

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

### PHYSIOLOGY (T-Z)

Keyword		Article title (downloadable pdf link)	Author	Year	DOI
Tassel development (2)		<a href="#">Barrenness and Changes in Tassel Development and Flowering Habit of Hybrid Maize Associated with Low Air Temperatures</a>	Hayashi T, et al.	2015	<a href="#">10.1626/pps.18.93</a>
		<a href="#">Varietal difference in the effects of low temperature on tassel development in hybrid maize</a>	Hayashi T.	2016	<a href="#">10.1080/1343943X.2015.1133236</a>
Texture (3)	Texture (1)	<a href="#">Physicochemical and <i>Machi-making</i> Properties of the Native Red and Black-Kerneled Glutinous Rice Cultivars</a>	Matsue Y, et al.	1998	<a href="#">10.1626/pps.1.126</a>
	Texture characteristics (1)	<a href="#">An Efficient Method for Evaluating the Palatability Deterioration During Storage in Rice</a>	Matsue Y, et al.	2003	<a href="#">10.1626/pps.6.107</a>
	Textural characteristics (1)	<a href="#">Comparison of Physicochemical Properties of the Grains between Old- and New-Types of Rice Cultivars in Japan</a>	Matsue Y, et al.	2000	<a href="#">10.1626/pps.3.145</a>
Theca dehiscence (1)		<a href="#">High Temperature at Flowering Inhibits Swelling of Pollen Grains, a Driving Force for Thecae Dehiscence in Rice (<i>Oryza sativa</i> L.)</a>	Matsui T, et al.	2000	<a href="#">10.1626/pps.3.430</a>
Thylakoid (3)	Thylakoid (2)	<a href="#">Pretreatment with Antioxidants Decreases the Effects of Salt Stress on Chloroplast Ultrastructure in Rice Leaf Segments (<i>Oryza sativa</i> L.)</a>	Yamane K, et al.	2004	<a href="#">10.1626/pps.7.292</a>
		<a href="#">Pretreatment with a Low Concentration of Methyl Viologen Decreases the Effects of Salt Stress on Chloroplast Ultrastructure in Rice Leaves (<i>Oryza sativa</i> L.)</a>	Yamane K, et al.	2004	<a href="#">10.1626/pps.7.435</a>
	Thylakoid membrane (1)	<a href="#">Plastid Damage in Photosynthetic Cells of Mizugayatsuri (<i>Cyperus serotinus</i>) Leaves Treated with a Pyrazole Herbicide</a>	Ogawa M, et al.	2001	<a href="#">10.1626/pps.4.291</a>
Tiller (12)	Tiller (3)	<a href="#">Developmental Fates of Axillary Buds as a Major Determinant for the Pattern of Life History in Lolium</a>	Onishi K, et al.	2003	<a href="#">10.1626/pps.6.179</a>
		<a href="#">Path Analysis of Tiller Density of Winter Wheat Demonstrates the Importance of Practices that Manipulate Clod Size Based on Soil Moisture at Seeding in the Rice-Wheat Cropping System</a>	Inamura T, et al.	2010	<a href="#">10.1626/pps.13.85</a>
		<a href="#">Tillering Responses to High Red/Far-Red Ratio of Four Japanese Wheat Cultivars</a>	Toyota M, et al.	2014	<a href="#">10.1626/pps.17.124</a>
	Tiller appearance rate (1)	<a href="#">Effects of Foliar and Root-Applied Benzylaminopurine on Tillering of Rice Plants Grown in Hydroponics</a>	Liu Z, et al.	2001	<a href="#">10.1626/pps.4.220</a>
	Tiller bud dormancy (1)	<a href="#">Tillering Behavior of the Rice <i>fine culm 1</i> Mutant</a>	Goto Y, et al.	2005	<a href="#">10.1626/pps.8.68</a>
	Tiller number (2)	<a href="#">Molecular Dissection of the Relationships among Tiller Number, Plant Height and Heading Date in Rice</a>	Cui K, et al.	2004	<a href="#">10.1626/pps.7.309</a>
		<a href="#">Nursery Management for Improving Seedling Length and Early Growth after Transplanting in a Semi-Dwarf Rice Cultivar Hokuriku 193</a>	Ohsumi A, et al.	2015	<a href="#">10.1626/pps.18.407</a>
	Tillage patterns (1)	<a href="#">Long-term Effect of Year-Round Tillage Patterns on Yield and Grain Quality of Wheat</a>	Tang Y, et al.	2013	<a href="#">10.1626/pps.16.365</a>
	Coleoptile tiller (1)	<a href="#">The Development of Coleoptile Tillers in Relation to Seedling Vigor in Early-Maturing Varieties of Spring Type Wheat</a>	Fujita R, et al.	2000	<a href="#">10.1626/pps.3.275</a>
	Last visible primary tiller (1)	<a href="#">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</a>	Sasaki R, et al.	2006	<a href="#">10.1626/pps.9.242</a>
	Primary tillers (1)	<a href="#">Analysis of the Number of Spikelets per Panicle on the Main Stems, Primary and Secondary Tillers of Different Rice Genotypes Grown under the Conventional and Nitrogen-Free Basal Dressing Accompanied with Sparse Planting Density Practices</a>	Pham QD, et al.	2004	<a href="#">10.1626/pps.7.456</a>
	Secondary tillers (1)	<a href="#">Analysis of the Number of Spikelets per Panicle on the Main Stems, Primary and Secondary Tillers of Different Rice Genotypes Grown under the Conventional and Nitrogen-Free Basal Dressing Accompanied with Sparse Planting Density Practices</a>	Pham QD, et al.	2004	<a href="#">10.1626/pps.7.456</a>
Tillering (13)	Tillering (9)	<a href="#">Tillering, Lodging and Yield under Deep Water Treatment in Direct-seeded Rice</a>	Won JG, et al.	1999	<a href="#">10.1626/pps.2.200</a>
		<a href="#">Parameterization, Validation and Comparison of Three Tillering Models for Irrigated Rice in the Tropics</a>	Zhong X, et al.	1999	<a href="#">10.1626/pps.2.258</a>

Tillering (continued)	Tillering (continued)	Higher Leaf Area Growth Rate Contributes to Greater Vegetative Growth of F1 Rice Hybrids in the Tropics	Laza MRC, et al.	2001	10.1626/pps.4.184
		Effects of Foliar and Root-Applied Benzylaminopurine on Tillering of Rice Plants Grown in Hydroponics	Liu Z, et al.	2001	10.1626/pps.4.220
		Phenotypic Plasticity of Rice Seedlings: Case of Phosphorus Deficiency	Luquet D, et al.	2005	10.1626/pps.8.145
		Individual Tiller Dynamics of Two Wild <i>Oryza</i> species in Contrasting Habitats	Kariali E, et al.	2008	10.1626/pps.11.355
		Tillering and Yield of Rice Cultivars under a Water Storage-Type Deep-Irrigation Regime	Ishibashi T, et al.	2009	10.1626/pps.12.237
		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
		Chlorophyll Fluorescence and Yield Responses of Winter Wheat to Waterlogging at Different Growth Stages	Wu X, et al.	2015	10.1626/pps.18.284
	Tillering pattern (1)	The Development of Coleoptile Tillers in Relation to Seedling Vigor in Early-Maturing Varieties of Spring Type Wheat	Fujita R, et al.	2000	10.1626/pps.3.275
	Tillering traits (1)	Influence of the Improved System of Rice Intensification (SRI) on Rice Yield, Yield Components and Tillering Characteristics under Different Rice Establishment Methods	Chen S, et al.	2013	10.1626/pps.16.191
	Active tillering (1)	Effect of Nitrogen Application Rate and Timing on Grain Yield and Protein Content of the Bread Wheat Cultivar 'Minaminokaori' in Southwestern Japan	Nakano H, et al.	2008	10.1626/pps.11.151
Lowest tillering node (1)	Effects of the Tillering Nodes on the Main Stem of a Chinese Large-Panicle-Type Rice Cultivar, Yangdao 4, on the Growth and Yield-Related Characteristics in Relation to Cropping Season	Gendua PA, et al.	2009	10.1626/pps.12.257	
Tissue localization (1)		Tissue Localization of the Glycine Betaine Biosynthetic Enzymes in Barley Leaves	Mitsuya S, et al.	2013	10.1626/pps.16.117
Tolerance (58)	Tolerance (4)	Screening Cultivars at Low Dissolved Oxygen Level for Water-seeded Rice	Won JG, et al.	2000	10.1626/pps.3.112
		Correlation between Viability of Pollination and Length of Basal Dehiscence of the Theca in Rice under a Hot-and-Humid Condition	Matsui T, et al.	2005	10.1626/pps.8.109
		Does Regional Temperature Difference before the Panicle Initiation Affect the Tolerance for Low Temperature-Induced Sterility in Rice?	Shimono H, et al.	2008	10.1626/pps.11.430
		Water submersion of seeds from three bean cultivars	Martins Vieira GH, et al.	2016	10.1080/13.43943X.20.15.1128093
	Tolerance to K deficiency (1)	Difference in Tolerance to Potassium Deficiency between Two Maize Inbred Lines	Minjian C, et al.	2007	10.1626/pps.10.42
	Acid sulfate soil-tolerance (1)	Agronomic and Tolerant Performance of Acid Soil-Tolerant Wild Soybean ( <i>Glycine soja</i> Sieb. and Zucc.) in Acid Sulfate Soil of Thailand	Kang DJ, et al.	2011	10.1626/pps.14.156
	Al-tolerance (1)	Heritability and Genetic Correlation of Al-Tolerance with Several Agronomic Characters in Sorghum Assessed by Hematoxylin Staining	Anas, et al.	2004	10.1626/pps.7.280
	Al-tolerant (1)	Screening of Al-Tolerant Sorghum by Hematoxylin Staining and Growth Response	Anas, et al.	2000	10.1626/pps.3.246
	Anoxia tolerance (2)	Hypoxic Induction of Anoxia Tolerance in Rice Coleoptiles	Kato-Noguchi H.	2002	10.1626/pps.5.211
		Anoxia Tolerance and Sugar Level in Roots and Coleoptiles of Aerobically Germinated Rice	Kato-Noguchi H, et al.	2011	10.1626/pps.14.325
	Chilling tolerance (2)	Early-Maturing and Chilling-Tolerant Soybean Lines Derived from Crosses between Japanese and Polish Cultivars	Yamaguchi N, et al.	2015	10.1626/pps.18.234
		Effects of salt and low light intensity during the vegetative stage on susceptibility of rice to male sterility induced by chilling stress during the reproductive stage	Koumoto T, et al.	2016	10.1080/13.43943X.20.16.1190283
	Cold tolerance (1)	Effects of the number of pollen grains on cold tolerance at the booting stage in rice lines with QTLs for cold tolerance	Fukushima A, et al.	2017	10.1080/13.43943X.20.16.1245103
	Cold-weather tolerance (1)	Pod Setting Pattern during and after Low Temperature and the Mechanism of Cold-Weather Tolerance at the Flowering Stage in Soybeans	Kurosaki H, et al.	2003	10.1626/pps.6.247
	Cool tolerance (1)	Cool Tolerance of Barley ( <i>Hordeum vulgare</i> L.) at the Young Microspore Stage	Koike S, et al.	2003	10.1626/pps.6.132

Tolerance (continued)	Co-tolerance (1)	Tolerance of Grasses to Calcium Chloride, Magnesium Chloride and Sodium Chloride	Kobayashi H, et al.	2004	10.1626/pps .7.30
	Cross-tolerance (1)	Genotypic Diversity of Cross-Tolerance to Oxidative and Drought Stresses in Rice Seedlings Evaluated by the Maximum Quantum Yield of Photosystem II and Membrane Stability	Iseki K, et al.	2013	10.1626/pps .16.295
	Disease tolerance (1)	Disease Tolerance in <i>Helianthus petiolaris</i> : A Genetic Resource for Sunflower Breeding	Gutierrez A, et al.	2012	10.1626/pps .15.204
	Drought tolerance (7)	Genotypic Variation in Response of Rainfed Lowland Rice to Drought and Rewatering. II. Root growth	Azhiri-Sigari T, et al.	2000	10.1626/pps .3.180
		Genotypic Variations in Response of Lateral Root Development to Fluctuating Soil Moisture in Rice	Bañoc DM, et al.	2000	10.1626/pps .3.335
		Drought Tolerance Characteristics of Brazilian Soybean Cultivars: Evaluation and characterization of drought tolerance of various Brazilian soybean cultivars in the field	Oya T, et al.	2004	10.1626/pps .7.129
		Development and Distribution of Root System in Two Grain Sorghum Cultivars Originated from Sudan under Drought Stress	Tsuji W, et al.	2005	10.1626/pps .8.553
		Assessing Drought Tolerance of Snap Bean ( <i>Phaseolus vulgaris</i> ) from Genotypic Differences in Leaf Water Relations, Shoot Growth and Photosynthetic Parameters	Omae H, et al.	2007	10.1626/pps .10.28
		Effect of Pre- and Post-heading Water Deficit on Growth and Grain Yield of Four Millets	Matsuura A, et al.	2012	10.1626/pps .15.323
		Developmental Plasticity of Rice Root System Grown under Mild Drought Stress Condition with Shallow Soil Depth; Comparison between Nodal and Lateral roots	Kameoka E, et al.	2016	10.1080/13 43943X.20 15.1128094
	Flood tolerance (3)	Varietal Differences of Flood Tolerance during Germination and Selection of the Tolerant Lines in Common Buckwheat	Sakata K, et al.	2006	10.1626/pps .9.395
		Relationship between Shoot Elongation and Dry Matter Weight During Submergence in <i>Oryza sativa</i> L. and <i>O. glaberrima</i> Steud. Rice Cultivars	Kawano N, et al.	2008	10.1626/pps .11.316
		Variation in Root Development Response to Flooding among 92 Soybean Lines during Early Growth Stages	Sakazono S, et al.	2014	10.1626/pps .17.228
	Flooding tolerance (3)	The Role of Seed Structure and Oxygen Responsiveness in Pre-Germination Flooding Tolerance of Soybean Cultivars	Tian XH, et al.	2005	10.1626/pps .8.157
		Relation of Seed Structures to Soybean Cultivar Difference in Pre-germination Flooding Tolerance	Muramatsu N, et al.	2008	10.1626/pps .11.434
		Does Pre-Germination Flooding-Tolerant Soybean Cultivar Germinate Better under Hypoxia Conditions?	Nakajima T, et al.	2015	10.1626/pps .18.146
	Freezing tolerance (2)	Changes in Freezing Tolerance and its Relationship with the Contents of Carbohydrates and Proline in Overwintering Centipedegrass ( <i>Eremochloa ophiuroides</i> (Munro) Hack.)	Cai Q, et al.	2004	10.1626/pps .7.421
		Fructan Content in <i>Aegilops cylindrica</i> and its Relationship to Snow Mold Resistance and Freezing Tolerance	Iriki N, et al.	2005	10.1626/pps .8.563
	Heat tolerance (5)	Water Status of Flower Buds and Leaves as Affected by High Temperature in Heat-Tolerant and Heat-Sensitive Cultivars of Snap Bean ( <i>Phaseolus vulgaris</i> L.)	Tsukaguchi T, et al.	2003	10.1626/pps .6.24
		Diurnal Change in Water Balance of Heat-Tolerant Snap Bean ( <i>Phaseolus vulgaris</i> ) Cultivar and Its Association with Growth under High Temperature	Tsukaguchi T, et al.	2005	10.1626/pps .8.375
		Influence of High Temperature on Morphological Characters, Biomass Allocation, and Yield Components in Snap Bean ( <i>Phaseolus vulgaris</i> L.)	Omae H, et al.	2006	10.1626/pps .9.200
		Influence of Temperature Shift after Flowering on Dry Matter Partitioning in Two Cultivars of Snap Bean ( <i>Phaseolus vulgaris</i> ) that Differ in Heat Tolerance	Omae H, et al.	2007	10.1626/pps .10.14
		Percentage of Dehisced Thecae and Length of Dehiscence Control Pollination Stability of Rice Cultivars at High Temperatures	Kobayashi K, et al.	2011	10.1626/pps .14.89
High-temperature tolerance (1)	The Effect of High-Temperature Stress Applied to the Root on Grain Quality of Rice	Nagaoka I, et al.	2012	10.1626/pps .15.274	
Hypoxia tolerance (1)	Phenotypic variation in root development of 162 soybean accessions under hypoxia condition at the seedling stage	Suematsu K, et al.	2017	10.1080/13 43943X.20 17.1334511	
Low-temperature tolerance (1)	Submergence Acclimation to Low-Temperature Stress in Rice Roots	Kato-Noguchi H.	2007	10.1626/pps .10.297	

Tolerance (continued)	Root-lodging tolerance (1)	Effect of Field Drainage on Root Lodging Tolerance Direct-Sown Rice in Flooded Paddy Field	Terashima K, et al.	2003	10.1626/pps.6.255
	Salinity tolerance (5)	Variation of Salinity Tolerance in <i>Zoysia</i> Clones Collected from Different Habitats in Taiwan	Weng JH, et al.	2001	10.1626/pps.4.313
		Effects of Excess Magnesium on the Growth and Mineral Content of Rice and <i>Echinochloa</i>	Kobayashi H, et al.	2005	10.1626/pps.8.38
		Differential Salinity Tolerance among <i>Oryza glaberrima</i> , <i>Oryza sativa</i> and Their Interspecies Including NERICA	Awala SK, et al.	2010	10.1626/pps.13.3
		Salinity Tolerance of Super-Nodulating Soybean Genotype En-b0-1	Yasuta Y, et al.	2014	10.1626/pps.17.32
		Genotypic variation in salinity tolerance and its association with nodulation and nitrogen uptake in soybean	Song Y, et al.	2017	10.1080/1343943X.2017.1360140
	Salt tolerance (5)	Genetic Variation of <i>Zoysia</i> in Taiwan as Analyzed by Isozyme Patterns and Salinity Tolerance	Weng JH.	2002	10.1626/pps.5.236
		Effect of NaCl on the Photosynthesis, Water Relations and Free Proline Accumulation in the Wild <i>Oryza</i> Species	Nakamura I, et al.	2002	10.1626/pps.5.305
		Differences in the Vegetative Growth between Common and Tartary Buckwheat in Saline Hydroponic Culture	Matsuura H, et al.	2005	10.1626/pps.8.533
		Screening, Inheritance and Linkage Marker Analyses of Salt Tolerance in Mutated Scented Japonica Rice ( <i>Oryza sativa</i> L.)	Yen CC, et al.	2011	10.1626/pps.14.260
		A rapid quantification method for tissue Na <sup>+</sup> and K <sup>+</sup> concentrations in salt-tolerant and susceptible accessions in <i>Vigna vexillata</i> (L.) A. Rich.	Iseki K, et al.	2017	10.1080/1343943X.2016.1251826
	Snow tolerance (1)	Effect of Dwarfing Induced by Uniconazole-P on Snow Tolerance of the Faba Bean ( <i>Vicia faba</i> L.)	Fukuta N, et al.	2001	10.1626/pps.4.189
	Stress tolerance (3)	Effects of Silicon on Tolerance to Water Deficit and Heat Stress in Rice Plants ( <i>Oryza sativa</i> L.), Monitored by Electrolyte Leakage	Agarie S, et al.	1998	10.1626/pps.1.96
		Current Status and Challenges of Rice Production in China	Peng S, et al.	2009	10.1626/pps.12.3
		Molecular physiological aspects of chalking mechanism in rice grains under high-temperature stress	Mitsui T, et al.	2016	10.1080/1343943X.2015.1128112
	Waterlogging tolerance (2)	Effect of pre- and post-heading waterlogging on growth and grain yield of four millets	Matsuura A, et al.	2016	10.1080/1343943X.2016.1146907
		Phenotypic variation in root development of 162 soybean accessions under hypoxia condition at the seedling stage	Suematsu K, et al.	2017	10.1080/1343943X.2017.1334511
	Tonoplast (1)	Characteristics of Adenosinetriphosphatase and Inorganic Pyrophosphatase in Tonoplasts Isolated from Three CAM Species, <i>Ananas comosus</i> , <i>Kalanchoë pinnata</i> and <i>K. daigremontiana</i>	Chen L-S, et al.	2000	10.1626/pps.3.24
	Toxicity (7)	Al <sup>3+</sup> toxicity (1)	Influence of Oil Palm Empty Fruit Bunch Biochar on Floodwater pH and Yield Components of Rice Cultivated on Acid Sulphate Soil under Rice Intensification Practices	Rosenani AB, et al.	2015
Fe toxicity (1)		Genetic Improvement of Iron Toxicity Tolerance in Rice-Progress, Challenges and Prospects in West Africa	Sikirou M, et al.	2015	10.1626/pps.18.423
Iron toxicity (1)		Soil-based screening for iron toxicity tolerance in rice using pots	Sikirou M, et al.	2016	10.1080/1343943X.2016.1186496
Mineral toxicity (1)		Agronomic and Tolerant Performance of Acid Soil-Tolerant Wild Soybean ( <i>Glycine soja</i> Sieb. and Zucc.) in Acid Sulfate Soil of Thailand	Kang DJ, et al.	2011	10.1626/pps.14.156
Phytotoxicity (3)		Allelopathy in Maize I: Isolation and identification of allelochemicals in maize seedlings	Kato-Noguchi H, et al.	2000	10.1626/pps.3.43
		Allelopathy in Maize II: Allelopathic potential of a new benzoxazinone, 5-chloro-6-methoxy-2-benzoxazinone and its analogues	Kato-Noguchi H.	2000	10.1626/pps.3.47
	Isolation of Allelopathic Substances in Rice Seedlings	Kato-Noguchi H.	2002	10.1626/pps.5.8	
Trait (6)	Leaf photosynthetic traits (1)	Morphological and physiological traits of seeds and seedlings in two rice cultivars with contrasting early vigor	Huang M, et al.	2017	10.1080/1343943X.2016.1229571
	Plant trait (1)	Response of 10 Elite "Green Super Rice" Genotypes to Weed Infestation in Aerobic Rice Systems	Chauhan BS, et al.	2015	10.1626/pps.18.228



Traits (continued)	Root traits (2)	Root Growth and Water Extraction Response of Doubled-Haploid Rice Lines to Drought and Rewatering during the Vegetative Stage	Siopongco JDLC, et al.	2005	10.1626/pps.8.497
		Improving Drought-Avoidance Root Traits in Chickpea ( <i>Cicer arietinum</i> L.): Current Status of Research at ICRIASAT	Gaur PM, et al.	2008	10.1626/pps.11.3
	Stem traits (1)	Evaluation of the juice brix of wild sugarcanes ( <i>Saccharum spontaneum</i> ) indigenous to Japan	Sakaigaichi T, et al.	2016	10.1080/1343943X.2016.1140009
	Tillering traits (1)	Influence of the Improved System of Rice Intensification (SRI) on Rice Yield, Yield Components and Tillering Characteristics under Different Rice Establishment Methods	Chen S, et al.	2013	10.1626/pps.16.191
Transfer (3)	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
	Oxygen transfer (1)	Short-term evaluation of oxygen transfer from rice ( <i>Oryza sativa</i> ) to mixed planted drought-adapted upland crops under hydroponic culture	Iijima M, et al.	2017	10.1080/1343943X.2017.1379882
Translocation (7)	Translocation (5)	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
		Contribution of Biomass Partitioning and Translocation to Grain Yield under Sub-Optimum Growing Conditions in Irrigated Rice	Laza MRC, et al.	2003	10.1626/pps.6.28
		Effect of CO <sub>2</sub> Enrichment on the Translocation and Partitioning of Carbon at the Early Grain-filling Stage in Rice ( <i>Oryza sativa</i> L.)	Sasaki H, et al.	2005	10.1626/pps.8.8
		Effects of the Temperature Lowered in the Daytime and Night-time on Sugar Accumulation in Sugarcane	Uehara N, et al.	2009	10.1626/pps.12.420
		Differences in Cadmium Accumulation and Root Morphology in Seedlings of Japanese Wheat Varieties with Distinctive Grain Cadmium Concentration	Kubo K, et al.	2011	10.1626/pps.14.148
	Dry matter translocation (1)	Effects of Harvest Time on Shoot Biomass and Yield of Turmeric ( <i>Curcuma longa</i> L.) in Okinawa, Japan	Hossain MA.	2010	10.1626/pps.13.97
	Retranslocation (1)	A Survey of Woody Tropical Species for Boron Retranslocation	Konsaeng S, et al.	2005	10.1626/pps.8.338
Transpiration (23)	Transpiration (14)	Effects of Silicon on Transpiration and Leaf Conductance in Rice Plants ( <i>Oryza sativa</i> L.)	Agarie S, et al.	1998	10.1626/pps.1.89
		Growth Responses of Drought Resistant Rice Cultivars to Soil Compaction under Irrigated and Succeeding Nonirrigated Conditions during the Vegetative Stage	Hoque M, et al.	1998	10.1626/pps.1.183
		Effect of Soil Compaction on Dry Matter Production and Water Use of Rice ( <i>Oryza sativa</i> L.) under Water Deficit Stress during the Reproductive Stage	Kobata T, et al.	2000	10.1626/pps.3.306
		Leaf Temperature and Transpiration of Field Grown Cotton and Soybean under Arid and Humid Conditions	Isoda A, et al.	2002	10.1626/pps.5.224
		Water Status of Flower Buds and Leaves as Affected by High Temperature in Heat-Tolerant and Heat-Sensitive Cultivars of Snap Bean ( <i>Phaseolus vulgaris</i> L.)	Tsukaguchi T, et al.	2003	10.1626/pps.6.24
		Hydrogen Stable Isotope Analysis of Water Acquisition Ability of Deep Roots and Hydraulic Lift in Sixteen Food Crop Species	Zegada-Lizarazu W, et al.	2004	10.1626/pps.7.427
		Adaptive Responses of Soybean and Cotton to Water Stress. I. Transpiration Changes in Relation to Stomatal Area and Stomatal Conductance	Inamullah, et al.	2005	10.1626/pps.8.16
		Diurnal Change in Water Balance of Heat-Tolerant Snap Bean ( <i>Phaseolus vulgaris</i> ) Cultivar and Its Association with Growth under High Temperature	Tsukaguchi T, et al.	2005	10.1626/pps.8.375
		Deep Root Water Uptake Ability and Water Use Efficiency of Pearl Millet in Comparison to Other Millet Species	Zegada-Lizarazu W, et al.	2005	10.1626/pps.8.454
		Effects of Elevated Atmospheric Carbon Dioxide Concentration on Silica Deposition in Rice ( <i>Oryza sativa</i> L.) Panicle	Takahashi N, et al.	2008	10.1626/pps.11.307
		Responses of Root Growth to Moderate Soil Water Deficit in Wheat Seedlings	Saidi A, et al.	2010	10.1626/pps.13.261
		Effects of Water Stress on Leaf Temperature and Chlorophyll Fluorescence Parameters in Cotton and Peanut	Shahenshah et al.	2010	10.1626/pps.13.269

Transpiration (continued)	Transpiration (continued)	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
		Genotypic Variation in Biomass Production at the Early Vegetative Stage among Rice Cultivars Subjected to Deficient Soil Moisture Regimes and Its Association with Water Uptake Capacity	Matsunami M, et al.	2012	10.1626/pps .15.82
	Transpiration ability (1)	Transpiration and Leaf Movement of Cotton Cultivars Grown in the Field under Arid Conditions	Wang C, et al.	2004	10.1626/pps .7.266
	Transpiration cooling (1)	Varietal Range in Transpiration Conductance of Flowering Rice Panicle and Its Impact on Panicle Temperature	Fukuoka M, et al.	2012	10.1626/pps .15.258
	Transpiration rate (3)	Reduction in Leaf Water Potential and Hydraulic Conductance of Young Rice Plants ( <i>Oryza Sativa</i> L.) Grown in Wet Compacted Soils	Kobata T, et al.	1999	10.1626/pps .2.14
		Varietal Differences in the Morphophysiological Response to Atmospheric Humidity in Rice	Hirai G, et al.	2002	10.1626/pps .5.101
		Effects of Waterlogging at Vegetative and Reproductive Growth Stages on Photosynthesis, Leaf Water Potential and Yield in Mungbean	Ahmed S, et al.	2002	10.1626/pps .5.117
	Transpirational cooling (2)	Stability of Rice Pollination in the Field under Hot and Dry Conditions in the Riverina Region of New South Wales, Australia	Matsui T, et al.	2007	10.1626/pps .10.57
		Lower-Than-Expected Floret Sterility of Rice under Extremely Hot Conditions in a Flood-Irrigated Field in New South Wales, Australia	Matsui T, et al.	2014	10.1626/pps .17.245
	Evapotranspiration (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
Panicle transpiration (1)	Varietal Range in Transpiration Conductance of Flowering Rice Panicle and Its Impact on Panicle Temperature	Fukuoka M, et al.	2012	10.1626/pps .15.258	
Transplanting (3)	Transplanting shock (1)	A Model for Phenological Development of Vietnamese Rice Influenced by Transplanting Shock	Kotera A, et al.	2004	10.1626/pps .7.62
	Early growth after transplanting (2)	Varietal Differences in Biomass Production of Rice Early After Transplanting at Low Temperatures	Ohsumi A, et al.	2012	10.1626/pps .15.32
		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/pps .18.407
Transport (7)	Auxin polar transport (1)	Auxin Polar Transport is Essential for the Early Growth Stage of Etiolated Maize ( <i>Zea mays</i> L. cv. Honey Bantam) Seedlings	Ueda J, et al.	2014	10.1626/pps .17.144
	Oxygen transport system (1)	Secondary Aerenchyma Formation and its Relation to Nitrogen Fixation in Root Nodules of Soybean Plants ( <i>Glycine max</i> ) Grown under Flooded Conditions	Shimamura S, et al.	2002	10.1626/pps .5.294
	Resistance to water transport (2)	Effects of Pre-Flowering Soil Moisture Deficits on Dry Matter Production and Ecophysiological Characteristics in Soybean Plants under Well Irrigated Conditions during Grain Filling	Hirasawa T, et al.	1998	10.1626/pps .1.8
		Effects of Soil Moisture Depletion for One Month before Flowering on Dry Matter Production and Ecophysiological Characteristics of Wheat Plants in Wet Soil during Grain Filling	Nakamura E, et al.	2003	10.1626/pps .6.195
	Sucrose transport (1)	Gene Expression of Enzymes for Starch and Sucrose Metabolism and Transport in Leaf Sheaths of Rice ( <i>Oryza sativa</i> L.) during the Heading Period in Relation to the Sink to Source Transition	Hirose T, et al.	1999	10.1626/pps .2.178
	Sugar transport (1)	Effects of Epibrassinolide on Sugar Transport and Allocation to the Epicotyl in Cucumber Seedlings	Nakajima N, et al.	1999	10.1626/pps .2.165
	Tyrosine transporter (1)	Complementary Genes That Cause Black Ripening Hulls in F <sub>1</sub> Plants of Crosses between <i>Indica</i> and <i>Japonica</i> Rice Cultivars	Fukuda A, et al.	2012	10.1626/pps .15.270
Tuber (12)	Tuber (5)	Structural Changes and Fate of Crystalloplastids during Growth of Calcium Oxalate Crystal Idioblasts in Japanese Yam ( <i>Dioscorea japonica</i> Thunb.) Tubers	Kawasaki M, et al.	2004	10.1626/pps .7.283
		Efficient Plant <i>in vitro</i> Regeneration of <i>Pinelliae Cordatae</i> Breit	Zhang L, et al.	2008	10.1626/pps .11.127
		Dynamics of Amyloplast Sedimentation in Growing Yam Tubers and Its Possible Role in Gravisperception	Kawasaki M, et al.	2008	10.1626/pps .11.393
		Potato Stolon and Tuber Growth Influenced by Nitrogen Form	Gao Y, et al.	2014	10.1626/pps .17.138
		Effects of the Direction of Gravisimulation on Tuber Formation and Amyloplast Distribution in Tuber Tips of Chinese Yam	Kawasaki M, et al.	2014	10.1626/pps .17.298

Tuber (continued)	Tuber bulking (1)	Effects of Planting Date on the Growth and Yield of Two Potato Cultivars Grown from Microtubers and Conventional Seed Tubers	Kawakami J, et al.	2005	10.1626/pps.8.74
	Tuber formation (1)	Effects of Planting Date on the Growth and Yield of Two Potato Cultivars Grown from Microtubers and Conventional Seed Tubers	Kawakami J, et al.	2005	10.1626/pps.8.74
	Tuberous root (1)	Effect of Calcium Concentration on the Shape of Sweet Potato ( <i>Ipomoea batatas</i> Lam.) Tuberous Root	Sulaiman H, et al.	2004	10.1626/pps.7.191
	Tuberous root formation (1)	Regulation of Expression of D3-type Cyclins and ADP-Glucose Pyrophosphorylase Genes by Sugar, Cytokinin and ABA in Sweet Potato ( <i>Ipomoea batatas</i> Lam.)	Nagata T, et al.	2009	10.1626/pps.12.434
	Mother tuber enlargement (2)	Suppression of Mother Tuber Enlargement in the Sweet Potato Cultivar "Koganesengan" by Transplantation of Bottled Tuber Seedlings	Adachi K, et al.	2012	10.1626/pps.15.57
		Yield-enhancing and tuber-downsizing effects of transplantation cultivation method of case-held tuber seedlings in the sweet potato cultivar Beniharuka	Adachi K, et al.	2016	10.1080/1343943X.2015.1128086
Seed tuber (1)	Effect of Potato Microtuber Size on the Growth and Yield Performance of Field Grown Plants	Kawakami J, et al.	2012	10.1626/pps.15.144	
Turgor pressure (1)		Root Osmotic Adjustment under Osmotic Stress in Maize Seedlings. 1. Transient Change of Growth and Water Relations in Roots in Response to Osmotic Stress	Ogawa A, et al.	2006	10.1626/pps.9.27
Uptake (34)	Uptake (1)	Differences in Cadmium Accumulation and Root Morphology in Seedlings of Japanese Wheat Varieties with Distinctive Grain Cadmium Concentration	Kubo K, et al.	2011	10.1626/pps.14.148
	K <sup>+</sup> -uptake (1)	Difference in Tolerance to Potassium Deficiency between Two Maize Inbred Lines	Minjian C, et al.	2007	10.1626/pps.10.42
	Nitrogen uptake (13)	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 <sup>15</sup> 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
		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
		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 <sub>2</sub> 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 <sup>15</sup> 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	10.1080/1343943X.2015.1128111
		Characterizing N uptake and use efficiency in rice as influenced by environments	Jiang P, et al.	2016	10.1080/1343943X.2015.1128103
		Genotypic variation in salinity tolerance and its association with nodulation and nitrogen uptake in soybean	Song Y, et al.	2017	10.1080/1343943X.2017.1360140
	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	10.1626/pps.16.238
	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
Nutrient uptake (1)	Growth and Nutrient Accumulation of Winged Bean and Velvet Bean as Cover Crops in a Subtropical Region	Anugroho F, et al.	2010	10.1626/pps.13.360	

Uptake (continued)	Phosphorus uptake (2)	Root Morphological Plasticity for Heterogeneous Phosphorus Supply in <i>Zea mays</i> L.	Yano K, et al.	2005	10.1626/pps.8.427
		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
	Root water uptake (1)	Developmental Plasticity of Rice Root System Grown under Mild Drought Stress Condition with Shallow Soil Depth; Comparison between Nodal and Lateral roots	Kameoka E, et al.	2016	10.1080/1343943X.2015.1128094
	Water uptake (11)	The Role of Active and Passive Water Uptake in Maintaining Leaf Water Status and Photosynthesis in Tomato under Water Deficit	Weng JH.	2000	10.1626/pps.3.296
		Hydrogen Stable Isotope Analysis of Water Acquisition Ability of Deep Roots and Hydraulic Lift in Sixteen Food Crop Species	Zegada-Lizarazu W, et al.	2004	10.1626/pps.7.427
		Hydraulic Conductivity and Aquaporins of Cortical Cells in Gravitropically Bending Roots of <i>Pisum sativum</i> L.	Miyamoto N, et al.	2005	10.1626/pps.8.515
		Water Competition of Intercropped Pearl Millet with Cowpea under Drought and Soil Compaction Stresses	Zegada-Lizarazu W, et al.	2006	10.1626/pps.9.123
		Pearl Millet Developed Deep Roots and Changed Water Sources by Competition with Intercropped Cowpea in the Semiarid Environment of Northern Namibia	Zegada-Lizarazu W, et al.	2006	10.1626/pps.9.355
		Water Acquisition from the Seasonal Wetland and Root Development of Pearl Millet Intercropped with Cowpea in a Flooding Ecosystem of Northern Namibia	Zegada-Lizarazu W, et al.	2007	10.1626/pps.10.20
		No-Tillage Enhanced the Dependence on Surface Irrigation Water in Wheat and Soybean	Iijima M, et al.	2007	10.1626/pps.10.182
		Genetic Opportunities to Improve Cereal Root Systems for Dryland Agriculture	Richards RA, et al.	2008	10.1626/pps.11.12
		Effects of Low Root Temperature on Dry Matter Production and Root Water Uptake in Rice Plants	Nagasuga K, et al.	2011	10.1626/pps.14.22
		Characterization of the morphological and physiological traits of rice cultivars with adaptation to unflooded condition during early vegetative growth	Matsunami M, et al.	2016	10.1080/1343943X.2015.1128090
		Root development and the expression of aquaporin genes in rice seedlings under osmotic stress	Matsunami M, et al.	2016	10.1080/1343943X.2015.1128109
Water uptake ability (2)	Genotypic Variation in Biomass Production at the Early Vegetative Stage among Rice Cultivars Subjected to Deficient Soil Moisture Regimes and Its Association with Water Uptake Capacity	Matsunami M, et al.	2012	10.1626/pps.15.82	
	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	
Vacuole (2)	Electron Microscopy Related to the Reserve Mobilization in Germinating Rice Seed: Decomposition process of protein bodies	Zakaria S, et al.	1999	10.1626/pps.2.100	
	Effects of Salinity Stress on the Seminal Root Tip Ultrastructures of Rice Seedlings ( <i>Oryza sativa</i> L.)	Rahman S, et al.	2001	10.1626/pps.4.103	
Vascular (6)	Vascular bundle (3)	Anatomical Characteristics of the Formation of Crown Root Primordia in Unelongated Stems of Wheat	Nitta Y, et al.	2005	10.1626/pps.8.186
		Relation between Crown Root Primordia Formation and Stem Size in Unelongated Stems of Wheat ( <i>Triticum aestivum</i> L.)	Nitta Y, et al.	2006	10.1626/pps.9.266
		Identification of Casparian Bands in the Mesocotyl and Lower Internodes of Rice ( <i>Oryza sativa</i> L.) Seedlings Using Fluorescence Microscopy	Watanabe H, et al.	2006	10.1626/pps.9.390
	Vascular tissue (1)	Root Anatomical Traits and Their Possible Contribution to Drought Tolerance in Grain Legumes	Purushothaman R, et al.	2013	10.1626/pps.16.1
	Peripheral cylinder of longitudinal vascular bundles (2)	Anatomical Characteristics of the Formation of Crown Root Primordia in Unelongated Stems of Wheat	Nitta Y, et al.	2005	10.1626/pps.8.186
Relation between Crown Root Primordia Formation and Stem Size in Unelongated Stems of Wheat ( <i>Triticum aestivum</i> L.)		Nitta Y, et al.	2006	10.1626/pps.9.266	
Vegetative (6)	Vegetative growth (2)	Differences in Vegetative Growth Response to Soil Flooding between Common and Tartary Buckwheat	Matsuura H, et al.	2005	10.1626/pps.8.525
		Differences in the Vegetative Growth between Common and Tartary Buckwheat in Saline Hydroponic Culture	Matsuura H, et al.	2005	10.1626/pps.8.533
	Vegetative stage (3)	Relationship between the Size of the Apical Dome at the Panicle Initiation and the Panicle Components in Rice	Kobayasi K, et al.	2001	10.1626/pps.4.81



Vegetative (continued)	Vegetative stage (continued)	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
		Effects of salt and low light intensity during the vegetative stage on susceptibility of rice to male sterility induced by chilling stress during the reproductive stage	Koumoto T, et al.	2016	10.1080/1343943X.2016.1190283
	Vegetative vigor (1)	Higher Leaf Area Growth Rate Contributes to Greater Vegetative Growth of F <sub>1</sub> Rice Hybrids in the Tropics	Laza MRC, et al.	2001	10.1626/pps.4.184
Vernalization requirement (1)		Tillering Responses to High Red/Far-Red Ratio of Four Japanese Wheat Cultivars	Toyota M, et al.	2014	10.1626/pps.17.124
Vertical (2)	Vertical and diurnal variations (1)	Temporal and Vertical Variations in Photosynthetic Drivers in Mangrove Canopies, Okinawa, Japan	Al-Saidi A, et al.	2009	10.1626/pps.12.336
	Vertical distribution of roots (1)	Deep Rooting in Winter Wheat: Rooting Nodes of Deep Roots in Two Cultivars with Deep and Shallow Root Systems	Araki H, et al.	2001	10.1626/pps.4.215
Vigor (6)	Vigor (2)	Factors Relating to Seedling Emergence in Spring Wheat	Ueno K, et al.	1999	10.1626/pps.2.235
		Germination Characteristics of SC701 Maize Hybrid According to Size and Shape at Different Temperature Regimes	Akinnuoye DB, et al.	2015	10.1626/pps.18.514
	Early vigor (1)	Morphological and physiological traits of seeds and seedlings in two rice cultivars with contrasting early vigor	Huang M, et al.	2017	10.1080/1343943X.2016.1229571
	Seed vigor (1)	Calculation of Population Parameters using Richards Function and Application of Indices of Growth and Seed Vigor to Rice Plants	Hara Y.	1999	10.1626/pps.2.129
	Seedling vigor (1)	The Development of Coleoptile Tillers in Relation to Seedling Vigor in Early-Maturing Varieties of Spring Type Wheat	Fujita R, et al.	2000	10.1626/pps.3.275
	Vegetative vigor (1)	Higher Leaf Area Growth Rate Contributes to Greater Vegetative Growth of F <sub>1</sub> Rice Hybrids in the Tropics	Laza MRC, et al.	2001	10.1626/pps.4.184
Water (65)	Water absorption (2)	The Role of Seed Structure and Oxygen Responsiveness in Pre-Germination Flooding Tolerance of Soybean Cultivars	Tian XH, et al.	2005	10.1626/pps.8.157
		Relation of Seed Structures to Soybean Cultivar Difference in Pre-germination Flooding Tolerance	Muramatsu N, et al.	2008	10.1626/pps.11.434
	Water content (1)	Application of Near-Infrared Diffuse Reflectance Spectroscopic Analysis for Estimating the Ratio of True Seed Weight to Fruit Weight in Sugar Beet Seed	Mukasa Y, et al.	2005	10.1626/pps.8.3
	Water potential (6)	Effects of Different Types and Concentrations of Gelling Agents on the Physical and Chemical Properties of Media and the Growth of Banana ( <i>Musa spp.</i> ) <i>in Vitro</i>	Buah JN, et al.	1999	10.1626/pps.2.138
		Effects of Various Carbon Sources and Their Combinations on <i>in vitro</i> Growth and Photosynthesis of Banana Plantlets	Buah JN, et al.	2000	10.1626/pps.3.392
		Effect of NaCl on the Photosynthesis, Water Relations and Free Proline Accumulation in the Wild <i>Oryza</i> Species	Nakamura I, et al.	2002	10.1626/pps.5.305
		Water Status of Flower Buds and Leaves as Affected by High Temperature in Heat-Tolerant and Heat-Sensitive Cultivars of Snap Bean ( <i>Phaseolus vulgaris</i> L.)	Tsukaguchi T, et al.	2003	10.1626/pps.6.24
		Growth and Water Use Response of Doubled-Haploid Rice Lines to Drought and Rewatering during the Vegetative Stage	Siopongco JDLC, et al.	2006	10.1626/pps.9.141
		A quick determination of root resistance to water transport in paddy rice	Adachi S, et al.	2017	10.1080/1343943X.2017.1313688
	Water production functions (1)	Yield response, water productivity, and seasonal water production functions for maize under deficit irrigation water management in southern Taiwan	Greaves GE, et al.	2017	10.1080/1343943X.2017.1365613
	Water productivity (7)	Increasing Water Productivity in Rice-Based Systems in Asia: Past Trends, Current Problems, and Future Prospects	Dawe D.	2005	10.1626/pps.8.221
		Water Saving by Shallow Intermittent Irrigation and Growth of Rice	Won JG, et al.	2005	10.1626/pps.8.487
		Effect of Planting Density on Grain Yield and Water Productivity of Rice ( <i>Oryza sativa</i> L.) Grown in Flooded and Non-flooded Fields in Japan	Hayashi S, et al.	2006	10.1626/pps.9.298
		Growth of Three Rice Cultivars ( <i>Oryza sativa</i> L.) under Upland Conditions with Different Levels of Water Supply. 2. Grain Yield	Kato Y, et al.	2006	10.1626/pps.9.435
		Growth and Yield of Six Rice Cultivars under Three Water-saving Cultivations	Matsuo N, et al.	2009	10.1626/pps.12.514

Water (continued)	Water productivity (continued)	Utilizing rainfall and alternate wetting and drying irrigation for high water productivity in irrigated lowland paddy rice in southern Taiwan	Pascual VJ, et al.	2017	10.1080/1343943X.2016.1242373
		Near-isogenic lines of IR64 ( <i>Oryza sativa</i> subsp. <i>indica</i> cv.) introgressed with <i>DEEPER ROOTING 1</i> and <i>STELE TRANSVERSAL AREA 1</i> improve rice yield formation over the background parent across three water management regimes	Deshmukh V, et al.	2017	10.1080/1343943X.2017.1305868
	Water requirement (1)	Soil Management Systems Improve Water Use Efficiency of Rainfed Rice in the Semi-Arid Tropics of Southern Lombok, Eastern Indonesia	Mahrup M, et al.	2005	10.1626/pps.8.342
	Water status (2)	Influence of Low/High Temperature on Water Status in Developing and Maturing Rice Grains	Funaba M, et al.	2006	10.1626/pps.9.347
		Changes in NMR Relaxation of Rice Grains, Kernel Quality and Physicochemical Properties in Response to a High Temperature after Flowering in Heat-Tolerant and Heat-Sensitive Rice Cultivars	Tanaka K, et al.	2009	10.1626/pps.12.185
	Water uptake (11)	The Role of Active and Passive Water Uptake in Maintaining Leaf Water Status and Photosynthesis in Tomato under Water Deficit	Weng JH.	2000	10.1626/pps.3.296
		Hydrogen Stable Isotope Analysis of Water Acquisition Ability of Deep Roots and Hydraulic Lift in Sixteen Food Crop Species	Zegada-Lizarazu W, et al.	2004	10.1626/pps.7.427
		Hydraulic Conductivity and Aquaporins of Cortical Cells in Gravitropically Bending Roots of <i>Pisum sativum</i> L.	Miyamoto N, et al.	2005	10.1626/pps.8.515
		Water Competition of Intercropped Pearl Millet with Cowpea under Drought and Soil Compaction Stresses	Zegada-Lizarazu W, et al.	2006	10.1626/pps.9.123
		Pearl Millet Developed Deep Roots and Changed Water Sources by Competition with Intercropped Cowpea in the Semiarid Environment of Northern Namibia	Zegada-Lizarazu W, et al.	2006	10.1626/pps.9.355
		Water Acquisition from the Seasonal Wetland and Root Development of Pearl Millet Intercropped with Cowpea in a Flooding Ecosystem of Northern Namibia	Zegada-Lizarazu W, et al.	2007	10.1626/pps.10.20
		No-Tillage Enhanced the Dependence on Surface Irrigation Water in Wheat and Soybean	Iijima M, et al.	2007	10.1626/pps.10.182
		Genetic Opportunities to Improve Cereal Root Systems for Dryland Agriculture	Richards RA, et al.	2008	10.1626/pps.11.12
		Effects of Low Root Temperature on Dry Matter Production and Root Water Uptake in Rice Plants	Nagasuga K, et al.	2011	10.1626/pps.14.22
		Characterization of the morphological and physiological traits of rice cultivars with adaptation to unflooded condition during early vegetative growth	Matsunami M, et al.	2016	10.1080/1343943X.2015.1128090
		Root development and the expression of aquaporin genes in rice seedlings under osmotic stress	Matsunami M, et al.	2016	10.1080/1343943X.2015.1128109
	Water uptake ability (2)	Genotypic Variation in Biomass Production at the Early Vegetative Stage among Rice Cultivars Subjected to Deficient Soil Moisture Regimes and Its Association with Water Uptake Capacity	Matsunami M, et al.	2012	10.1626/pps.15.82
		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
	Water use efficiency (1)	Growth Responses of Drought Resistant Rice Cultivars to Soil Compaction under Irrigated and Succeeding Nonirrigated Conditions during the Vegetative Stage	Hoque M, et al.	1998	10.1626/pps.1.183
	Water use efficiency (15)	Effect of Soil Compaction on Dry Matter Production and Water Use of Rice ( <i>Oryza sativa</i> L.) under Water Deficit Stress during the Reproductive Stage	Kobata T, et al.	2000	10.1626/pps.3.306
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	
Water Saving in Rice-Wheat Systems		Humphreys E, et al.	2005	10.1626/pps.8.242	
Alternate Furrow Irrigation with Different Irrigation Intervals for Maize ( <i>Zea mays</i> L.)		Sepaskhah AR, et al.	2005	10.1626/pps.8.592	
Growth and Water Use Response of Doubled-Haploid Rice Lines to Drought and Rewatering during the Vegetative Stage		Siopongco JDLC, et al.	2006	10.1626/pps.9.141	
Effect of Planting Density on Grain Yield and Water Productivity of Rice ( <i>Oryza sativa</i> L.) Grown in Flooded and Non-flooded Fields in Japan		Hayashi S, et al.	2006	10.1626/pps.9.298	

Water (continued)	Water use efficiency (continued)	Effects of Alternate Furrow Irrigation with Supplemental Every-Furrow Irrigation at Different Growth Stages on the Yield of Maize ( <i>Zea mays</i> L.)	Sepaskhah AR, et al.	2006	10.1626/pps .9.415
		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
		Effects of Irrigation and Straw Mulching on Microclimate Characteristics and Water Use Efficiency of Winter Wheat in North China	Li Q, et al.	2008	10.1626/pps .11.161
		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
		Genotypic Variation in Biomass Production at the Early Vegetative Stage among Rice Cultivars Subjected to Deficient Soil Moisture Regimes and Its Association with Water Uptake Capacity	Matsunami M, et al.	2012	10.1626/pps .15.82
		Role of Canopy Coverage in Water Use Efficiency of Lowland Rice in Early Growth Period in Semi-Arid Region	Suzuki T, et al.	2013	10.1626/pps .16.12
		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
		Utilizing rainfall and alternate wetting and drying irrigation for high water productivity in irrigated lowland paddy rice in southern Taiwan	Pascual VJ, et al.	2017	10.1080/13 43943X.20 16.1242373
		Yield response, water productivity, and seasonal water production functions for maize under deficit irrigation water management in southern Taiwan	Greaves GE, et al.	2017	10.1080/13 43943X.20 17.1365613
	Dynamic states of water (1)	Cold- or Heat-Tolerance of Leaves and Roots in Perennial Ryegrass Determined by <sup>1</sup> H-NMR	Iwaya-Inoue M, et al.	2004	10.1626/pps .7.118
	Leaf water content (1)	Midday Drop of Leaf Water Content Related to Drought Tolerance in Snap Bean ( <i>Phaseolus vulgaris</i> L.)	Omae H, et al.	2005	10.1626/pps .8.465
	Leaf water potential (8)	Reduction in Leaf Water Potential and Hydraulic Conductance of Young Rice Plants ( <i>Oryza Sativa</i> L.) Grown in Wet Compacted Soils	Kobata T, et al.	1999	10.1626/pps .2.14
		Studies on Mechanisms of Dehydration Postponement in Cassava Leaves under Short-term Soil Water Deficits	Itani J, et al.	1999	10.1626/pps .2.184
		Effects of Waterlogging at Vegetative and Reproductive Growth Stages on Photosynthesis, Leaf Water Potential and Yield in Mungbean	Ahmed S, et al.	2002	10.1626/pps .5.117
		Mixed Planting with Legumes Modified the Water Source and Water Use of Pearl Millet	Zegada-Lizarazu W, et al.	2005	10.1626/pps .8.433
		Water Competition of Intercropped Pearl Millet with Cowpea under Drought and Soil Compaction Stresses	Zegada-Lizarazu W, et al.	2006	10.1626/pps .9.123
		Pearl Millet Developed Deep Roots and Changed Water Sources by Competition with Intercropped Cowpea in the Semiarid Environment of Northern Namibia	Zegada-Lizarazu W, et al.	2006	10.1626/pps .9.355
		Effects of Soil Moisture Conditions before Heading on Growth of Wheat Plants under Drought Conditions in the Ripening Stage: Insufficient Soil Moisture Conditions before Heading Render Wheat Plants More Resistant to Drought during Ripening	Saidi A, et al.	2008	10.1626/pps .11.403
		Stomatal Responses in Rainfed Lowland Rice to Partial Soil Drying: Comparison of Two Lines	Siopongco JDLC, et al.	2009	10.1626/pps .12.17
		Leaf water status (1)	Assessing Drought Tolerance of Snap Bean ( <i>Phaseolus vulgaris</i> ) from Genotypic Differences in Leaf Water Relations, Shoot Growth and Photosynthetic Parameters	Omae H, et al.	2007
Photosynthetic water use efficiency (2)	Variations in structural, biochemical, and physiological traits of photosynthesis and resource use efficiency in <i>Amaranthus</i> species (NAD-ME-type C <sub>4</sub> )	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 <sub>4</sub> )	Yabiku T, et al.	2017	10.1080/13 43943X.20 17.1398050	
Resistance to water transport (2)	Effects of Pre-Flowering Soil Moisture Deficits on Dry Matter Production and Ecophysiological Characteristics in Soybean Plants under Well Irrigated Conditions during Grain Filling	Hirasawa T, et al.	1998	10.1626/pps .1.8	
	Effects of Soil Moisture Depletion for One Month before Flowering on Dry Matter Production and Ecophysiological Characteristics of Wheat Plants in Wet Soil during Grain Filling	Nakamura E, et al.	2003	10.1626/pps .6.195	

Water (continued)	Root water uptake (1)	Developmental Plasticity of Rice Root System Grown under Mild Drought Stress Condition with Shallow Soil Depth: Comparison between Nodal and Lateral roots	Kameoka E, et al.	2016	10.1080/1343943X.2015.1128094	
Weight (26)	1000-grain weight (1)	Daytime and Nighttime Field Spectral Imagery of Ripening Paddy Rice for Determining Leaf Greenness and 1000-Grain Weight	Shibayama M, et al.	2009	10.1626/pps.12.307	
	1000-kernel weight (1)	The Effect of High-Temperature Stress Applied to the Root on Grain Quality of Rice	Nagaoka I, et al.	2012	10.1626/pps.15.274	
	Dry weight (3)		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
			Studies on the Adaptation of <i>Azolla mexicana</i> in the Aegean and the Mediterranean Regions	Gevrek M, et al.	2004	10.1626/pps.7.50
			Relationship between Dry Weight at Heading and the Number of Spikelets on Individual Rice Tillers	Shiratsuchi H, et al.	2007	10.1626/pps.10.430
	Fresh weight (1)	Studies on the Adaptation of <i>Azolla mexicana</i> in the Aegean and the Mediterranean Regions	Gevrek M, et al.	2004	10.1626/pps.7.50	
	Fruit weight (1)	Influence of Rootstock Type on the Agronomic Characteristics of Two Grape ( <i>Vitis vinifera</i> L.) Cultivars Grown in the Northwestern Iberian Peninsula	Santiago JL, et al.	2007	10.1626/pps.10.473	
	Grain weight (2)		Genetic and Environmental Variations and Associations of the Characters Related to the Grain-Filling Process in Rice Cultivars	Kato T.	1999	10.1626/pps.2.32
			Investigation of Yielding Ability of Wheat Cultivars for Early-Sowing Cultivation in Yamaguchi	Zhang L, et al.	2006	10.1626/pps.9.83
	Increase in the dry weight of seed (1)	High Carbon Requirements for Seed Production in Soybeans [ <i>Glycine max</i> (L.) Merr.]	Kakiuchi J, et al.	2008	10.1626/pps.11.198	
	Increase in the dry weight of whole plant (1)	High Carbon Requirements for Seed Production in Soybeans [ <i>Glycine max</i> (L.) Merr.]	Kakiuchi J, et al.	2008	10.1626/pps.11.198	
	Leaf blade dry weight (1)	Leaf Blade Dry Weight and Leaf Area Index×SPAD Value at Anthesis Can Be Used to Estimate Nitrogen Application Rate at Anthesis Required to Obtain Target Protein Content of Grain in Bread Wheat	Nakano H, et al.	2010	10.1626/pps.13.297	
	Own-weight moment (1)	A mechanical study on the mitigation of lodging in edible canna	Imai K, et al.	2017	10.1080/1343943X.2016.1255148	
	Panicle weight (2)		Effects of the Tillering Nodes on the Main Stem of a Chinese Large-Panicle-Type Rice Cultivar, Yangdao 4, on the Growth and Yield-Related Characteristics in Relation to Cropping Season	Gendua PA, et al.	2009	10.1626/pps.12.257
			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
	Plant dry weight (1)	The Development of Coleoptile Tillers in Relation to Seedling Vigor in Early-Maturing Varieties of Spring Type Wheat	Fujita R, et al.	2000	10.1626/pps.3.275	
	Root dry weight (1)	A Simple Method for Selection of Potato Lines with a Higher Root/Total Ratio at an Early Stage in the Seedling Generation	Iwama K, et al.	1998	10.1626/pps.1.286	
	Root weight density (2)		Root Growth of Two Soybean [ <i>Glycine max</i> (L.) Merr.] Cultivars Grown under Different Groundwater Level Conditions	Matsuo N, et al.	2013	10.1626/pps.16.374
			Root growth, soil water variation, and grain yield response of winter wheat to supplemental irrigation	Man J, et al.	2016	10.1080/1343943X.2015.1128097
	Seed weight (2)		Seed Weight of Nodulating and Non-nodulating Soybeans at Different Nitrogen Levels and Years	Manalo DD, et al.	1998	10.1626/pps.1.264
			Effects of Day Length and Air and Soil Temperatures on Sesamin and Sesamolins Contents of Sesame Seed	Kumazaki T, et al.	2009	10.1626/pps.12.481
	Specific leaf weight (2)		Higher Leaf Area Growth Rate Contributes to Greater Vegetative Growth of F <sub>1</sub> Rice Hybrids in the Tropics	Laza MRC, et al.	2001	10.1626/pps.4.184
			Chlorophyll Meter's Estimate of Weight-based Nitrogen Concentration in Rice Leaf is Influenced by Leaf Thickness	Li J, et al.	2011	10.1626/pps.14.177
	Spikelet weight (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/pps.5.198	
	Straw weight (1)	Effects of the Tillering Nodes on the Main Stem of a Chinese Large-Panicle-Type Rice Cultivar, Yangdao 4, on the Growth and Yield-Related Characteristics in Relation to Cropping Season	Gendua PA, et al.	2009	10.1626/pps.12.257	
	Total dry weight (1)	Effects of Top Dressing on Growth and Panicle Dry Weight as Affected by Soil Water Stress at the Early Panicle-Development Stage in Rice ( <i>Oryza sativa</i> L.)	Tsuda M, et al.	2010	10.1626/pps.13.37	



Whole plant (1)	Increase in the carbon of whole plant (1)	High Carbon Requirements for Seed Production in Soybeans [ <i>Glycine max</i> (L.) Merr.]	Kakiuchi J, et al.	2008	10.1626/pps.11.198
Winter habit (1)		Investigation of Yielding Ability of Wheat Cultivars for Early-Sowing Cultivation in Yamaguchi	Zhang L, et al.	2006	10.1626/pps.9.83
Wintering ability (1)		N onstructural Carbohydrate Reserves in Roots and the Ability of Temperate Perennial Grasses to Overwinter in Early Growth Stages	Tamura Y, et al.	2001	10.1626/pps.4.56
Xylem (4)	Xylem exudation (1)	Effects of Soil Temperature on Growth and Root Function in Rice	Arai-Sanoh Y, et al.	2010	10.1626/pps.13.235
	Xylem sap (1)	A quick determination of root resistance to water transport in paddy rice	Adachi S, et al.	2017	10.1080/1343943X.2017.1313688
	Xylem vessel (2)	Anatomy of Nodal Roots in Tropical Upland and Lowland Rice Varieties	Kondo M, et al.	2000	10.1626/pps.3.437
Root Anatomical Traits and Their Possible Contribution to Drought Tolerance in Grain Legumes		Purushothaman R, et al.	2013	10.1626/pps.16.1	
Yield (139)	Yield (50)	Differences in Flowering Habit between Determinate and Indeterminate Types of Soybean	Kuroda T, et al.	1998	10.1626/pps.1.18
		Increasing Production of Rainfed Lowland Rice in Drought Prone Environments: A Case Study in Thailand and Laos	Fukai S, et al.	1998	10.1626/pps.1.75
		Physio-morphological Studies of F1 Hybrids in Rice ( <i>Oryza sativa</i> L.)	Khan MNA, et al.	1998	10.1626/pps.1.233
		Steps Towards Feeding the Ten Billion: A crop physiologists View	Evans LT.	1999	10.1626/pps.2.3
		Effect of a Bio-decomposer on Utilization by Rice ( <i>Oryza sativa</i> L.) of 15N Derived from Rice Chaff or Straw	Hossain KA, et al.	1999	10.1626/pps.2.65
		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
		Tillering, Lodging and Yield under Deep Water Treatment in Direct-seeded Rice	Won JG, et al.	1999	10.1626/pps.2.200
		Comparison of Growth and Yield Performance of Several Water Chestnut Species Collected from Southwestern Japan and Middle China	Arima S, et al.	1999	10.1626/pps.2.273
		Factors Causing the Variation in the Temperature Coefficient of Dark Respiration in Rice ( <i>Oryza sativa</i> L.)	Lee KH, et al.	2000	10.1626/pps.3.38
		Effects of Waterlogging at Vegetative and Reproductive Growth Stages on Photosynthesis, Leaf Water Potential and Yield in Mungbean	Ahmed S, et al.	2002	10.1626/pps.5.117
		Effects of Elevated CO <sub>2</sub> Concentration on Photosynthetic Carbon Metabolism in Flag-Leaf Blades of Rice before and after Heading	Aoki N, et al.	2003	10.1626/pps.6.52
		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
		Effects of Paclobutrazol on Podding and Photosynthetic Characteristics in Peanut	Senoo S, et al.	2003	10.1626/pps.6.190
		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/pps.7.3
		Topographic Position Influences Water Availability in Rainfed Lowland Rice at Rajshahi, Northwest Bangladesh	Samson B, et al.	2004	10.1626/pps.7.101
		Size and Activity of Shoot Apical Meristems as Determinants of Floret Number in Rice Panicles	Mu C, et al.	2005	10.1626/pps.8.51
		Analysis of High Yielding Ability in a Rice Cultivar Akisayaka	Fukushima A, et al.	2006	10.1626/pps.9.369
		High Yielding Performance of Soybean in Northern Xinjiang, China	Isoda A, et al.	2006	10.1626/pps.9.401
		Enhancing the Performance of Direct Seeded Fine Rice by Seed Priming	Farooq M, et al.	2006	10.1626/pps.9.446
		Effects of Temperature, Sowing Depth and Soil Hardness on Seedling Establishment and Yield of Cambodian Rice Direct-seeded in Flood Paddy Fields	Ly T, et al.	2007	10.1626/pps.10.129
Variation in Growth and Yield Performance of Seventeen Water Chestnut Accessions ( <i>Trapa</i> spp.) Collected from Asia and Europe	Suriyagoda L, et al.	2007	10.1626/pps.10.372		
Overexpression of a Maize <i>SPS</i> Gene Improves Yield Characters of Potato under Field Conditions	Ishimaru K, et al.	2008	10.1626/pps.11.104		

Yield (continued)	Yield (continued)	Does Regional Temperature Difference before the Panicle Initiation Affect the Tolerance for Low Temperature-Induced Sterility in Rice?	Shimono H, et al.	2008	10.1626/pps .11.430
		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
		Response of Soybean Yield to Daytime Temperature Change during Seed Filling: A Long-Term Field Study in Northeast China	Zheng H, et al.	2009	10.1626/pps .12.526
		Transplantation of Half-Cut Tuber Seedlings Provides Enhanced Yields Over Conventional Sprouted-Vine Planting in Sweet Potato Cultivar "Murasakimasari"	Adachi K, et al.	2011	10.1626/pps .14.291
		Suppression of Mother Tuber Enlargement in the Sweet Potato Cultivar "Koganesengan" by Transplantation of Bottled Tuber Seedlings	Adachi K, et al.	2012	10.1626/pps .15.57
		Effect of Supplementing Inorganic Fertilizer with Organic Fertilizer on Growth and Yield of Rice-Cowpea Mixed Crop	Amoah AA, et al.	2012	10.1626/pps .15.109
		Effects of CO <sub>2</sub> Increase on Wheat Growth and Yield under Different Atmospheric Pressures and Their Interaction with Temperature	Fujimura S, et al.	2012	10.1626/pps .15.118
		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
		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
		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
		Growth and Yield Responses of Two Soybean Cultivars Grown under Controlled Groundwater Level in Southwestern Japan	Matsuo N, et al.	2013	10.1626/pps .16.84
		Agronomic Traits for High Productivity of Rice Grown in Aerobic Culture in Progeny of a Japonica Cultivar and a High-Yielding Indica Cultivar	Katsura K.	2013	10.1626/pps .16.317
		Alleles Affecting 30 Traits for Productivity in Two Japonica Rice Varieties, Koshihikari and Nipponbare ( <i>Oryza sativa</i> L.)	Ujiiie K, et al.	2014	10.1626/pps .17.47
		Effect of Winter Crop Species on Arbuscular Mycorrhizal Fungal Colonization and Subsequent Soybean Yields	Isobe K, et al.	2014	10.1626/pps .17.260
		Early-Maturing and Chilling-Tolerant Soybean Lines Derived from Crosses between Japanese and Polish Cultivars	Yamaguchi N, et al.	2015	10.1626/pps .18.234
		Influence of Seed Treatment with Uniconazole Powder on Soybean Growth, Photosynthesis, Dry Matter Accumulation after Flowering and Yield in Relay Strip Intercropping System	Yan YH, et al.	2015	10.1626/pps .18.295
		Relationship between Phosphorus Accumulation and Dry Matter Production in Soybeans	Kakiuchi J, et al.	2015	10.1626/pps .18.344
		Influence of Light Intensity on the Yield and Quality of <i>Houttuynia cordata</i>	Li A, et al.	2015	10.1626/pps .18.522
		Yield-enhancing and tuber-downsizing effects of transplantation cultivation method of case-held tuber seedlings in the sweet potato cultivar Beniharuka	Adachi K, et al.	2016	10.1080/13 43943X.20 15.1128086
		Path analysis of genotype × environment interactions in rainfed durum wheat	Mohammadi R, et al.	2016	10.1080/13 43943X.20 15.1128100
		Effects of soil types and fertilizers on growth, yield, and quality of edible <i>Amaranthus tricolor</i> lines in Okinawa, Japan	Ohshiro M, et al.	2016	10.1080/13 43943X.20 15.1128087
		Yield and dry matter productivity of Japanese and US soybean cultivars	Kawasaki Y, et al.	2016	10.1080/13 43943X.20 15.1133235
		Effect of planting density on lodging-related morphology, lodging rate, and yield of tartary buckwheat ( <i>Fagopyrum tataricum</i> )	Xiang DB, et al.	2016	10.1080/13 43943X.20 16.1188320
		Effect of narrow-row planting patterns on crop competitive and economic advantage in maize–soybean relay strip intercropping system	Yang F, et al.	2017	10.1080/13 43943X.20 16.1224553
		A mechanical study on the mitigation of lodging in edible canna	Imai K, et al.	2017	10.1080/13 43943X.20 16.1255148
		A high seed yield and associated attributes of dry matter production achieved by recent Japanese soybean cultivars	Maitree L, et al.	2017	10.1080/13 43943X.20 17.1294463

Yield (continued)	Yield (continued)	Plant development and yield components under a tropical environment in soybean cultivars with temperate and tropical origins	Saryoko A, et al.	2017	10.1080/1343943X.2017.1356203
		Effects of genes increasing the number of spikelets per panicle, <i>TAWI</i> and <i>APO1</i> , on yield and yield-related traits in rice	Fukushima A, et al.	2017	10.1080/1343943X.2017.1365614
	Yield and yield components (1)	Tillering and Yield of Rice Cultivars under a Water Storage-Type Deep-Irrigation Regime	Ishibashi T, et al.	2009	10.1626/pps.12.237
	Yield barrier (1)	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
Yield components (8)		Effects of Selection for Yield Components on Grain Yield in Pearl Millet ( <i>Pennisetum typhoides</i> Rich.)	Totok ADH, et al.	1998	10.1626/pps.1.52
		Effects of Inabenfide [4'-chloro-2'-( $\alpha$ -hydroxybenzyl)-isonicotinamide] on Growth, Lodging, and Yield Components of Rice	Fukazawa M, et al.	2001	10.1626/pps.4.118
		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/pps.7.109
		Effect of Planting Density on Grain Yield and Water Productivity of Rice ( <i>Oryza sativa</i> L.) Grown in Flooded and Non-flooded Fields in Japan	Hayashi S, et al.	2006	10.1626/pps.9.298
		Yields from Rice Plants Cultivated under Tree Canopies in Rainfed Paddy Fields on the Central Plain of Laos	Miyagawa S, et al.	2013	10.1626/pps.16.325
		Growth and Yield Properties of Near-Isogenic Wheat Lines Carrying Different Photoperiodic Response Genes	Matsuyama H, et al.	2015	10.1626/pps.18.57
		Growth and yield responses of upland NERICAs to variable water management under field conditions	Kikuta M, et al.	2017	10.1080/1343943X.2016.1245102
		Yield response, water productivity, and seasonal water production functions for maize under deficit irrigation water management in southern Taiwan	Greaves GE, et al.	2017	10.1080/1343943X.2017.1365613
	Yield estimation (1)	Effect of Plot Size on Accuracy of Yield Estimation of Rainfed Lowland Rice Genotypes with Different Plant Heights and Grown under Different Soil Fertility Conditions	Jearakongman S, et al.	2003	10.1626/pps.6.95
	Yield gap (1)	Comparison of Rice Yield after Various Years of Cultivation by Natural Farming	Neera P, et al.	1999	10.1626/pps.2.58
Yield improvement (2)		Effect of Sugar Solution Infused into Mungbean ( <i>Vigna radiata</i> (L.) Wilczek) Plant on Seed Yield and Dry Matter Production	Khaliq QA, et al.	2002	10.1626/pps.5.31
		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
Yield potential (7)		Four Decades of Breeding for Varietal Improvement of Irrigated Lowland Rice in the International Rice Research Institute	Peng S, et al.	2003	10.1626/pps.6.157
		Correlation between Yielding Ability and Dry Matter Productivity during Initial Seed Filling Stage in Various Soybean Genotypes	Shiraiwa T, et al.	2004	10.1626/pps.7.138
		Growth of Three Rice Cultivars ( <i>Oryza sativa</i> L.) under Upland Conditions with Different Levels of Water Supply. 2. Grain Yield	Kato Y, et al.	2006	10.1626/pps.9.435
		Yield Potential and Physiological and Morphological Characteristics Related to Yield Performance in <i>Oryza glaberrima</i> Steud.	Futakuchi K, et al.	2012	10.1626/pps.15.151
		Yielding Performance of "Kita-aoba", High-yielding Rice Variety for Hokkaido Region, Northern Japan	Hayashi S, et al.	2012	10.1626/pps.15.209
		Effects of early planting and cultivars on the yield and agronomic traits of soybeans grown in southwestern Japan	Matsuo N, et al.	2016	10.1080/1343943X.2016.1155417
		Effects of yield-related QTLs <i>SPIKE</i> and <i>GPS</i> in two <i>indica</i> rice genetic backgrounds	Takai T, et al.	2017	10.1080/1343943X.2017.1385404
	Yield prediction (1)	Analysis of Spectral Measurements in Paddy Field for Predicting Rice Growth and Yield Based on a Simple Crop Simulation Model	Inoue Y, et al.	1998	10.1626/pps.1.269
	Yield response (1)	Growth and yield responses of upland NERICAs to variable water management under field conditions	Kikuta M, et al.	2017	10.1080/1343943X.2016.1245102
	Yield stability (1)	Yield Stability of Aromatic Upland Rice with High Yielding Ability in Indonesia	Totok ADH, et al.	2008	10.1626/pps.11.96

Yield (continued)	Yielding ability (2)	Studies on Agronomic Traits of African Rice ( <i>Oryza glaberrima</i> Steud.). IV. Changes In growth, dry matter productivity and yielding ability related to domestication from wild to cultivated form	Sumi A, et al.	1998	10.1626/pps .1.199
		Responses of Yielding Ability, Sink Size and Percentage of Filled Grains to the Cultivation Practices in a Chinese Large-Panicle-Type Rice Cultivar, Yangdao 4	Gendua PA, et al.	2009	10.1626/pps .12.243
	Yielding performance (1)	High-Yielding Performance of a New Rice Variety, IR53650 in Mildly Improved Acid Sulfate Soil Conditions	Kang DJ, et al.	2007	10.1626/pps .10.64
	Yield-shoot ratio (1)	Effects of Harvest Time on Shoot Biomass and Yield of Turmeric ( <i>Curcuma longa</i> L.) in Okinawa, Japan	Hossain MA.	2010	10.1626/pps .13.97
	Dry matter yield (5)	Effects of Cutting Interval and Cutting Height on Dry Matter Yield and Overwintering Ability at the Established Year in <i>Pennisetum</i> Species	Wadi A, et al.	2004	10.1626/pps .7.88
		Effects of Cutting Height and Trampling over Stubbles of the First Crop on Dry Matter Yield in Twice Harvesting of Forage Rice	Nakano H, et al.	2009	10.1626/pps .12.124
		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
		Effect of Stubble Shaving after High-Level Cutting on the Growth and Yield of Forage Sugarcane, KRf093-1, under Multiple Ratooning Cultivation	Sakaigaichi T, et al.	2013	10.1626/pps .16.183
		Comparison of ratoon yield under high-level cutting in two varieties of forage sugarcane, KRf093-1, and Shimanoushie	Sakaigaichi T, et al.	2017	10.1080/13 43943X.20 17.1283239
	Grain yield (40)	Effects of Selection for Yield Components on Grain Yield in Pearl Millet ( <i>Pennisetum typhoideum</i> Rich.)	Totok ADH, et al.	1998	10.1626/pps .1.52
		Effect of Soil Compaction on the Grain Yield of Rice ( <i>Oryza sativa</i> L.) under Water-Deficit Stress during the Reproductive Stage	Hoque M, et al.	2000	10.1626/pps .3.316
		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
		Agronomic Performance of F <sub>1</sub> Hybrids of Rice ( <i>Oryza sativa</i> L.) in Japonica-Indica Crosses: Heterosis for and relationship between grain yield and related characters	Murayama S, et al.	2002	10.1626/pps .5.203
		Contribution of Biomass Partitioning and Translocation to Grain Yield under Sub-Optimum Growing Conditions in Irrigated Rice	Laza MRC, et al.	2003	10.1626/pps .6.28
		Sterility of Thermo-Sensitive Genic Male Sterile Line, Heterosis for Grain Yield and Related Characters in F <sub>1</sub> Hybrid Rice ( <i>Oryza sativa</i> L.)	Pham VC, et al.	2004	10.1626/pps .7.22
		Effect of Panicle Size on Grain Yield of IRRI-Released Indica Rice Cultivars in the Wet Season	Laza MRC, et al.	2004	10.1626/pps .7.271
		Investigation of Yielding Ability of Wheat Cultivars for Early-Sowing Cultivation in Yamaguchi	Zhang L, et al.	2006	10.1626/pps .9.83
		Effect of Planting Density on Grain Yield and Water Productivity of Rice ( <i>Oryza sativa</i> L.) Grown in Flooded and Non-flooded Fields in Japan	Hayashi S, et al.	2006	10.1626/pps .9.298
		Growth of Three Rice Cultivars ( <i>Oryza sativa</i> L.) under Upland Conditions with Different Levels of Water Supply. 2. Grain Yield	Kato Y, et al.	2006	10.1626/pps .9.435
		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
		Effects of High Temperature on Growth, Yield and Dry-Matter Production of Rice Grown in the Paddy Field	Oh-e I, et al.	2007	10.1626/pps .10.412
		Effect of Nitrogen Application Rate and Timing on Grain Yield and Protein Content of the Bread Wheat Cultivar 'Minaminokaori' in Southwestern Japan	Nakano H, et al.	2008	10.1626/pps .11.151
		Effects of Soil Moisture Conditions before Heading on Growth of Wheat Plants under Drought Conditions in the Ripening Stage: Insufficient Soil Moisture Conditions before Heading Render Wheat Plants More Resistant to Drought during Ripening	Saidi A, et al.	2008	10.1626/pps .11.403
A Knowledge-Based Model for Nitrogen Management in Rice and Wheat		Cao J, et al.	2009	10.1626/pps .12.100	
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		
Comparison of Growth and Grain Yield of Spring Wheat in Lhasa, the Tibetan Plateau, with those in Sapporo, Japan	Fujimura S, et al.	2009	10.1626/pps .12.116		



Yield (continued)	Grain yield (continued)	Current Status and Challenges of Rice Production in China	Peng S, et al.	2009	10.1626/pps .12.3	
		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	
		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	
		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	
		Effects of Soil Type, Vertical Root Distribution and Precipitation on Grain Yield of Winter Wheat	Itoh H, et al.	2009	10.1626/pps .12.503	
		Growth and Yield of Six Rice Cultivars under Three Water-saving Cultivations	Matsuo N, et al.	2009	10.1626/pps .12.514	
		Spatial Variations in Water Availability, Soil Fertility and Grain Yield in Rainfed Lowland Rice: A Case Study from Savannakhet Province, Lao PDR	Inthavong T, et al.	2011	10.1626/pps .14.184	
		Effect of Pre- and Post-heading Water Deficit on Growth and Grain Yield of Four Millets	Matsuura A, et al.	2012	10.1626/pps .15.323	
		Grain Yield and Leaf Area Growth of Direct-Seeded Rice on Flooded and Aerobic Soils in Japan	Okami M, et al.	2013	10.1626/pps .16.276	
		Long-term Effect of Year-Round Tillage Patterns on Yield and Grain Quality of Wheat	Tang Y, et al.	2013	10.1626/pps .16.365	
		Comparison of Five Nitrogen Dressing Methods to Optimize Rice Growth	Chen QC, et al.	2014	10.1626/pps .17.66	
		SPAD Values and Nitrogen Nutrition Index for the Evaluation of Rice Nitrogen Status	Yang H, et al.	2014	10.1626/pps .17.81	
		Field Technique and Traits to Assess Reproductive Stage Cold Tolerance in Sorghum ( <i>Sorghum bicolor</i> (L.) Moench)	Krishnamurthy L, et al.	2014	10.1626/pps .17.218	
		Maintenance of Crop Growth through 30 Days after Silking Contributes to Achieving Super-High Yield of Spring Maize	Tao H, et al.	2014	10.1626/pps .17.268	
		Chlorophyll Fluorescence and Yield Responses of Winter Wheat to Waterlogging at Different Growth Stages	Wu X, et al.	2015	10.1626/pps .18.284	
		Characterizing N uptake and use efficiency in rice as influenced by environments	Jiang P, et al.	2016	10.1080/13 43943X.20 15.1128103	
		Root growth, soil water variation, and grain yield response of winter wheat to supplemental irrigation	Man J, et al.	2016	10.1080/13 43943X.20 15.1128097	
		Effect of pre- and post-heading waterlogging on growth and grain yield of four millets	Matsuura A, et al.	2016	10.1080/13 43943X.20 16.1146907	
		Analysis of yield-attributing traits for high-yielding wheat lines in southwestern Japan	Okami M, et al.	2016	10.1080/13 43943X.20 16.1151331	
		Bayesian analysis of quantitative traits in popcorn ( <i>Zea mays</i> L.) through four cycles of recurrent selection	do Amaral Jr AT, et al.	2016	10.1080/13 43943X.20 16.1222870	
		Suppression of starch accumulation in 'sugar leaves' of rice affects plant productivity under field conditions	Okamura M, et al.	2017	10.1080/13 43943X.20 16.1259958	
		Overexpression of CO <sub>2</sub> -responsive CCT protein, a key regulator of starch synthesis strikingly increases the glucose yield from rice straw for bioethanol production	Morita R, et al.	2017	10.1080/13 43943X.20 17.1389614	
		Adaptation of rice ( <i>Oryza sativa</i> L.) genotypes in the rainfed lowlands of Lao PDR	Sengxua P, et al.	2017	10.1080/13 43943X.20 17.1403290	
		Oil yield (1)	Oil Palm: Achievements and Potential	Wahid MB, et al.	2005	10.1626/pps .8.288
		Photosystem II effective quantum yield (1)	Physiological Response of Three Wheat Cultivars to High Shoot and Root Temperatures during Early Growth Stages	Tahir ISA, et al.	2009	10.1626/pps .12.409
Pod yield (1)	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/pps .11.507		
Quantum yield of photosystem II (1)	Effects of Paclo butrazol on Podding and Photosynthetic Characteristics in Peanut	Senoo S, et al.	2003	10.1626/pps .6.190		

Yield (continued)	Root yield (1)	Accumulation of Soluble Sugar in True Seeds by Priming of Sugar Beet Seeds and the Effects of Priming on Growth and Yield of Drilled Plants	Mukasa Y, et al.	2003	10.1626/pps .6.74
	Seed yield (9)	Effects of Low Temperature and Shading during Flowering on the Yield Components in Soybeans	Kurosaki H, et al.	2003	10.1626/pps .6.17
		Effects of Paclo butrazol on Dry Matter Distribution and Yield in Peanut	Senoo S, et al.	2003	10.1626/pps .6.90
		Drought Tolerance Characteristics of Brazilian Soybean Cultivars: Evaluation and characterization of drought tolerance of various Brazilian soybean cultivars in the field	Oya T, et al.	2004	10.1626/pps .7.129
		Nitrogen Fixation and Seed Yield in Soybean under Moderate High-Temperature Stress	Shiraiwa T, et al.	2006	10.1626/pps .9.165
		Agronomic and Tolerant Performance of Acid Soil-Tolerant Wild Soybean ( <i>Glycine soja</i> Sieb. and Zucc.) in Acid Sulfate Soil of Thailand	Kang DJ, et al.	2011	10.1626/pps .14.156
		Genotypic Adaptation of Soybean to Late Sowing in Southwestern Japan	Fatichin, et al.	2013	10.1626/pps .16.123
		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
		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
		Branch development responses to planting density and yield stability in soybean cultivars	Agudamu, et al.	2016	10.1080/13 43943X.20 16.1157443
		Source and yield (1)	Contribution of Sink and Source Sizes to Yield Variation among Rice Cultivars	Lubis I, et al.	2003
	Stem yield (1)	Relation between seeding times and stem yield of sorghum in cold region in Japan	Fujii A, et al.	2016	10.1080/13 43943X.20 15.1128102