## A Genomic Approach to Suberin Biosynthesis and Cork

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Citation Report

#	Article	IF	CITATIONS
1	Identification of acyltransferases required for cutin biosynthesis and production of cutin with suberin-like monomers. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18339-18344.	3.3	348
2	An ABC Transporter Gene of Arabidopsis thaliana, AtWBC11, is Involved in Cuticle Development and Prevention of Organ Fusion. Plant and Cell Physiology, 2007, 48, 1790-1802.	1.5	149
3	Building lipid barriers: biosynthesis of cutin and suberin. Trends in Plant Science, 2008, 13, 236-246.	4.3	779
4	Differential gene expression induced by growth hormone treatment in the uremic rat growth plate. Growth Hormone and IGF Research, 2008, 18, 353-359.	0.5	4
5	Seasonal variation in transcript abundance in cork tissue analyzed by real time RT-PCR. Tree Physiology, 2008, 28, 743-751.	1.4	43
6	The Arabidopsis cytochrome P450 CYP86A1 encodes a fatty acid ω-hydroxylase involved in suberin monomer biosynthesis. Journal of Experimental Botany, 2008, 59, 2347-2360.	2.4	238
7	CYP86B1 Is Required for Very Long Chain <i>ï‰</i> -Hydroxyacid and <i>α</i> , <i>ï‰</i> -Dicarboxylic Acid Synthesis in Root and Seed Suberin Polyester  Â. Plant Physiology, 2009, 150, 1831-1843.	2.3	173
8	<i>CYP86A33</i> -Targeted Gene Silencing in Potato Tuber Alters Suberin Composition, Distorts Suberin Lamellae, and Impairs the Periderm's Water Barrier Function   Â. Plant Physiology, 2009, 149, 1050-1060.	2.3	120
9	Silencing of StKCS6 in potato periderm leads to reduced chain lengths of suberin and wax compounds and increased peridermal transpiration. Journal of Experimental Botany, 2009, 60, 697-707.	2.4	95
10	Identification of an Arabidopsis Feruloyl-Coenzyme A Transferase Required for Suberin Synthesis  Â. Plant Physiology, 2009, 151, 1317-1328.	2.3	193
11	Proteomic analysis from haploid and diploid embryos of <i>Quercus suber</i> L. identifies qualitative and quantitative differential expression patterns. Proteomics, 2009, 9, 4355-4367.	1.3	41
12	The <i>DAISY</i> gene from <i>Arabidopsis</i> encodes a fatty acid elongase condensing enzyme involved in the biosynthesis of aliphatic suberin in roots and the chalazaâ€micropyle region of seeds. Plant Journal, 2009, 57, 80-95.	2.8	177
13	The grapevine transcription factor WRKY2 influences the lignin pathway and xylem development in tobacco. Plant Molecular Biology, 2010, 72, 215-234.	2.0	141
14	A feruloyl transferase involved in the biosynthesis of suberin and suberin-associated wax is required for maturation and sealing properties of potato periderm. Plant Journal, 2010, 62, 277-290.	2.8	120
15	Unraveling ferulate role in suberin and periderm biology by reverse genetics. Plant Signaling and Behavior, 2010, 5, 953-958.	1.2	24
16	Suberized Cell Walls of Cork from Cork Oak Differ from Other Species. Microscopy and Microanalysis, 2010, 16, 569-575.	0.2	26
17	Transport barriers made of cutin, suberin and associated waxes. Trends in Plant Science, 2010, 15, 546-553.	4.3	308
18	Phenylpropanoid Biosynthesis. Molecular Plant, 2010, 3, 2-20.	3.9	2,042

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" 19	Acyl-Lipid Metabolism. The Arabidopsis Book, 2010, 8, e0133.	0.5	287
20	Silicon enhances suberization and lignification in roots of rice (Oryza sativa). Journal of Experimental Botany, 2011, 62, 2001-2011.	2.4	210
23	Quercus. , 2011, , 89-129.		46
24	Temperature stress effects in Quercus suber leaf metabolism. Journal of Plant Physiology, 2011, 168, 1729-1734.	1.6	26
25	Suberin research in the genomics era—New interest for an old polymer. Plant Science, 2011, 180, 399-413.	1.7	185
26	Annexins. New Phytologist, 2011, 189, 40-53.	3.5	173
27	A potato skin SSH library yields new candidate genes for suberin biosynthesis and periderm formation. Planta, 2011, 233, 933-945.	1.6	39
28	Identification of GPAT acyltransferases in cork oak. BMC Proceedings, 2011, 5, .	1.8	4
29	Proteins associated with cork formation in Quercus suber L. stem tissues. Journal of Proteomics, 2011, 74, 1266-1278.	1.2	35
30	Metabolic engineering of novel lignin in biomass crops. New Phytologist, 2012, 196, 978-1000.	3.5	338
32	Reference Gene Selection for Quantitative Real-time PCR Normalization in Quercus suber. PLoS ONE, 2012, 7, e35113.	1.1	102
33	Genomics of Fagaceae. Tree Genetics and Genomes, 2012, 8, 583-610.	0.6	109
34	Arabidopsis ACA7, encoding a putative auto-regulated Ca2+-ATPase, is required for normal pollen development. Plant Cell Reports, 2012, 31, 651-659.	2.8	43
35	Molecular characterization of Quercus suber MYB1, a transcription factor up-regulated in cork tissues. Journal of Plant Physiology, 2013, 170, 172-178.	1.6	31
37	Acyl-Lipid Metabolism. The Arabidopsis Book, 2013, 11, e0161.	0.5	974
38	Identification of nitrogen responsive genes in poplar roots grown under two contrasting nitrogen levels. Plant Root, 2014, 8, 42-54.	0.3	2
39	miRNA profiling in leaf and cork tissues of Quercus suber reveals novel miRNAs and tissue-specific expression patterns. Tree Genetics and Genomes, 2014, 10, 721-737.	0.6	20
40	At <scp>MYB</scp> 41 activates ectopic suberin synthesis and assembly in multiple plant species and cell types. Plant Journal, 2014, 80, 216-229.	2.8	172

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41	A comprehensive assessment of the transcriptome of cork oak (Quercus suber) through EST sequencing. BMC Genomics, 2014, 15, 371.	1.2	53
42	Comparison of good- and bad-quality cork: application of high-throughput sequencing of phellogenic tissue. Journal of Experimental Botany, 2014, 65, 4887-4905.	2.4	42
43	Microarray analysis of laser-microdissected tissues indicates the biosynthesis of suberin in the outer part of roots during formation of a barrier to radial oxygen loss in rice (Oryza sativa). Journal of Experimental Botany, 2014, 65, 4795-4806.	2.4	83
44	Relationship Between Tuber Storage Proteins and Tuber Powdery Scab Resistance in Potato. American Journal of Potato Research, 2014, 91, 233-245.	0.5	9
45	Physiological and transcriptional analyses of developmental stages along sugarcane leaf. BMC Plant Biology, 2015, 15, 300.	1.6	64
46	How tree roots respond to drought. Frontiers in Plant Science, 2015, 6, 547.	1.7	520
47	Examination of the Abscission-Associated Transcriptomes for Soybean, Tomato, and Arabidopsis Highlights the Conserved Biosynthesis of an Extensible Extracellular Matrix and Boundary Layer. Frontiers in Plant Science, 2015, 6, 1109.	1.7	38
48	Role of HXXXD-motif/BAHD acyltransferases in the biosynthesis of extracellular lipids. Plant Cell Reports, 2015, 34, 587-601.	2.8	72
49	Suberin: biosynthesis, regulation, and polymer assembly of a protective extracellular barrier. Plant Cell Reports, 2015, 34, 573-586.	2.8	225
50	Partial depolymerization of genetically modified potato tuber periderm reveals intermolecular linkages in suberin polyester. Phytochemistry, 2015, 117, 209-219.	1.4	40
51	Apple russeting as seen through the RNA-seq lens: strong alterations in the exocarp cell wall. Plant Molecular Biology, 2015, 88, 21-40.	2.0	94
52	Suberization — the second life of an endodermal cell. Current Opinion in Plant Biology, 2015, 28, 9-15.	3.5	102
55	Implication of the suberin pathway in adaptation to waterlogging and hypertrophied lenticels formation in pedunculate oak ( <i>Quercus robur</i> L.). Tree Physiology, 2016, 36, tpw056.	1.4	36
56	Proteome Analyses of Soil Bacteria Grown in the Presence of Potato Suberin, a Recalcitrant Biopolymer. Microbes and Environments, 2016, 31, 418-426.	0.7	6
57	Asymmetrical development of root endodermis and exodermis in reaction to abiotic stresses. Annals of Botany, 2016, 118, 667-674.	1.4	54
58	MYB107 and MYB9 Homologs Regulate Suberin Deposition in Angiosperms. Plant Cell, 2016, 28, 2097-2116.	3.1	151
59	Silencing of the potato <i>StNAC103</i> gene enhances the accumulation of suberin polyester and associated wax in tuber skin. Journal of Experimental Botany, 2016, 67, 5415-5427.	2.4	56
60	Toughing It Out—Disease-Resistant Potato Mutants Have Enhanced Tuber Skin Defenses. Phytopathology, 2016, 106, 474-483.	1.1	41

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61	Genome-wide Identification and Structural, Functional and Evolutionary Analysis of WRKY Components of Mulberry. Scientific Reports, 2016, 6, 30794.	1.6	39
62	Characterization of the watercress (Nasturtium officinale R. Br.; Brassicaceae) transcriptome using RNASeq and identification of candidate genes for important phytonutrient traits linked to human health. BMC Genomics, 2016, 17, 378.	1.2	33
63	Suberin as an Extra Barrier to Grass Digestibility: a Closer Look to Sugarcane Forage. Tropical Plant Biology, 2016, 9, 96-108.	1.0	4
64	Ferulates and lignin structural composition in cork. Holzforschung, 2016, 70, 275-289.	0.9	53
65	Cinnamate and cinnamate derivatives in plants. Acta Physiologiae Plantarum, 2016, 38, 1.	1.0	33
66	Liquid chromatography and high resolution mass spectrometry-based metabolomics to identify quantitative resistance-related metabolites and genes in wheat QTL-2DL against Fusarium head blight. European Journal of Plant Pathology, 2018, 151, 125.	0.8	3
67	The Role of Hybridization on the Adaptive Potential of Mediterranean Sclerophyllous Oaks: The Case of the Quercus ilex x Q. suber Complex. Tree Physiology, 2017, , 239-260.	0.9	7
68	Leaf Composition of American Bur-Reed (Sparganium americanum Nutt.) to Determine Pesticide Mitigation Capability. Bulletin of Environmental Contamination and Toxicology, 2018, 100, 576-580.	1.3	2
69	Characterization of the cork formation and production transcriptome in Quercus cerris × suber hybrids. Physiology and Molecular Biology of Plants, 2018, 24, 535-549.	1.4	9
70	A molecular framework to study periderm formation in Arabidopsis. New Phytologist, 2018, 219, 216-229.	3.5	78
71	Suberized transport barriers in Arabidopsis, barley and rice roots: From the model plant to crop species. Journal of Plant Physiology, 2018, 227, 75-83.	1.6	79
72	Cell Wall Reinforcement in the Potato Tuber Periderm After Crop Treatment with Potassium Phosphite. Potato Research, 2018, 61, 19-29.	1.2	11
73	Reconstructing the suberin pathway in poplar by chemical and transcriptomic analysis of bark tissues. Tree Physiology, 2018, 38, 340-361.	1.4	51
74	A comparative transcriptomic approach to understanding the formation of cork. Plant Molecular Biology, 2018, 96, 103-118.	2.0	35
75	Abscisic acid induces differential expression of genes involved in wound-induced suberization in postharvest tomato fruit. Journal of Integrative Agriculture, 2018, 17, 2670-2682.	1.7	16
76	Transcriptional profiling of cork oak phellogenic cells isolated by laser microdissection. Planta, 2018, 247, 317-338.	1.6	46
77	ChIP-Seq reveals that QsMYB1 directly targets genes involved in lignin and suberin biosynthesis pathways in cork oak (Quercus suber). BMC Plant Biology, 2018, 18, 198.	1.6	50
78	Cork Oak Young and Traumatic Periderms Show PCD Typical Chromatin Patterns but Different Chromatin-Modifying Genes Expression. Frontiers in Plant Science, 2018, 9, 1194.	1.7	23

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79	Woody Ornamentals of the Temperate Zone. Handbook of Plant Breeding, 2018, , 803-887.	0.1	9
80	Different clonal responses to cypress canker disease based on transcription of suberin-related genes and bark carbohydrates' content. Trees - Structure and Function, 2018, 32, 1707-1722.	0.9	7
81	The transcriptome of potato tuber phellogen reveals cellular functions of cork cambium and genes involved in periderm formation and maturation. Scientific Reports, 2019, 9, 10216.	1.6	29
82	Genome-wide association studies of bark texture in Populus trichocarpa. Tree Genetics and Genomes, 2019, 15, 1.	0.6	13
83	Suberin and hemicellulose in sugarcane cell wall architecture and crop digestibility: A biotechnological perspective. Food and Energy Security, 2019, 8, e00163.	2.0	13
84	Tissueâ€specific study across the stem reveals the chemistry and transcriptome dynamics of birch bark. New Phytologist, 2019, 222, 1816-1831.	3.5	56
85	Four hundred years of cork imaging: New advances in the characterization of the cork structure. Scientific Reports, 2019, 9, 19682.	1.6	20
86	The development of the periderm: the final frontier between a plant and its environment. Current Opinion in Plant Biology, 2020, 53, 10-14.	3.5	47
87	Phellem versus xylem: genome-wide transcriptomic analysis reveals novel regulators of cork formation in cork oak. Tree Physiology, 2020, 40, 129-141.	1.4	21
88	Silencing against the conserved NAC domain of the potato StNAC103 reveals new NAC candidates to repress the suberin associated waxes in phellem. Plant Science, 2020, 291, 110360.	1.7	17
89	Suberin deposition in potato periderm: a novel resistance mechanism against tuber greening. New Phytologist, 2020, 225, 1273-1284.	3.5	18
90	Drought activates MYB41 orthologs and induces suberization of grapevine fine roots. Plant Direct, 2020, 4, e00278.	0.8	16
91	A review of current knowledge about the formation of native peridermal exocarp in fruit. Functional Plant Biology, 2020, 47, 1019.	1.1	14
92	The sugarcane ShMYB78 transcription factor activates suberin biosynthesis in Nicotiana benthamiana. Plant Molecular Biology, 2020, 104, 411-427.	2.0	15
93	Oxidosqualene cyclases involved in the biosynthesis of triterpenoids in Quercus suber cork. Scientific Reports, 2020, 10, 8011.	1.6	19
94	Three Transcription Activators of ABA Signaling Positively Regulate Suberin Monomer Synthesis by Activating Cytochrome P450 CYP86A1 in Kiwifruit. Frontiers in Plant Science, 2019, 10, 1650.	1.7	24
95	Plant Morphological, Physiological and Anatomical Adaption to Flooding Stress and the Underlying Molecular Mechanisms. International Journal of Molecular Sciences, 2021, 22, 1088.	1.8	61
96	Cork cells in cork oak periderms undergo programmed cell death and proanthocyanidin deposition. Tree Physiology, 2021, 41, 1701-1713.	1.4	5

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98	Transcriptomic analysis of cork during seasonal growth highlights regulatory and developmental processes from phellogen to phellem formation. Scientific Reports, 2021, 11, 12053.	1.6	13
100	Silencing of StRIK in potato suggests a role in periderm related to RNA processing and stress. BMC Plant Biology, 2021, 21, 409.	1.6	3
101	Exploring Candidate Genes for Pericarp Russet Pigmentation of Sand Pear (Pyrus pyrifolia) via RNA-Seq Data in Two Genotypes Contrasting for Pericarp Color. PLoS ONE, 2014, 9, e83675.	1.1	47
102	Annexin5 Plays a Vital Role in Arabidopsis Pollen Development via Ca2+-Dependent Membrane Trafficking. PLoS ONE, 2014, 9, e102407.	1.1	40
103	Differential DNA Methylation Patterns Are Related to Phellogen Origin and Quality of Quercus suber Cork. PLoS ONE, 2017, 12, e0169018.	1.1	31
104	Transcription Factors in Poplar Growth and Development. , 2011, , 192-230.		0
105	Halo Spot Symptom Induced by Oviposition of Frankliniella occidentalis on Grape Fruits: Molecular Diagnosis by a Species-specific DNA Amplification and Microscopic Characterization of the Symptom. Korean Journal of Applied Entomology, 2014, 53, 281-286.	0.3	4
106	microRNA-Mediated Regulation of Plant Vascular Development and Secondary Growth. Concepts and Strategies in Plant Sciences, 2020, , 143-168.	0.6	1
107	Abscisic acid is required for exodermal suberization to form a barrier to radial oxygen loss in the adventitious roots of rice ( <i>Oryza sativa</i> ). New Phytologist, 2022, 233, 655-669.	3.5	15
108	Characterization of a pericarp browning related LACCASE 14-4 from longan fruit with a focus on (epi)catechin oxidative polymerization. Postharvest Biology and Technology, 2022, 185, 111802.	2.9	8
109	Revealing the Genetic Components Responsible for the Unique Photosynthetic Stem Capability of the Wild Almond Prunus arabica (Olivier) Meikle. Frontiers in Plant Science, 2021, 12, 779970.	1.7	5
110	Genome-wide identification and co-expression analysis of GDSL genes related to suberin formation during fruit russeting in pear. Horticultural Plant Journal, 2022, 8, 153-170.	2.3	7
111	The Making of Plant Armor: The Periderm. Annual Review of Plant Biology, 2022, 73, 405-432.	8.6	30
112	Genome-Wide Characterization and Abiotic Stresses Expression Analysis of Annexin Family Genes in Poplar. International Journal of Molecular Sciences, 2022, 23, 515.	1.8	3
113	Translational profile of developing phellem cells in <i>Arabidopsis thaliana</i> roots. Plant Journal, 2022, 110, 899-915.	2.8	9
114	Suberin Biosynthesis, Assembly, and Regulation. Plants, 2022, 11, 555.	1.6	44
115	Spatiotemporal development of suberized barriers in cork oak taproots. Tree Physiology, 2022, 42, 1269-1285.	1.4	4
129	Synthesis of C20–38 Fatty Acids in Plant Tissues. International Journal of Molecular Sciences, 2022, 23, 4731.	1.8	6

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130	The metabolic and proteomic repertoires of periderm tissue in skin of the reticulated Sikkim cucumber fruit. Horticulture Research, 2022, 9, .	2.9	10
131	Quercus suber Transcriptome Analyses: Identification of Genes and SNPs Related to Cork Quality. , 2022, 11, .		2
133	MYB1R1 and MYC2 Regulate ω-3 Fatty Acid Desaturase Involved in ABA-Mediated Suberization in the Russet Skin of a Mutant of â€Dangshansuli' (Pyrus bretschneideri Rehd.). Frontiers in Plant Science, 0, 13, .	1.7	6
134	Effect of climate on cork-ring width and density of Quercus suber L. in Southern Portugal. Trees - Structure and Function, 2022, 36, 1711-1720.	0.9	6
135	Knockout of <i>MITOGEN-ACTIVATED PROTEIN KINASE 3</i> causes barley root resistance against <i>Fusarium graminearum</i> . Plant Physiology, 2022, 190, 2847-2867.	2.3	7
136	<i>Populus</i> × <i>canescens</i> root suberization in reaction to osmotic and salt stress is limited to the developing younger root tip region. Physiologia Plantarum, 2022, 174, .	2.6	6
137	Cork Development: What Lies Within. Plants, 2022, 11, 2671.	1.6	7
138	Beyond width and density: stable carbon and oxygen isotopes in cork-rings provide insights of physiological responses to water stress in <i>Quercus suber</i> L. PeerJ, 0, 10, e14270.	0.9	1
139	Foxtail millet MYB-like transcription factor SiMYB16 confers salt tolerance in transgenic rice by regulating phenylpropane pathway. Plant Physiology and Biochemistry, 2023, 195, 310-321.	2.8	9
140	The application of fatty acid synthesis inhibitors regulates the suberin biosynthesis in the exocarp of the russet mutant of †Dangshansuli' (Pyrus bretschneideri Rehd.). Acta Physiologiae Plantarum, 2023, 45, .	1.0	0
141	The D165H Polymorphism of QiMYB-like-1 Is Linked to Interactions between Tannin Accumulation, Herbivory and Biogeographical Determinants of Quercus ilex. International Journal of Molecular Sciences, 2023, 24, 151.	1.8	0
143	Cutinized and suberized barriers in leaves and roots: Similarities and differences. Journal of Plant Physiology, 2023, 282, 153921.	1.6	4
144	Periderm differentiation: a cellular and molecular approach to cork oak. Trees - Structure and Function, 2023, 37, 627-639.	0.9	1