution of Leaf Area Index and Leaf N Content in Relation to Grain Yield and Nitrogen Uptake in Rice	Jing Q, et al.	2007	10.1626/pps .10.136
		Leaf Photosynthesis and Its Genetic Improvement from the Perspective of Energy Flow and CO ₂ Diffusion	Tanaka Y, et al.	2014	10.1626/pps .17.111
		A Comparison of the Accumulation and Partitioning of Nitrogen in Plants between Two Rice Cultivars, Akenohoshi and Nipponbare, at the Ripening Stage	Ookawa T, et al.	2003	10.1626/pps .6.172
		Comparison and Standardization among Chlorophyll Meters in their Readings on Rice Leaves	Huang J, et al.	2004	10.1626/pps .7.97
		Effects of a Reduction in Soil Moisture from One Month before Flowering through Ripening on Dry Matter Production and Ecophysiological Characteristics of Wheat Plants	Nakagami K, et al.	2004	10.1626/pps .7.143
		Nitrogen Content of Leaves Affects the Nodal Position of the Last Visible Primary Tiller on Main Stems of Rice Plants Grown at Various Plant Densities	Sasaki R, et al.	2006	10.1626/pps .9.242
Nitrate-nitrogen (1)		Genetic Variations in Dry Matter Production, Nitrogen Uptake, and Nitrogen Use Efficiency in the AA Genome <i>Oryza</i> Species Grown under Different Nitrogen Conditions	Hamaoka N, et al.	2013	10.1626/pps .16.107
Nitrogen (29)		Land Equivalent Ratio of Groundnut-Finger millet Intercrops as Affected by Plant Combination Ratio, and Nitrogen and Water Availability	Runkulatile H, et al.	1998	10.1626/pps .1.39
		Seed Weight of Nodulating and Non-nodulating Soybeans at Different Nitrogen Levels and Years	Manalo DD, et al.	1998	10.1626/pps .1.264
		Nitrogen and Potassium Fertility Impacts on Aggregate Sheath Spot Disease and Yields of Rice	Linguist BA, et al.	2008	10.1626/pps .11.260
		Effects of Deep-Flooding Irrigation on Growth, Canopy Structure and Panicle Weight Yield Under Different Planting Patterns in Rice	Ohe M, et al.	2010	10.1626/pps .13.193
		Leaf Senescence of Soybean at Reproductive Stage is Associated with Induction of Autophagy-related Genes, <i>GmATG8c</i> , <i>GmATG8i</i> and <i>GmATG4</i>	Nang MPSH, et al.	2011	10.1626/pps .14.141
		Ammonia Emission from Leaves of Different Rice (<i>Oryza sativa</i> L.) Cultivars	Kumagai E, et al.	2011	10.1626/pps .14.249
		Effects of the Long-Term Application of Anaerobically-Digested Cattle Manure on Growth, Yield and Nitrogen Uptake of Paddy Rice (<i>Oryza sativa</i> L.), and Soil Fertility in Warmer Region of Japan	Nishikawa T, et al.	2012	10.1626/pps .15.284

Nitrogen (continued)	Estimating Rice Leaf Greenness (SPAD) Using Fixed-Point Continuous Observations of Visible Red and Near Infrared Narrow-Band Digital Images	Shibayama M, et al.	2012	10.1626/pps .15.293
	Effects of Nitrogen on the Expression of Ribulose-1,5-Bisphosphate Carboxylase/Oxygenase Small Subunit Multigene Family Members in Rice (<i>Oryza sativa</i> L.)	Miyazaki N, et al.	2013	10.1626/pps .16.37
	Temporal Growth Inhibition of Rice Plant and Growth Recovery Observed under Application of Anaerobically-Digested Cattle Manure	Nishikawa T, et al.	2013	10.1626/pps .16.154
	Dual and Triple Intercropping: Potential Benefits for Annual Green Manure Production	Miyazawa K, et al.	2014	10.1626/pps .17.194
	Nitrogen Uptake by the Rice Plant and Changes in the Soil Chemical Properties in the Paddy Rice Field during Yearly Application of Anaerobically-Digested Manure for Seven Years	Nishikawa T, et al.	2014	10.1626/pps .17.237
	Acidulocompost, a food waste compost with thermophilic lactic acid fermentation: its effects on potato production and weed growth	Asagi N, et al.	2016	10.1080/13 43943X.20 15.1128092
	Response of the leaf photosynthetic rate to available nitrogen in erect panicle type rice (<i>Oryza sativa</i> L.) cultivar, Shennong265	Urairi C, et al.	2016	10.1080/13 43943X.20 16.1149037
	Effect of a Bio-decomposer on Utilization by Rice (<i>Oryza sativa</i> L.) of ¹⁵ N Derived from Rice Chaff or Straw	Hossain KA, et al.	1999	10.1626/pps .2.65
	Interaction between N Application and Water Management in Dry-Seeded Rice	Won JG, et al.	1999	10.1626/pps .2.109
	Effects of Powdered Rice Chaff Application on Si and N Absorption, Lodging Resistance and Yield in Rice Plants (<i>Oryza sativa</i> L.)	Hossain KA, et al.	1999	10.1626/pps .2.159
	Yield of sugarcane varieties and their sugar quality grown in different soil types and inoculated with a diazotrophic bacteria consortium	Schultz N, et al.	2017	10.1080/13 43943X.20 17.1374869
	Effects of High Nitrogen Supply on the Susceptibility to Coolness at the Young Micro spore Stage in Rice (<i>Oryza sativa</i> L.)	Hayashi T, et al.	2000	10.1626/pps .3.323
	Unlocking the Yield Barrier in Rice through a Nitrogen-Led Improvement in the Radiation Conversion Factor	Sheehy J, et al.	2000	10.1626/pps .3.372
	Identification of Nutrients Limiting Rice Growth in Soils of Northeast Thailand under Water-Limiting and Non-Limiting Conditions	Suriyaarunroj D, et al.	2000	10.1626/pps .3.417
	Effects of Non-Structural Carbohydrates on Spikelet Differentiation in Rice	Kobayasi K, et al.	2001	10.1626/pps .4.9
	Effects of Dry Matter Production, Translocation of Nonstructural Carbohydrates and Nitrogen Application on Grain Filling in Rice Cultivar Takanari, a Cultivar Bearing a Large Number of Spikelets	Nagata K, et al.	2001	10.1626/pps .4.173
	Initiation and Development of Spikelets and Florets in Wheat as Influenced by Shading and Nitrogen Supply at the Spikelet Phase	Toyota M, et al.	2001	10.1626/pps .4.283
	Relationship between Apical Dome Diameter at Panicle Initiation and the Size of Panicle Components in Rice Grown under Different Nitrogen Conditions during the Vegetative Stage	Kobayasi K, et al.	2002	10.1626/pps .5.3
	Evaluation of the SPAD Value in Faba Bean (<i>Vicia faba</i> L.) Leaves in Relation to Different Fertilizer Applications	Ahdelhamid M, et al.	2003	10.1626/pps .6.185
	Proteins and Carbohydrates in Developing Rice Panicles with Different Numbers of Spikelets: Cultivar difference and the effect of nitrogen topdressing	Ding Y, et al.	2004	10.1626/pps .7.16
Geostatistical Analysis of Yield, Soil Properties and Crop Management Practices in Paddy Rice Fields	Inamura T, et al.	2004	10.1626/pps .7.230	
Dry-Matter Partitioning and Accumulation of Carbon and Nitrogen during Ripening in a Female-Sterile Line of Rice	Kato M, et al.	2006	10.1626/pps .9.185	
Nitrogen absorption (3)	Effects of High Ground-Water Level on the Growth and Yield of Supernodulating Soybean Cultivar, Sakukei 4. II. Effects of High Ground-Water Level on Nitrogen Absorption	Hamaya K, et al.	2007	10.1626/pps .10.478

Nitrogen absorption (continued)		Continuous Monitoring of Visible and Near-Infrared Band Reflectance from a Rice Paddy for Determining Nitrogen Uptake Using Digital Cameras	Shibayama M, et al.	2009	10.1626/pps .12.293
		Growth and Yield of New Rice for Africa (NERICAs) under Different Ecosystems and Nitrogen Levels	Matsunami M, et al.	2009	10.1626/pps .12.381
Nitrogen accumulation (6)	Nitrogen accumulation (5)	Performance of a High-Yielding Modern Rice Cultivar Takanari and Several Old and New Cultivars Grown with and without Chemical Fertilizer in a Submerged Paddy Field	Taylaran RD, et al.	2009	10.1626/pps .12.365
		Varietal Difference in Nitrogen Redistribution from Leaves and Its Contribution to Seed Yield in Soybean	Zhao X, et al.	2014	10.1626/pps .17.103
		Statistical Models for Prediction of Dry Weight and Nitrogen Accumulation Based on Visible and Near-Infrared Hyper-Spectral Reflectance of Rice Canopies	Takahashi W, et al.	2000	10.1626/pps .3.377
		Competitiveness of Four Rice Cultivars against Barnyardgrass, <i>Echinochloa oryzicola</i> Vasing, with Reference to Root and Shoot Competition	Suzuki T, et al.	2002	10.1626/pps .5.77
		A Comparison of the Accumulation and Partitioning of Nitrogen in Plants between Two Rice Cultivars, Akenohoshi and Nipponbare, at the Ripening Stage	Ookawa T, et al.	2003	10.1626/pps .6.172
	Plant nitrogen accumulation (1)	Comparison of Five Nitrogen Dressing Methods to Optimize Rice Growth	Chen QC, et al.	2014	10.1626/pps .17.66
Nitrogen application (14)	Nitrogen application (8)	Effects of Alternate Furrow Irrigation and Nitrogen Application Rates on Yield and Water-and Nitrogen-Use Efficiency of Winter Wheat (<i>Triticum aestivum</i> L.)	Sepaskhah AR, et al.	2008	10.1626/pps .11.250
		Performance of Maize-Soybean Intercropping under Various N Application Rates and Soil Moisture Conditions in Northern Mozambique	Tsujimoto Y, et al.	2015	10.1626/pps .18.365
		Countermeasures for heat damage in rice grain quality under climate change	Morita S, et al.	2016	10.1080/13 43943X.20 15.1128114
		An application of digital imagery analysis to understand the effect of N application on light interception, radiation use efficiency, and grain yield of maize under various agro-environments in Northern Mozambique	Tsujimoto Y, et al.	2017	10.1080/13 43943X.20 16.1240013
		Effects of Nitrogen Application on the Development and Accumulation of Protein Bodies in Developing Rice Seed	Zakaria S, et al.	2000	10.1626/pps .3.84
		Contribution of Sink and Source Sizes to Yield Variation among Rice Cultivars	Lubis I, et al.	2003	10.1626/pps .6.119
		Historical Changes in Grain Yield and Photosynthetic Rate of Rice Cultivars Released in the 20th Century in Tohoku Region	Zheng W-H, et al.	2004	10.1626/pps .7.36
		Effects of Water-Saving Irrigation and Nitrogen Fertilization on Yield and Yield Components of Rice (<i>Oryza sativa</i> L.)	Pirmoradian N, et al.	2004	10.1626/pps .7.337
	Nitrogen application method (2)	Effects of Planting Time and Nitrogen Application on Dry Matter Yield of the Forage Rice Cultivar Tachiaoba in Southwestern Japan	Nakano H, et al.	2009	10.1626/pps .12.351
		Early Planting and Early Nitrogen Application Increase Stem Total Digestible Nutrient Concentration and Yield of Forage Rice in Southwestern Japan	Nakano H, et al.	2011	10.1626/pps .14.169
	Nitrogen application rate (3)	Effects of Seeding Rate and Nitrogen Application Rate on Grain Yield and Protein Content of the Bread Wheat Cultivar 'Minaminokaori' in Southwestern Japan	Nakano H, et al.	2009	10.1626/pps .12.109
		Effects of Planting Time and Nitrogen Application on Dry Matter Yield of the Forage Rice Cultivar Tachiaoba in Southwestern Japan	Nakano H, et al.	2009	10.1626/pps .12.351
		Early Planting and Early Nitrogen Application Increase Stem Total Digestible Nutrient Concentration and Yield of Forage Rice in Southwestern Japan	Nakano H, et al.	2011	10.1626/pps .14.169
	Nitrogen application regime (1)	Effect of Top-dressing and Planting Density on the Number of Spikelets and Yield of Rice Cultivated with Nitrogen-free Basal Dressing	Truong TH, et al.	1998	10.1626/pps .1.191

Nitrogen assimilation (1)		Introduction of a fungal NADP(H)-dependent glutamate dehydrogenase (<i>gdhA</i>) improves growth, grain weight and salt resistance by enhancing the nitrogen uptake efficiency in forage rice	Zhang H, et al.	2016	10.1080/1343943X.2015.1133237
Nitrogen availability (1)		Response of Soybean, Sugar Beet and Spring Wheat to the Combination of Reduced Tillage and Fertilization Practices	Miyazawa K, et al.	2004	10.1626/ppp.7.77
Nitrogen balance (1)		Nitrogen Balance in Forage Rice (<i>Oryza sativa</i> L. cv. Tachisuzuka) Cultivation in Pots with Animal Manure Application	Gusmini, et al.	2015	10.1626/ppp.18.529
Nitrogen concentration (1)		Correlation of Nitrogen Concentration with Dry-Matter Partitioning to Spikelets and Total Husk Volume on the Panicle in Japonica Rice	Matsui T, et al.	2002	10.1626/ppp.5.198
Nitrogen content (6)		Varietal Differences in Photosynthetic Rates in Rice Plants, with Special Reference to the Nitrogen Content of Leaves	Hirasawa T, et al.	2010	10.1626/ppp.13.53
		Identification of Chromosomal Regions Controlling the Leaf Photosynthetic Rate in Rice by Using a Progeny from Japonica and High-yielding Indica Varieties	Adachi S, et al.	2011	10.1626/ppp.14.118
		Chlorophyll Meter's Estimate of Weight-based Nitrogen Concentration in Rice Leaf is Influenced by Leaf Thickness	Li J, et al.	2011	10.1626/ppp.14.177
		Enhanced Nitrogen Uptake and Photosynthesis of Rice Grown with Deep and Permanent Irrigation Method: Possible Mechanism for Chalky Grain Reduction	Hayashi M, et al.	2013	10.1626/ppp.16.309
		Effects of Nitrogen Application on Dark-Respiration in Different Parts of Rice Seedlings	Saitoh K, et al.	2000	10.1626/ppp.3.243
		Plant Nitrogen Levels and Photosynthesis in the Supernodulating Soybean (<i>Glycine max</i> L. Merr.) Cultivar 'Sakukei 4'	Takahashi M, et al.	2005	10.1626/ppp.8.412
Nitrogen deficiency (3)		Characteristics of Gas Exchange and Chlorophyll Fluorescence during Senescence of Flag Leaf in Different Rice (<i>Oryza sativa</i> L.) Cultivars Grown under Nitrogen-Deficient Condition	Kumagai E, et al.	2009	10.1626/ppp.12.285
		Comparison of Susceptibility to Photoinhibition and Energy Partitioning of Absorbed Light in Photosystem II in Flag Leaves of Two Rice (<i>Oryza sativa</i> L.) Cultivars that Differ in Their Responses to Nitrogen-Deficiency	Kumagai E, et al.	2010	10.1626/ppp.13.11
		Genetic Variations in Dry Matter Production, Nitrogen Uptake, and Nitrogen Use Efficiency in the AA Genome <i>Oryza</i> Species Grown under Different Nitrogen Conditions	Hamaoka N, et al.	2013	10.1626/ppp.16.107
Nitrogen dressing (7)	Nitrogen dressing approach (1)	Comparison of Five Nitrogen Dressing Methods to Optimize Rice Growth	Chen QC, et al.	2014	10.1626/ppp.17.66
	Nitrogen topdressing (2)	Influence of Sowing Time and Nitrogen Topdressing at the Flowering Stage on the Yield and Pod Character of Green Soybean (<i>Glycine max</i> (L.) Merrill)	Nishioka H, et al.	2008	10.1626/ppp.11.507
		Nursery Management for Improving Seedling Length and Early Growth after Transplanting in a Semi-Dwarf Rice Cultivar Hokuriku 193	Ohsumi A, et al.	2015	10.1626/ppp.18.407
	Nitrogen-free basal dressing (4)	Varietal Differences in Tillering and Yield Responses of Rice Plants to Nitrogen-Free Basal Dressing Accompanied with Sparse Planting Density in the Tohoku Region of Japan	Pham QD, et al.	2004	10.1626/ppp.7.3
		Varietal Differences in the Responses of Yield Components of Rice Plants to Nitrogen-Free Basal Dressing Accompanied with Sparse Planting Density in the Tohoku Region of Japan	Pham QD, et al.	2004	10.1626/ppp.7.109
		Analysis of the Dry Matter Production Process Related to Yield and Yield Components of Rice Plants Grown under the Practice of Nitrogen-Free Basal Dressing Accompanied with Sparse Planting Density	Pham QD, et al.	2004	10.1626/ppp.7.155
		Analysis of Lodging-Resistant Characteristics of Different Rice Genotypes Grown under the Standard and Nitrogen-Free Basal Dressing Accompanied with Sparse Planting Density Practices	Pham QD, et al.	2004	10.1626/ppp.7.243
	Nitrogen economy (1)		Rice Production in Unfertilized Paddy Field: Mechanism of grain production as estimated from nitrogen economy	Okumura T.	2002

Nitrogen efficiency (10)	Nitrogen efficiency (1)	Responses of Seed Yield and Quality to Nitrogen Application Levels in Two Oilseed Rape (<i>Brassica napus</i> L.) Varieties Differing in Nitrogen Efficiency	Zhang ZH, et al.	2012	10.1626/pps .15.265
	Nitrogen use efficiency (NUE) (6)	Effects of Alternate Furrow Irrigation and Nitrogen Application Rates on Yield and Water- and Nitrogen-Use Efficiency of Winter Wheat (<i>Triticum aestivum</i> L.)	Sepaskhah AR, et al.	2008	10.1626/pps .11.250
		Genetic Variations in Dry Matter Production, Nitrogen Uptake, and Nitrogen Use Efficiency in the AA Genome <i>Oryza</i> Species Grown under Different Nitrogen Conditions	Hamaoka N, et al.	2013	10.1626/pps .16.107
		Genotypic Variation in Nitrogen Uptake during Early Growth among Rice Cultivars under Different Soil Moisture Regimes	Matsunami M, et al.	2013	10.1626/pps .16.238
		Comparison of Five Nitrogen Dressing Methods to Optimize Rice Growth	Chen QC, et al.	2014	10.1626/pps .17.66
		Characterizing N uptake and use efficiency in rice as influenced by environments	Jiang P, et al.	2016	10.1080/13 43943X.20 15.1128103
		Photosynthetic response and nitrogen use efficiency of sugarcane under drought stress conditions with different nitrogen application levels	Dinh TH, et al.	2017	10.1080/13 43943X.20 17.1371570
	Nitrogen use efficiency (NUE) for dry matter accumulation (1)	Genotypic Differences in Dry Matter Accumulation, Nitrogen Use Efficiency and Harvest Index in Recombinant Inbred Lines of Rice under Hydroponic Culture	Ju J, et al.	2009	10.1626/pps .12.208
	Photosynthetic nitrogen use efficiency (2)	Variations in structural, biochemical, and physiological traits of photosynthesis and resource use efficiency in Amaranthus species (NAD-ME-type C ₄)	Tsutsumi N, et al.	2017	10.1080/13 43943X.20 17.1320948
Variations in physiological, biochemical, and structural traits of photosynthesis and resource use efficiency in maize and teosintes (NADP-ME-type C ₄)		Yabiku T, et al.	2017	10.1080/13 43943X.20 17.1398050	
Nitrogen enrichment (1)		Influence of Nitrogen Enrichment during Reproductive Growth Stage on Leaf Nitrogen Accumulation and Seed Yield in Soybean	Zhao X, et al.	2014	10.1626/pps .17.209
Nitrogen fertilization (5)	Nitrogen fertilization (1)	Effects of Nitrogen Fertilization on Dark-Respiration and Growth Efficiency of Field-Grown Rice Plants	Saitoh K, et al.	2000	10.1626/pps .3.238
	Nitrogen fertilization model (1)	A Knowledge-Based Model for Nitrogen Management in Rice and Wheat	Cao J, et al.	2009	10.1626/pps .12.100
		Effects of Nitrogen Fertilizer and Planting Density on the Lignin Synthesis in the Culm in Relation to Lodging Resistance of Buckwheat	Wang C, et al.	2015	10.1626/pps .18.218
	Nitrogen fertilizer (2)	The Effect of the Amount of Nitrogen Fertilizer on Starch Metabolism in Leaf Sheath of Japonica and Indica Rice Varieties during the Heading Period	Hirano T, et al.	2005	10.1626/pps .8.122
Fertilizer nitrogen (1)	Effect of Fertilizer and Fixed Nitrogen on the Water Use Efficiency of Genge (<i>Astragalus sinicus</i> L.)	Sumi A, et al.	2015	10.1626/pps .18.104	
Nitrogen fixation (26)	Nitrogen fixation (21)	Effects of Soil Amendment with Crab Shell on the Growth and Nodulation of Soybean Plants (<i>Glycine max</i> Merr.)	Muhammad Ah, et al.	1998	10.1626/pps .1.119
		Effects of High Ground-Water Level on the Growth and Yield of Supernodulating Soybean Cultivar, Sakukei 4. II. Effects of High Ground-Water Level on Nitrogen Absorption	Hamaya K, et al.	2007	10.1626/pps .10.478
		Role of Belowground Parts of Green Manure Legumes, <i>Crotalaria spectabilis</i> and <i>Sesbania rostrata</i> , in N Uptake by the Succeeding Tendergreen Mustard Plant	Choi B, et al.	2008	10.1626/pps .11.116
		Effects of Waterlogging on Nitrogen Fixation and Photosynthesis in Supernodulating Soybean Cultivar Kanto 100	Jung G, et al.	2008	10.1626/pps .11.291
		Effect of CO ₂ Concentration, Temperature and N Fertilization on Biomass Production of Soybean Genotypes Differing in N Fixation Capacity	Matsunami T, et al.	2009	10.1626/pps .12.156
		Nitrogen Utilization in the Supernodulating Soybean Variety "Sakukei 4" and Its Parental Varieties, "Enrei" and "Tamahomare"	Nakamura T, et al.	2010	10.1626/pps .13.123

Nitrogen fixation (continued)	Nitrogen fixation (continued)	Control of Soybean Nodule Formation by a Crack Fertilization Technique	Iijima M, et al.	2011	10.1626/pps .14.202
		Soybean Cultivation on Desert Sand Using Drip Irrigation with Mulch	Miyauchi Y, et al.	2012	10.1626/pps .15.310
		Alternative Experimental Method Using a FRP Pot for Evaluating Wet Damage in Soybean and Morning Glory Grown under Excess Soil Water Conditions	Asakura S, et al.	2013	10.1626/pps .16.280
		Evaluation of Mixed Cropping of Oat and Hairy Vetch as Green Manure for Succeeding Corn Production	Tarui A, et al.	2013	10.1626/pps .16.383
		Nitrate-Induced Inhibition of Root Nodule Formation and Nitrogenase Activity in the Peanut (<i>Arachis hypogaea</i> L.)	Daimon H, et al.	1999	10.1626/pps .2.81
		Grain Yield and Related Physiological Characteristics of Rice Plants (<i>Oryza sativa</i> L.) Inoculated with Free-Living Rhizobacteria	Alam MS, et al.	2001	10.1626/pps .4.126
		Rice Cultivar Variation in the Growth Response to Inoculation of Free-Living Rhizo bacteria	Alam MS, et al.	2003	10.1626/pps .6.50
		Characteristics of Growth and Yield Formation the Improved Genotype of Supernodulating Soybean (<i>Glycine max</i> L. Merr.)	Takahashi M, et al.	2003	10.1626/pps .6.112
		Characterization of Vegetative Growth of a Supernodulating Soybean Genotype, Sakukei 4 Toshinori	Matsunami T, et al.	2004	10.1626/pps .7.165
		Characteristics of Nodulation and Nitrogen Fixation in the Improved Supernodulating Soybean (<i>Glycine max</i> L. Merr.) Cultivar 'Sakukei 4'	Takahashi M, et al.	2005	10.1626/pps .8.405
		Plant Nitrogen Levels and Photosynthesis in the Supernodulating Soybean (<i>Glycine max</i> L. Merr.) Cultivar 'Sakukei 4'	Takahashi M, et al.	2005	10.1626/pps .8.412
		Difference in $\delta^{15}\text{N}$ Signatures among Plant Parts of Perennial Species Subjected to Drought Stress with Special Reference to the Contribution of Symbiotic N_2 -fixation to Plant N	Khadka J, et al.	2006	10.1626/pps .9.115
		Nitrogen Fixation and Seed Yield in Soybean under Moderate High-Temperature Stress	Shiraiwa T, et al.	2006	10.1626/pps .9.165
		Alteration in Intra-plant Distribution of $\delta^{15}\text{N}$ in Response to Shading in Legumes	Khadka J, et al.	2006	10.1626/pps .9.219
		Tricalcium Phosphate Solubilization by Root Nodule Bacteria of <i>Sesbania cannabina</i> and <i>Crotalaria juncea</i>	Daimon H, et al.	2006	10.1626/pps .9.388
Nitrogen fixing activity (1)	Nitrogen-Fixing Activity of Root Nodules in Relation to Their Size in Peanut (<i>Arachis hypogaea</i> L.)	Tajima R, et al.	2007	10.1626/pps .10.423	
Nodule nitrogen fixation (1)	Effects of Water Table Control by Farm-Oriented Enhancing Aquatic System on Photosynthesis, Nodule Nitrogen Fixation, and Yield of Soybeans	Shimada S, et al.	2012	10.1626/pps .15.132	
Biological nitrogen fixation (2)	Effect of Fertilizer and Fixed Nitrogen on the Water Use Efficiency of Genge (<i>Astragalus sinicus</i> L.)	Sumi A, et al.	2015	10.1626/pps .18.104	
	Yield of sugarcane varieties and their sugar quality grown in different soil types and inoculated with a diazotrophic bacteria consortium	Schultz N, et al.	2017	10.1080/13 43943X.20 17.1374869	
Fixed nitrogen (1)	Effect of Fertilizer and Fixed Nitrogen on the Water Use Efficiency of Genge (<i>Astragalus sinicus</i> L.)	Sumi A, et al.	2015	10.1626/pps .18.104	
Nitrogen form (2)	Rhizosphere pH Changes Induced by Exposure of Shoot to Light	Rao TP, et al.	2000	10.1626/pps .3.101	
	Effects of Benzylaminopurine on Shoot and Root Development and Growth of Rice (cv. North Rose) Grown Hydroponically with Different Nitrogen Forms	Liu Z, et al.	2000	10.1626/pps .3.349	
Nitrogen gradient (1)	Changes in Vertical Distribution of Leaf Nitrogen with the Growth Stage and the Influence on Dry Matter Production in Rice	Hasegawa T.	1999	10.1626/pps .2.37	
Nitrogen leaching (1)	Nitrogen Balance in Forage Rice (<i>Oryza sativa</i> L. cv. Tachisuzuka) Cultivation in Pots with Animal Manure Application	Gusmini, et al.	2015	10.1626/pps .18.529	
Nitrogen level (1)	Growth and Yield of New Rice for Africa (NERICAs) under Different Ecosystems and Nitrogen Levels	Matsunami M, et al.	2009	10.1626/pps .12.381	

Nitrogen loss (1)		Fate of ¹⁵ N-labeled Inorganic Fertilizer in an Upland Soil Applied with Sweet Sorghum Bagasse and N Uptake Efficiency by Komatsuna Plants	Asagi N, et al.	2015	10.1626/pps .18.535
Nitrogen management (2)	Nitrogen management (1)	Comparison and Standardization among Chlorophyll Meters in their Readings on Rice Leaves	Huang J, et al.	2004	10.1626/pps .7.97
	Site-specific nitrogen management (1)	Comparison of Five Nitrogen Dressing Methods to Optimize Rice Growth	Chen QC, et al.	2014	10.1626/pps .17.66
Nitrogen mineralization (2)		The suitability of non-legume cover crops for inorganic soil nitrogen immobilisation in the transition period to an organic no-till system	Rühlemann L, et al.	2016	10.1080/13 43943X.20 15.1128098
		Ecophysiological Traits of Field-Grown <i>Crotalaria incana</i> and <i>C. pallida</i> as Green Manure	Uratani A, et al.	2004	10.1626/pps .7.449
Nitrogen nutrition index (1)		SPAD Values and Nitrogen Nutrition Index for the Evaluation of Rice Nitrogen Status	Yang H, et al.	2014	10.1626/pps .17.81
Nitrogen partitioning (2)		Contribution of Nitrogen Absorbed during Ripening Period to Grain Filling in a High-Yielding Rice Variety, Takanari	Ida M, et al.	2009	10.1626/pps .12.176
		A Comparison of the Accumulation and Partitioning of Nitrogen in Plants between Two Rice Cultivars, Akenohoshi and Nipponbare, at the Ripening Stage	Ookawa T, et al.	2003	10.1626/pps .6.172
Nitrogen rate (1)		Effects of Crop Residue and Nitrogen Rates on Yield and Yield Components of Two Dryland Wheat (<i>Triticum aestivum</i> L.) Cultivars	Sadeghi H, et al.	2009	10.1626/pps .12.497
Nitrogen recovery (2)		Rice Uptake and Recovery of Nitrogen with Different Methods of Applying ¹⁵ N-Labeled Chicken Manure and Ammonium Sulfate	Liu J, et al.	2008	10.1626/pps .11.271
		Recovery of ¹⁵ N-labeled Ammonium by Barley and Maize Grown on the Soils with Long-Term Application of Chemical and Organic Fertilizers	Li K, et al.	2001	10.1626/pps .4.29
Nitrogen recycling (1)		Effect of Hairy Vetch Incorporated as Green Manure on Growth and N Uptake of Sorghum Crop	Choi B, et al.	2008	10.1626/pps .11.211
Nitrogen redistribution (2)		Relation of Leaf Nitrogen Content and Other Traits with Seed Yield of Soybean	Shibles R, et al.	1998	10.1626/pps .1.3
		Varietal Difference in Nitrogen Redistribution from Leaves and Its Contribution to Seed Yield in Soybean	Zhao X, et al.	2014	10.1626/pps .17.103
Nitrogen regime (1)		Effect of Nitrogen Regimes on Combining Ability Variation in Oil and Protein Contents in Cottonseed (<i>Gossypium hirsutum</i> L.)	Khan FA, et al.	2007	10.1626/pps .10.367
Nitrogen response (1)		Responses of a Supernodulating Soybean Genotype, Sakukei 4 to Nitrogen Fertilizer	Maekawa T, et al.	2003	10.1626/pps .6.206
Nitrogen starvation (1)		Role of Belowground Parts of Green Manure Legumes, <i>Crotalaria spectabilis</i> and <i>Sesbania rostrata</i> , in N Uptake by the Succeeding Tendergreen Mustard Plant	Choi B, et al.	2008	10.1626/pps .11.116
Nitrogen status (2)	Nitrogen status (1)	Leaf Positions of Potato Suitable for Determination of Nitrogen Content with a SPAD Meter	Li L, et al.	2012	10.1626/pps .15.317
	Plant nitrogen status (1)	The effects of nitrogen uptake before and after heading on grain protein content and the occurrence of basal- and back-white grains in rice (<i>Oryza sativa</i> L.)	Tsukaguchi T, et al.	2016	10.1080/13 43943X.20 16.1223527
Nitrogen strategy (1)		A Knowledge-Based Model for Nitrogen Management in Rice and Wheat	Cao J, et al.	2009	10.1626/pps .12.100
Nitrogen supply (1)		Effect of Different Nitrogen Doses on the Storage Proteins and Palatability of Rice Grains of Primary and Secondary Rachis Branches	Song YJ, et al.	2012	10.1626/pps .15.253
Nitrogen transfer (2)		Evaluation of Mixed Cropping of Oat and Hairy Vetch as Green Manure for Succeeding Corn Production	Tarui A, et al.	2013	10.1626/pps .16.383
		Characteristics of Nitrogen Uptake, Use and Transfer in a Wheat-Maize-Soybean Relay Intercropping System	Yong TW, et al.	2015	10.1626/pps .18.388
Nitrogen uptake (15)	Nitrogen uptake (13)	Spatial Distribution of Leaf Area Index and Leaf N Content in Relation to Grain Yield and Nitrogen Uptake in Rice	Jing Q, et al.	2007	10.1626/pps .10.136
		Diurnal and Phenological Changes in the Rate of Nitrogen Transportation Monitored by Bleeding in Field-Grown Rice Plants (<i>Oryza sativa</i> L.)	Sakaigaichi T, et al.	2007	10.1626/pps .10.270

Nitrogen uptake (continued)	Nitrogen uptake (continued)	High-yielding Crop Management by Enhancing Growth in Reproductive Stage of Direct-Seeded Rainfed Lowland Rice (<i>Oryza sativa</i> L.) in Northeast Thailand	Hayashi S, et al.	2010	10.1626/pps .13.104
		Comparison of Nitrogen Uptake, Transpiration Rate and Exudation Rate between Upland NERICAs and Japanese Cultivars	Matsunami M, et al.	2010	10.1626/pps .13.347
		Interactive Effects of Elevated Atmospheric CO ₂ and Waterlogging on Vegetative Growth of Soybean (<i>Glycine max</i> (L.) Merr.)	Shimono H, et al.	2012	10.1626/pps .15.238
		Characteristics of Nitrogen Uptake, Use and Transfer in a Wheat-Maize-Soybean Relay Intercropping System	Yong TW, et al.	2015	10.1626/pps .18.388
		Fate of ¹⁵ N-labeled Inorganic Fertilizer in an Upland Soil Applied with Sweet Sorghum Bagasse and N Uptake Efficiency by Komatsuna Plants	Asagi N, et al.	2015	10.1626/pps .18.535
		Modeling the effects of N application on growth, yield and plant properties associated with the occurrence of chalky grains of rice	Yoshida H, et al.	2016	10.1080/13 43943X.20 15.1128111
		Characterizing N uptake and use efficiency in rice as influenced by environments	Jiang P, et al.	2016	10.1080/13 43943X.20 15.1128103
		Genotypic variation in salinity tolerance and its association with nodulation and nitrogen uptake in soybean	Song Y, et al.	2017	10.1080/13 43943X.20 17.1360140
		Correlation of the Amount of Nitrogen Accumulated in the Aboveground Biomass at Panicle Initiation and Nitrogen Content of Soil with the Nitrogen Uptake by Lowland Rice during the Period from Panicle Initiation to Heading	Inamura T, et al.	2003	10.1626/pps .6.302
		Nitrogen Uptake by Faba Bean from ¹⁵ N-Labelled Oilseed-Rape Residue and Chicken Manure with Ryegrass as a Reference Crop	Abdelhamid M, et al.	2004	10.1626/pps .7.371
		Growth of Three Rice (<i>Oryza sativa</i> L.) Cultivars under Upland Conditions with Different Levels of Water Supply. 1. Nitrogen Content and Dry Matter Production	Kato Y, et al.	2006	10.1626/pps .9.422
		Nitrogen uptake ability (1)	Genotypic Variation in Nitrogen Uptake during Early Growth among Rice Cultivars under Different Soil Moisture Regimes	Matsunami M, et al.	2013
Nitrogen uptake and utilization (1)	Nitrogen Uptake and Utilization by No-Tillage Rice under Different Soil Moisture Conditions: A Model Study under Simulated Soil Conditions	Yang C, et al.	2015	10.1626/pps .18.118	
Soil nitrogen (3)	Effect of Incorporation of Hairy Vetch and Rye Grown as Cover Crops on Weed Suppression Related with Phenolics and Nitrogen Contents of Soil	Sung J-K, et al.	2010	10.1626/pps .13.80	
	Significance of Plant-induced Solubilization of Soil Nitrogen: A Case of Komatsuna Plants Grown in Fertilized Soils	Moritsuka N, et al.	2010	10.1626/pps .13.307	
	Correlation of the Amount of Nitrogen Accumulated in the Aboveground Biomass at Panicle Initiation and Nitrogen Content of Soil with the Nitrogen Uptake by Lowland Rice during the Period from Panicle Initiation to Heading	Inamura T, et al.	2003	10.1626/pps .6.302	
Ureide form nitrogen (1)	Control of Soybean Nodule Formation by a Crack Fertilization Technique	Iijima M, et al.	2011	10.1626/pps .14.202	
Water-soluble nitrogen (1)	Regional Differences in the Concentration of Water-soluble N in Immature Seeds of Soybean (<i>Glycine max</i> (L.) Merr.)	Yanagisawa Y, et al.	1998	10.1626/pps .1.179	