Peter Hedley

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7595945/publications.pdf

Version: 2024-02-01

61984 38395 10,017 136 43 95 citations h-index g-index papers 147 147 147 10437 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	WHIRLY1 functions in the nucleus to regulate barley leaf development and associated metabolite profiles. Biochemical Journal, 2022, 479, 641-659.	3.7	2
2	Identifying plant genes shaping microbiota composition in the barley rhizosphere. Nature Communications, 2022, 13, .	12.8	44
3	Chitosan primes plant defence mechanisms against <i>Botrytis cinerea</i> , including expression of Avr9/Cfâ€9 rapidly elicited genes. Plant, Cell and Environment, 2021, 44, 290-303.	5.7	29
4	Haustorium formation and a distinct biotrophic transcriptome characterize infection of <i>Nicotiana benthamiana</i> by the tree pathogen <i>Phytophthora kernoviae</i> Molecular Plant Pathology, 2021, 22, 954-968.	4.2	5
5	Draft genome assemblies for tree pathogens Phytophthora pseudosyringae and Phytophthora boehmeriae. G3: Genes, Genomes, Genetics, 2021, 11, .	1.8	4
6	Senescent sweetening in potato (Solanum tuberosum) tubers is associated with a reduction in plastidial glucose-6-phosphate/phosphate translocator transcripts. Postharvest Biology and Technology, 2021, 181, 111637.	6.0	5
7	Applications of the indole-alkaloid gramine modulate the assembly of individual members of the barley rhizosphere microbiota. Peerl, 2021, 9, e12498.	2.0	12
8	A high-throughput genomic screen identifies a role for the plasmid-borne type II secretion system of Escherichia coli O157:H7 (Sakai) in plant-microbe interactions. Genomics, 2020, 112, 4242-4253.	2.9	2
9	Phytophthora austrocedri in Argentina and Co-Inhabiting Phytophthoras: Roles of Anthropogenic and Abiotic Factors in Species Distribution and Diversity. Forests, 2020, 11, 1223.	2.1	11
10	A footprint of plant eco-geographic adaptation on the composition of the barley rhizosphere bacterial microbiota. Scientific Reports, 2020, 10, 12916.	3.3	48
11	Escherichia coli O157:H7 F9 Fimbriae Recognize Plant Xyloglucan and Elicit a Response in Arabidopsis thaliana. International Journal of Molecular Sciences, 2020, 21, 9720.	4.1	3
12	Detection and spread of <i>Phytophthora austrocedri</i> within infected <i>Juniperus communis</i> woodland and diversity of coâ€associated Phytophthoras as revealed by metabarcoding. Forest Pathology, 2020, 50, e12602.	1.1	8
13	TRA1: A Locus Responsible for Controlling Agrobacterium-Mediated Transformability in Barley. Frontiers in Plant Science, 2020, 11, 355.	3.6	12
14	Intact salicylic acid signalling is required for potato defence against the necrotrophic fungus Alternaria solani. Plant Molecular Biology, 2020, 104, 1-19.	3.9	32
15	Physiological, Biochemical, and Transcriptional Responses to Single and Combined Abiotic Stress in Stress-Tolerant and Stress-Sensitive Potato Genotypes. Frontiers in Plant Science, 2020, 11, 169.	3.6	79
16	TERMINAL FLOWERâ€1/CENTRORADIALIS inhibits tuberisation via protein interaction with the tuberigen activation complex. Plant Journal, 2020, 103, 2263-2278.	5.7	24
17	Light Regulation of Chlorophyll and Glycoalkaloid Biosynthesis During Tuber Greening of Potato S. tuberosum. Frontiers in Plant Science, 2020, 11, 753.	3.6	14
18	Dataset of Escherichia coli O157: H7 genes enriched in adherence to spinach root tissue. Data in Brief, 2020, 31, 105769.	1.0	0

#	Article	IF	Citations
19	Signatures of adaptation to a monocot host in the plantâ€parasitic cyst nematode Heterodera sacchari. Plant Journal, 2020, 103, 1263-1274.	5.7	9
20	Barley Anther and Meiocyte Transcriptome Dynamics in Meiotic Prophase I. Frontiers in Plant Science, 2020, 11, 619404.	3.6	19
21	Identification of TIMING OF CAB EXPRESSION 1 as a temperature-sensitive negative regulator of tuberization in potato. Journal of Experimental Botany, 2019, 70, 5703-5714.	4.8	21
22	A highly mutagenised barley (cv. Golden Promise) TILLING population coupled with strategies for screening-by-sequencing. Plant Methods, 2019, 15, 99.	4.3	39
23	Ancient barley landraces adapted to marginal soils demonstrate exceptional tolerance to manganese limitation. Annals of Botany, 2019, 123, 831-843.	2.9	29
24	A Comparison of Mainstream Genotyping Platforms for the Evaluation and Use of Barley Genetic Resources. Frontiers in Plant Science, 2019, 10, 544.	3 . 6	66
25	Development and Quality of Barley Husk Adhesion Correlates With Changes in Caryopsis Cuticle Biosynthesis and Composition. Frontiers in Plant Science, 2019, 10, 672.	3.6	5
26	APETALA2 control of barley internode elongation. Development (Cambridge), 2019, 146, .	2.5	36
27	BaRTv1.0: an improved barley reference transcript dataset to determine accurate changes in the barley transcriptome using RNA-seq. BMC Genomics, 2019, 20, 968.	2.8	50
28	Exome Capture for Variant Discovery and Analysis in Barley. Methods in Molecular Biology, 2019, 1900, 283-310.	0.9	5
29	High-Resolution RT-PCR Analysis of Alternative Barley Transcripts. Methods in Molecular Biology, 2019, 1900, 269-281.	0.9	11
30	Microarrays for High-Throughput Gene Expression Analysis of Barley. Methods in Molecular Biology, 2019, 1900, 181-194.	0.9	0
31	Metabarcoding reveals a high diversity of woody host-associated <i>Phytophthora </i> spp. in soils at public gardens and amenity woodlands in Britain. Peerl, 2019, 7, e6931.	2.0	40
32	A reversible light- and genotype-dependent acquired thermotolerance response protects the potato plant from damage due to excessive temperature. Planta, 2018, 247, 1377-1392.	3.2	19
33	The redox state of the apoplast influences the acclimation of photosynthesis and leaf metabolism to changing irradiance. Plant, Cell and Environment, 2018, 41, 1083-1097.	5.7	47
34	Enhancement of Glen Moy x Latham raspberry linkage map using GbS to further understand control of developmental processes leading to fruit ripening. BMC Genetics, 2018, 19, 59.	2.7	31
35	Gene Prediction in the Barley Genome. Compendium of Plant Genomes, 2018, , 73-88.	0.5	0
36	The Expressed Portion of the Barley Genome. Compendium of Plant Genomes, 2018, , 89-107.	0.5	0

#	Article	IF	CITATIONS
37	A Transcript and Metabolite Atlas of Blackcurrant Fruit Development Highlights Hormonal Regulation and Reveals the Role of Key Transcription Factors. Frontiers in Plant Science, 2018, 9, 1235.	3 . 6	11
38	RXLR Effector AVR2 Up-Regulates a Brassinosteroid-Responsive bHLH Transcription Factor to Suppress Immunity. Plant Physiology, 2017, 174, 356-369.	4.8	82
39	Barley transcriptome analyses upon interaction with different aphid species identify thionins contributing to resistance. Plant, Cell and Environment, 2017, 40, 2628-2643.	5.7	38
40	A chromosome conformation capture ordered sequence of the barley genome. Nature, 2017, 544, 427-433.	27.8	1,365
41	Redox Control of Aphid Resistance through Altered Cell Wall Composition and Nutritional Quality. Plant Physiology, 2017, 175, 259-271.	4.8	26
42	Fine mapping of a major QTL for awn length in barley using a multiparent mapping population. Theoretical and Applied Genetics, 2017, 130, 269-281.	3.6	46
43	Root Hair Mutations Displace the Barley Rhizosphere Microbiota. Frontiers in Plant Science, 2017, 8, 1094.	3.6	85
44	Association Mapping of Diastatic Power in UK Winter and Spring Barley by Exome Sequencing of Phenotypically Contrasting Variety Sets. Frontiers in Plant Science, 2017, 8, 1566.	3 . 6	6
45	Development and Evaluation of a Barley 50k iSelect SNP Array. Frontiers in Plant Science, 2017, 8, 1792.	3.6	257
46	A comparative analysis of nonhost resistance across the two Triticeae crop species wheat and barley. BMC Plant Biology, 2017, 17, 232.	3.6	21
47	Whole-Transcriptome Analysis of Verocytotoxigenic Escherichia coli O157:H7 (Sakai) Suggests Plant-Species-Specific Metabolic Responses on Exposure to Spinach and Lettuce Extracts. Frontiers in Microbiology, 2016, 7, 1088.	3.5	34
48	Molecular and Biochemical Examination of Spraing Disease in Potato Tuber in Response to <i>Tobacco rattle virus</i> Infection. Molecular Plant-Microbe Interactions, 2016, 29, 822-828.	2.6	10
49	The Dynamics of Transcript Abundance during Cellularization of Developing Barley Endosperm. Plant Physiology, 2016, 170, 1549-1565.	4.8	47
50	Insight on Genes Affecting Tuber Development in Potato upon Potato spindle tuber viroid (PSTVd) Infection. PLoS ONE, 2016, 11, e0150711.	2.5	43
51	Gene expression changes in diapause or quiescent potato cyst nematode, <i>Globodera pallida </i> , eggs after hydration or exposure to tomato root diffusate. Peerl, 2016, 4, e1654.	2.0	8
52	A transcriptional reference map of defence hormone responses in potato. Scientific Reports, 2015, 5, 15229.	3. 3	28
53	WHIRLY1 Functions in the Control of Responses to Nitrogen Deficiency But Not Aphid Infestation in Barley. Plant Physiology, 2015, 168, 1140-1151.	4.8	20
54	Assessing the genetic diversity of rice originating from Bangladesh, Assam and West Bengal. Rice, 2015, 8, 35.	4.0	63

#	Article	IF	CITATIONS
55	The <scp>MORPH</scp> â€R web server and software tool for predicting missing genes in biological pathways. Physiologia Plantarum, 2015, 155, 12-20.	5.2	3
56	Characterization of Arabidopsis Transcriptional Responses to Different Aphid Species Reveals Genes that Contribute to Host Susceptibility and Non-host Resistance. PLoS Pathogens, 2015, 11, e1004918.	4.7	47
57	Optimising ketocarotenoid production in potato tubers: Effect of genetic background, transgene combinations and environment. Plant Science, 2015, 234, 27-37.	3.6	33
58	Impacts on the metabolome of down-regulating polyphenol oxidase in potato tubers. Transgenic Research, 2015, 24, 447-461.	2.4	12
59	Towards an understanding of the control of â€~crumbly' fruit in red raspberry. SpringerPlus, 2015, 4, 223.	1.2	24
60	Nitrogen deficiency in barley (<i>Hordeum vulgare</i>) seedlings induces molecular and metabolic adjustments that trigger aphid resistance. Journal of Experimental Botany, 2015, 66, 3639-3655.	4.8	60
61	The effects of drought stress on leaf gene expression during flowering in blackcurrant (Ribes nigrum) Tj ETQq1	1 0.78431 0.7	4 rgBT /Overl
62	Evaluation and integration of functional annotation pipelines for newly sequenced organisms: the potato genome as a test case. BMC Plant Biology, 2014, 14, 329.	3.6	42
63	Phosphite-induced changes of the transcriptome and secretome in Solanum tuberosum leading to resistance against Phytophthora infestans. BMC Plant Biology, 2014, 14, 254.	3.6	77
64	Effect of short-term exposure to high-temperature on total gene expression in the leaves of four raspberry (<i>Rubus idaeus</i> L.) cultivars. Journal of Horticultural Science and Biotechnology, 2014, 89, 532-541.	1.9	12
65	Day length dependent restructuring of the leaf transcriptome and metabolome in potato genotypes with contrasting tuberization phenotypes. Plant, Cell and Environment, 2014, 37, 1351-1363.	5.7	47
66	The lowâ€recombining pericentromeric region of barley restricts gene diversity and evolution but not gene expression. Plant Journal, 2014, 79, 981-992.	5.7	30
67	The use of genotyping by sequencing in blackcurrant (Ribes nigrum): developing high-resolution linkage maps in species without reference genome sequences. Molecular Breeding, 2014, 33, 835-849.	2.1	53
68	An evaluation of genotyping by sequencing (GBS) to map the Breviaristatum-e (ari-e) locus in cultivated barley. BMC Genomics, 2014, 15, 104.	2.8	145
69	Physiological, biochemical and molecular responses of the potato (<i><scp>S</scp>olanum) Tj ETQq1 1 0.7843 2014, 37, 439-450.</i>	314 rgBT /C 5.7	Overlock 10 T 196
70	Quantitative proteomics and transcriptomics of potato in response to Phytophthora infestans in compatible and incompatible interactions. BMC Genomics, 2014, 15, 497.	2.8	77
71	Genome-wide QTL and bulked transcriptomic analysis reveals new candidate genes for the control of tuber carotenoid content in potato (Solanum tuberosum L.). Theoretical and Applied Genetics, 2014, 127, 1917-1933.	3.6	53
72	Proteomics and transcriptomics of the BABA-induced resistance response in potato using a novel functional annotation approach. BMC Genomics, 2014, 15, 315.	2.8	67

#	Article	IF	Citations
73	tropiTree: An NGS-Based EST-SSR Resource for 24 Tropical Tree Species. PLoS ONE, 2014, 9, e102502.	2.5	12
74	A Sequence-Ready Physical Map of Barley Anchored Genetically by Two Million Single-Nucleotide Polymorphisms Â. Plant Physiology, 2014, 164, 412-423.	4.8	77
75	The Barley Genome Sequence Assembly Reveals Three Additional Members of the CslF $(1,3;1,4)$ - \hat{l}^2 -Glucan Synthase Gene Family. PLoS ONE, 2014, 9, e90888.	2.5	39
76	Identification of genes in the VirR regulon of <i>Pectobacterium atrosepticum</i> and characterization of their roles in quorum sensingâ€dependent virulence. Environmental Microbiology, 2013, 15, 687-701.	3.8	18
77	Phytophthora capsici-tomato interaction features dramatic shifts in gene expression associated with a hemi-biotrophic lifestyle. Genome Biology, 2013, 14, R63.	8.8	113
78	Barley whole exome capture: a tool for genomic research in the genus <i>Hordeum</i> and beyond. Plant Journal, 2013, 76, 494-505.	5.7	260
79	A Metabolic Regulator Modulates Virulence and Quorum Sensing Signal Production in <i>Pectobacterium atrosepticum</i> Molecular Plant-Microbe Interactions, 2013, 26, 356-366.	2.6	14
80	Vitamin C and the Abscisic Acid-Insensitive 4 Transcription Factor Are Important Determinants of Aphid Resistance in <i>Arabidopsis</i> Antioxidants and Redox Signaling, 2013, 18, 2091-2105.	5.4	68
81	Identification and Characterisation CRN Effectors in Phytophthora capsici Shows Modularity and Functional Diversity. PLoS ONE, 2013, 8, e59517.	2.5	156
82	A physical, genetic and functional sequence assembly of the barley genome. Nature, 2012, 491, 711-716.	27.8	1,416
83	Natural variation in a homolog of Antirrhinum CENTRORADIALIS contributed to spring growth habit and environmental adaptation in cultivated barley. Nature Genetics, 2012, 44, 1388-1392.	21.4	477
84	Genetic characterization of the HrpL regulon of the fire blight pathogen <i>Erwinia amylovora</i> reveals novel virulence factors. Molecular Plant Pathology, 2012, 13, 160-173.	4.2	54
85	Comparison of transcript profiles in different life stages of the nematode <i>Globodera pallida</i> under different host potato genotypes. Molecular Plant Pathology, 2012, 13, 1120-1134.	4.2	14
86	Unlocking the Barley Genome by Chromosomal and Comparative Genomics Â. Plant Cell, 2011, 23, 1249-1263.	6.6	448
87	Highly parallel gene-to-BAC addressing using microarrays. BioTechniques, 2011, 50, 165-174.	1.8	8
88	Pectin engineering to modify product quality in potato. Plant Biotechnology Journal, 2011, 9, 848-856.	8.3	19
89	An exceptionally high nucleotide and haplotype diversity and a signature of positive selection for the eIF4E resistance gene in barley are revealed by allele mining and phylogenetic analyses of natural populations. Molecular Ecology, 2011, 20, no-no.	3.9	48
90	Analysis of ESTs generated from inner bark tissue of an Acacia auriculiformis x Acacia mangium hybrid. Tree Genetics and Genomes, 2011, 7, 143-152.	1.6	18

#	Article	IF	CITATIONS
91	Combining genetical genomics and bulked segregant analysis-based differential expression: an approach to gene localization. Theoretical and Applied Genetics, 2011, 122, 1375-1383.	3.6	20
92	Transcriptome sequencing of an ecologically important graminivorous sawfly: a resource for marker development. Conservation Genetics Resources, 2011, 3, 789-795.	0.8	10
93	Identification, utilisation and mapping of novel transcriptome-based markers from blackcurrant (Ribes) Tj ETQq1	1 <u>9.</u> 784314 3.6	4 rgBT /Ove
94	Early response mechanisms of perennial ryegrass (Lolium perenne) to phosphorus deficiency. Annals of Botany, 2011, 107, 243-254.	2.9	60
95	Allele Mining in Barley Genetic Resources Reveals Genes of Race-Non-Specific Powdery Mildew Resistance. Frontiers in Plant Science, 2011, 2, 113.	3.6	27
96	MICROARRAY CHARACTERIZATION OF THE HRPL REGULON OF THE FIRE BLIGHT PATHOGEN ERWINIA AMYLOVORA. Acta Horticulturae, 2011 , $263-270$.	0.2	2
97	Differential gene expression in nearly isogenic lines with QTL for partial resistance to Puccinia hordei in barley. BMC Genomics, 2010, 11, 629.	2.8	17
98	Specific patterns of gene space organisation revealed in wheat by using the combination of barley and wheat genomic resources. BMC Genomics, 2010, 11, 714.	2.8	21
99	Candidate genes associated with bud dormancy release in blackcurrant (Ribes nigrum L.). BMC Plant Biology, 2010, 10, 202.	3.6	69
100	An eQTL Analysis of Partial Resistance to Puccinia hordei in Barley. PLoS ONE, 2010, 5, e8598.	2.5	77
101	Effect of salinity on water relations of wild barley plants differing in salt tolerance. AoB PLANTS, 2010, 2010, plq006-plq006.	2.3	53
102	Genome-wide association mapping to candidate polymorphism resolution in the unsequenced barley genome. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21611-21616.	7.1	259
103	Flavonoid profiling and transcriptome analysis reveals new gene–metabolite correlations in tubers of Solanum tuberosum L Journal of Experimental Botany, 2010, 61, 1225-1238.	4.8	64
104	The Metabolic and Developmental Roles of Carotenoid Cleavage Dioxygenase4 from Potato Â. Plant Physiology, 2010, 154, 656-664.	4.8	143
105	Microarray Comparative Genomic Hybridisation Analysis Incorporating Genomic Organisation, and Application to Enterobacterial Plant Pathogens. PLoS Computational Biology, 2009, 5, e1000473.	3.2	9
106	Does biotechnology have a role in the promotion of underutilised crops?. Food Policy, 2009, 34, 319-328.	6.0	28
107	Molecular regulation of somatic embryogenesis in potato: an auxin led perspective. Plant Molecular Biology, 2008, 68, 185-201.	3.9	57
108	Quorum Sensing Coordinates Brute Force and Stealth Modes of Infection in the Plant Pathogen Pectobacterium atrosepticum. PLoS Pathogens, 2008, 4, e1000093.	4.7	216

#	Article	IF	CITATIONS
109	Expression profiling of potato germplasm differentiated in quality traits leads to the identification of candidate flavour and texture genes. Journal of Experimental Botany, 2008, 59, 4219-4231.	4.8	73
110	DsbA Plays a Critical and Multifaceted Role in the Production of Secreted Virulence Factors by the Phytopathogen Erwinia carotovora subsp. atroseptica. Journal of Biological Chemistry, 2008, 283, 23739-23753.	3.4	48
111	WHAT WILL A GENOME SEQUENCE DO FOR FIRE BLIGHT RESEARCH? PECTOBACTERIUM ATROSEPTICUM AND POTATO \tilde{A} ¢ \hat{A} ¢ \hat{A} ¢ \hat{A} ° A CASE STUDY. Acta Horticulturae, 2008, , 157-162.	0.2	O
112	Co-ordinated gene expression during phases of dormancy release in raspberry (Rubus idaeus L.) buds. Journal of Experimental Botany, 2007, 58, 1035-1045.	4.8	187
113	Efflux Pump Gene Expression in Erwinia chrysanthemi Is Induced by Exposure to Phenolic Acids. Molecular Plant-Microbe Interactions, 2007, 20, 313-320.	2.6	43
114	The Erwinia chrysanthemi 3937 PhoQ Sensor Kinase Regulates Several Virulence Determinants. Journal of Bacteriology, 2006, 188, 3088-3098.	2.2	48
115	Characterisation and functional analysis of two barley caleosins expressed during barley caryopsis development. Planta, 2005, 221, 513-522.	3.2	27
116	Genome-wide SNP discovery and linkage analysis in barley based on genes responsive to abiotic stress. Molecular Genetics and Genomics, 2005, 274, 515-527.	2.1	250
117	A comparative analysis of transcript abundance using SAGE and Affymetrix arrays. Functional and Integrative Genomics, 2005, 5, 163-174.	3.5	36
118	Analysis of the distribution of marker classes in a genetic linkage map: a case study in Norway spruce (Picea abies karst). Tree Genetics and Genomes, 2005 , 1 , $93-102$.	1.6	15
119	Single-feature polymorphism discovery in the barley transcriptome. Genome Biology, 2005, 6, R54.	9.6	130
120	Metabolic engineering of high carotenoid potato tubers containing enhanced levels of Â-carotene and lutein. Journal of Experimental Botany, 2004, 56, 81-9.	4.8	265
121	Characterisation of early transcriptional changes involving multiple signalling pathways in the Mla13 barley interaction with powdery mildew (Blumeria graminis f. sp. hordei). Planta, 2004, 218, 803-813.	3.2	26
122	A comparison of sequence-based polymorphism and haplotype content in transcribed and anonymous regions of the barley genome. Genome, 2004, 47, 389-398.	2.0	120
123	Differential expression of invertase genes in internal and external phloem tissues of potato (Solanum) Tj ETQq1 1	. 0,784314 4 . 8	rgBT /Over
124	Requirements for mini-exon inclusion in potato invertase mRNAs provides evidence for exon-scanning interactions in plants. Rna, 2000, 6, 422-433.	3.5	31
125	Differential expression of invertase genes in internal and external phloem tissues of potato (Solanum) Tj ETQq $1\ 1$	0.784314 4.8	rgBT /Over
126	Microsatellite repeats are not randomly distributed within Norway spruce (<i>Picea abies </i> K.) expressed sequences. Genome, 2000, 43, 41-46.	2.0	33

PETER HEDLEY

#	Article	IF	CITATION
127	Expression of tandem invertase genes associated with sexual and vegetative growth cycles in potato. Plant Molecular Biology, 1999, 41, 741-752.	3.9	48
128	Organisation and expression of a potato (Solanum tuberosum) protein kinase gene. Plant Science, 1996, 118, 71-80.	3.6	3
129	Erratum to "Organisation and expression of a potato (Solanum tuberosum) protein kinase gene― [Plant Science 118 (1996) 77]. Plant Science, 1996, 120, 113.	3.6	O
130	Exon Skipping Induced by Cold Stress in a Potato Invertase Gene Transcript. Nucleic Acids Research, 1996, 24, 2347-2351.	14.5	85
131	Processing of a 58 × 103Mr invertase from potato tubers. Phytochemistry, 1994, 35, 579-582.	2.9	2
132	Characterisation of a complementary DNA encoding a novel plant enzyme with sucrolytic activity. FEBS Letters, 1994, 354, 123-127.	2.8	7
133	Potato (Solanum tuberosum) invertase-encoding cDNAs and their differential expression. Gene, 1994, 145, 211-214.	2.2	39
134	cDNA cloning and expression of a potato (Solanum tuberosum) invertase. Plant Molecular Biology, 1993, 22, 917-922.	3.9	38
135	Purification of soluble invertase from potato. Phytochemistry, 1992, 31, 1901-1904.	2.9	18
136	Developmental regulation of insulin like growth factor II gene expression in the pig. Cell Biology International Reports, 1989, 13, 857-862.	0.6	11