Tricinâ€lignins: occurrence and quantitation of tricin in

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#	Article	IF	Citations
1	Building the wall: recent advances in understanding lignin metabolism in grasses. Acta Physiologiae Plantarum, 2016, 38, 1.	1.0	29
2	Antileishmanial Activity and Immunomodulatory Effects of Tricin Isolated from Leaves of <i>Casearia arborea</i> (Salicaceae). Chemistry and Biodiversity, 2017, 14, e1600458.	1.0	13
3	Effect of steam treatments on the availability of various families of secondary metabolites extracted from green sweet sorghum. Industrial Crops and Products, 2017, 104, 120-128.	2.5	5
4	Current understanding of the pathways of flavonoid biosynthesis in model and crop plants. Journal of Experimental Botany, 2017, 68, 4013-4028.	2.4	328
5	Hydroxystilbenes Are Monomers in Palm Fruit Endocarp Lignins. Plant Physiology, 2017, 174, 2072-2082.	2.3	90
6	Screening of rice mutants with improved saccharification efficiency results in the identification of CONSTITUTIVE PHOTOMORPHOGENIC 1 and GOLD HULL AND INTERNODE 1. Planta, 2017, 246, 61-74.	1.6	5
7	Systematic Parameterization of Lignin for the Charmm Force Field. Biophysical Journal, 2017, 112, 449a.	0.2	0
8	Disrupting Flavone Synthase II Alters Lignin and Improves Biomass Digestibility. Plant Physiology, 2017, 174, 972-985.	2.3	89
9	Silencing <i>CHALCONE SYNTHASE</i> in Maize Impedes the Incorporation of Tricin into Lignin and Increases Lignin Content. Plant Physiology, 2017, 173, 998-1016.	2.3	84
10	Effects of lignins as diet components on the physiological activities of a lower termite, Coptotermes formosanus Shiraki. Journal of Insect Physiology, 2017, 103, 57-63.	0.9	6
11	Bacterial catabolism of ligninâ€derived aromatics: New findings in a recent decade: Update on bacterial lignin catabolism. Environmental Microbiology Reports, 2017, 9, 679-705.	1.0	218
12	Base-Catalyzed Depolymerization of Solid Lignin-Rich Streams Enables Microbial Conversion. ACS Sustainable Chemistry and Engineering, 2017, 5, 8171-8180.	3.2	115
13	Fractionation and DOSY NMR as Analytical Tools: From Model Polymers to a Technical Lignin. ACS Omega, 2017, 2, 8466-8474.	1.6	26
14	The effects of various lignocelluloses and lignins on physiological responses of a lower termite, Coptotermes formosanus. Journal of Wood Science, 2017, 63, 464-472.	0.9	14
15	The Complete Plastome Sequences of Four Orchid Species: Insights into the Evolution of the Orchidaceae and the Utility of Plastomic Mutational Hotspots. Frontiers in Plant Science, 2017, 8, 715.	1.7	95
16	A comparative study of the biomass properties of<i>Erianthus</i>and sugarcane: lignocellulose structure, alkaline delignification rate, and enzymatic saccharification efficiency. Bioscience, Biotechnology and Biochemistry, 2018, 82, 1143-1152.	0.6	14
17	Variability in Lignin Composition and Structure in Cell Walls of Different Parts of MacaÃºba (<i>Acrocomia aculeata</i>) Palm Fruit. Journal of Agricultural and Food Chemistry, 2018, 66, 138-153.	2.4	70
18	Variation in levels of the flavone tricin in bran from rice genotypes varying in pericarp color. Journal of Cereal Science, 2018, 79, 226-232.	1.8	15

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19	Mechanistic insight in the selective delignification of wheat straw by three white-rot fungal species through quantitative 13C-IS py-GCâ€“MS and whole cell wall HSQC NMR. Biotechnology for Biofuels, 2018, 11, 262.	6.2	33
20	Metabotyping of 30 maize hybrids under early-sowing conditions reveals potential marker-metabolites for breeding. Metabolomics, 2018, 14, 132.	1.4	15
21	Elucidating Tricin-Lignin Structures: Assigning Correlations in HSQC Spectra of Monocot Lignins. Polymers, 2018, 10, 916.	2.0	30
22	Preferential solvation of tricin in {ethanol (1) + water (2)} mixtures at several temperatures. Revista Colombiana De Ciencias QuÃmico FarmacÃ©uticas, 2018, 47, 135-148.	0.3	4
23	Unveiling the Structural Properties of Ligninâ€“Carbohydrate Complexes in Bamboo Residues and Its Functionality as Antioxidants and Immunostimulants. ACS Sustainable Chemistry and Engineering, 2018, 6, 12522-12531.	3.2	97
24	Downregulation of pâ€‹<i><scp>COUMAROYL ESTER</scp> 3â€‹<scp>HYDROXYLASE</scp></i> in rice leads to altered cell wall structures and improves biomass saccharification. Plant Journal, 2018, 95, 796-811.	2.8	65
25	<scp>RNA</scp>iâ€suppression of barley caffeic acid <i>O</i>â€methyltransferase modifies lignin despite redundancy in the gene family. Plant Biotechnology Journal, 2019, 17, 594-607.	4.1	37
26	OsCAldOMT1 is a bifunctional O-methyltransferase involved in the biosynthesis of tricin-lignins in rice cell walls. Scientific Reports, 2019, 9, 11597.	1.6	35
27	The Origin and Evolution of Plant Flavonoid Metabolism. Frontiers in Plant Science, 2019, 10, 943.	1.7	269
28	The lignin toolbox of the model grass Setaria viridis. Plant Molecular Biology, 2019, 101, 235-255.	2.0	28
29	Structural Motifs of Wheat Straw Lignin Differ in Susceptibility to Degradation by the White-Rot Fungus <i>Ceriporiopsis subvermispora</i>. ACS Sustainable Chemistry and Engineering, 2019, 7, 20032-20042.	3.2	20
30	The Optimized Production of 5-(Hydroxymethyl)furfural and Related Products from Spent Coffee Grounds. Applied Sciences (Switzerland), 2019, 9, 3369.	1.3	5
31	Systematic parameterization of lignin for the CHARMM force field. Green Chemistry, 2019, 21, 109-122.	4.6	51
32	Structural features and regulation of lignin deposited upon biotic and abiotic stresses. Current Opinion in Biotechnology, 2019, 56, 209-214.	3.3	159
33	Low Lignin Mutants and Reduction of Lignin Content in Grasses for Increased Utilisation of Lignocellulose. Agronomy, 2019, 9, 256.	1.3	16
34	Modular Engineering of Biomass Degradation Pathways. Processes, 2019, 7, 230.	1.3	10
35	Radical coupling reactions of piceatannol and monolignols: A density functional theory study. Phytochemistry, 2019, 164, 12-23.	1.4	17
36	Hydroxystilbene Glucosides Are Incorporated into Norway Spruce Bark Lignin. Plant Physiology, 2019, 180, 1310-1321.	2.3	43

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37	Lignin biosynthesis and its integration into metabolism. Current Opinion in Biotechnology, 2019, 56, 230-239.	3.3	440
38	Lignin structure and its engineering. Current Opinion in Biotechnology, 2019, 56, 240-249.	3.3	533
39	Biosynthesis and Regulation of Secondary Cell Wall. Progress in Botany Fortschritte Der Botanik, 2019, , 189-226.	0.1	1
40	Recruitment of specific flavonoid Bâ€ring hydroxylases for two independent biosynthesis pathways of flavoneâ€derived metabolites in grasses. New Phytologist, 2019, 223, 204-219.	3.5	38
41	Effect of hydrothermal pretreatment severity on lignin inhibition in enzymatic hydrolysis. Bioresource Technology, 2019, 280, 303-312.	4.8	80
42	Tricin levels and expression of flavonoid biosynthetic genes in developing grains of purple and brown pericarp rice. PeerJ, 2019, 7, e6477.	0.9	11
43	Os<scp>MYB</scp>108 lossâ€ofâ€function enriches <i>p</i>â€coumaroylated and tricin lignin units in rice cell walls. Plant Journal, 2019, 98, 975-987.	2.8	57
44	Reductive catalytic fractionation: state of the art of the lignin-first biorefinery. Current Opinion in Biotechnology, 2019, 56, 193-201.	3.3	264
45	Secondary cell wall biosynthesis. New Phytologist, 2019, 221, 1703-1723.	3.5	185
46	Plant Phenylalanine/Tyrosine Ammonia-lyases. Trends in Plant Science, 2020, 25, 66-79.	4.3	154
47	Coupling and Reactions of Lignols and New Lignin Monomers: A Density Functional Theory Study. ACS Sustainable Chemistry and Engineering, 2020, 8, 11033-11045.	3.2	12
48	Production of <i>p</i>-Coumaric Acid from Corn GVL-Lignin. ACS Sustainable Chemistry and Engineering, 2020, 8, 17427-17438.	3.2	41
49	Tree-ring lignin proxies in Larix gmelinii forest growing in a permafrost area of northeastern China: Temporal variation and potential for climate reconstructions. Ecological Indicators, 2020, 118, 106750.	2.6	8
50	Deciphering the Unique Structure and Acylation Pattern of <i>Posidonia oceanica</i> Lignin. ACS Sustainable Chemistry and Engineering, 2020, 8, 12521-12533.	3.2	24
51	Tricin and tricinâ€lignins in Medicago versus in monocots. New Phytologist, 2020, 228, 11-14.	3.5	8
52	MYB-mediated regulation of lignin biosynthesis in grasses. Current Plant Biology, 2020, 24, 100174.	2.3	21
53	Redesigning plant cell walls for the biomass-based bioeconomy. Journal of Biological Chemistry, 2020, 295, 15144-15157.	1.6	48
54	Lignin from Tree Barks: Chemical Structure and Valorization. ChemSusChem, 2020, 13, 4537-4547.	3.6	33

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55	A flavonoid monomer tricin in Gramineous plants: Metabolism, bio/chemosynthesis, biological properties, and toxicology. Food Chemistry, 2020, 320, 126617.	4.2	35
56	Contributions to Lignomics: Stochastic Generation of Oligomeric Lignin Structures for Interpretation of MALDIâ€"FTâ€ICRâ€MS Results. ChemSusChem, 2020, 13, 4428-4445.	3.6	25
57	Lignin Monomers from beyond the Canonical Monolignol Biosynthetic Pathway: Another Brick in the Wall. ACS Sustainable Chemistry and Engineering, 2020, 8, 4997-5012.	3.2	184
58	Convergent recruitment of 5â€²â€hydroxylase activities by CYP75B flavonoid Bâ€ring hydroxylases for tricin biosynthesis in <i>Medicago</i> legumes. New Phytologist, 2020, 228, 269-284.	3.5	25
59	Metaboliteâ€based genomeâ€wide association study enables dissection of the flavonoid decoration pathway of wheat kernels. Plant Biotechnology Journal, 2020, 18, 1722-1735.	4.1	94
60	Phenolic cross-links: building and de-constructing the plant cell wall. Natural Product Reports, 2020, 37, 919-961.	5.2	111
61	The style and substance of plant flavonoid decoration; towards defining both structure and function. Phytochemistry, 2020, 174, 112347.	1.4	138
62	Double knockout of OsWRKY36 and OsWRKY102 boosts lignification with altering culm morphology of rice. Plant Science, 2020, 296, 110466.	1.7	21
63	Grass secondary cell walls, <i>Brachypodium distachyon</i> as a model for discovery. New Phytologist, 2020, 227, 1649-1667.	3.5	40
64	Guidelines for performing lignin-first biorefining. Energy and Environmental Science, 2021, 14, 262-292.	15.6	416
65	Coupling of Flavonoid Initiation Sites with Monolignols Studied by Density Functional Theory. ACS Sustainable Chemistry and Engineering, 2021, 9, 1518-1528.	3.2	6
66	Breeding Targets to Improve Biomass Quality in Miscanthus. Molecules, 2021, 26, 254.	1.7	19
67	Lignin: an innovative, complex, and highly flexible plant material/component. , 2021, , 35-60.		1
68	Expanding the Coverage of Metabolic Landscape in Cultivated Rice with Integrated Computational Approaches. Genomics, Proteomics and Bioinformatics, 2022, 20, 702-714.	3.0	3
69	Structural Characteristics of the Guaiacyl-Rich Lignins From Rice (Oryza sativa L.) Husks and Straw. Frontiers in Plant Science, 2021, 12, 640475.	1.7	28
70	Radical Coupling Reactions of Hydroxystilbene Glucosides and Coniferyl Alcohol: A Density Functional Theory Study. Frontiers in Plant Science, 2021, 12, 642848.	1.7	8
72	A multi-omics approach to lignocellulolytic enzyme discovery reveals a new ligninase activity from <i>Parascedosporium putredinis</i> NO1. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	18
73	Identification and quantification of tricin present in medicinal herbs, plant foods and by-products using UPLC-QTOF-MS. Chemical Papers, 2021, 75, 4579.	1.0	4

#	Article	IF	Citations
74	Stacking AsFMT overexpression with BdPMT loss of function enhances monolignol ferulate production in BrachypodiumÂdistachyon. Plant Biotechnology Journal, 2021, 19, 1878-1886.	4.1	5
75	Synthesis of deuteriumâ€labeled cinnamic acids: Understanding the volatile benzenoid pathway in the flowers of the Japanese loquat <scp><i>Eriobotrya japonica</i></scp>. Journal of Labelled Compounds and Radiopharmaceuticals, 2021, 64, 403-416.	0.5	4
76	Tailoring renewable materials via plant biotechnology. Biotechnology for Biofuels, 2021, 14, 167.	6.2	25
77	Tricin Biosynthesis and Bioengineering. Frontiers in Plant Science, 2021, 12, 733198.	1.7	25
78	A rapid thioacidolysis method for biomass lignin composition and tricin analysis. Biotechnology for Biofuels, 2021, 14, 18.	6.2	15
80	SbCOMT (Bmr12) is involved in the biosynthesis of tricin-lignin in sorghum. PLoS ONE, 2017, 12, e0178160.	1.1	59
81	Exogenous chalcone synthase expression in developing poplar xylem incorporates naringenin into lignins. Plant Physiology, 2022, 188, 984-996.	2.3	14
82	Incorporation of catechyl monomers into lignins: lignification from the non-phenolic end<i>via</i>Dielsâ€"Alder cycloaddition?. Green Chemistry, 2021, 23, 8995-9013.	4.6	6
83	Influence of the Lignin Extraction Methods on the Content of Tricin in Grass Lignins. Frontiers in Energy Research, 2021, 9, .	1.2	5
84	New Insights on Structures Forming the Lignin-Like Fractions of Ancestral Plants. Frontiers in Plant Science, 2021, 12, 740923.	1.7	17
85	Flavonoids naringenin chalcone, naringenin, dihydrotricin, and tricin are lignin monomers in papyrus. Plant Physiology, 2022, 188, 208-219.	2.3	28
86	Differences in the content, composition and structure of the lignins from rind and pith of papyrus (Cyperus papyrus L.) culms. Industrial Crops and Products, 2021, 174, 114226.	2.5	12
87	The Sorghum (Sorghum bicolor) Brown Midrib 30 Gene Encodes a Chalcone Isomerase Required for Cell Wall Lignification. Frontiers in Plant Science, 2021, 12, 732307.	1.7	9
88	Strikingly high amount of tricin-lignin observed from vanilla (<i>Vanilla planifolia</i>) aerial roots. Green Chemistry, 2022, 24, 259-270.	4.6	8
89	Density functional theory study on the coupling and reactions of diferuloylputrescine as a lignin monomer. Phytochemistry, 2022, 197, 113122.	1.4	0
91	Unconventional lignin monomersâ€"Extension of the lignin paradigm. Advances in Botanical Research, 2022, , 1-39.	0.5	13
92	Inhibiting tricin biosynthesis improves maize lignocellulose saccharification. Plant Physiology and Biochemistry, 2022, 178, 12-19.	2.8	2
93	<i>p</i>HBMT1, a BAHD-family monolignol acyltransferase, mediates lignin acylation in poplar. Plant Physiology, 2022, 188, 1014-1027.	2.3	18

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94	Deficiency in flavonoid biosynthesis genes <i>CHS</i>, <i>CHI</i>, and <i>CHIL</i> alters rice flavonoid and lignin profiles. Plant Physiology, 2022, 188, 1993-2011.	2.3	18
95	A tailored fast thioacidolysis method incorporating multi-reaction monitoring mode of GC-MS for higher sensitivity on lignin monomer quantification. Holzforschung, 2022, .	0.9	0
96	ÂVariations in lignin monomer contents and stable hydrogen isotope ratios in methoxy groups during the biodegradation of garden biomass. Scientific Reports, 2022, 12, .	1.6	5
97	Transcriptional and metabolic changes associated with internode development and reduced cinnamyl alcohol dehydrogenase activity in sorghum. Journal of Experimental Botany, 2022, 73, 6307-6333.	2.4	6
98	Loosen up! How lignin manipulations affect biomass molecular assembly and deconstruction. Plant Physiology, 0, , .	2.3	0
99	Bioactive metabolite profile and antioxidant properties of brown juice, a processed alfalfa (Medicago) Tj ETQq1 1 0.784314 rgBT /Overlo	1.4	2
100	High value valorization of lignin as environmental benign antimicrobial. Materials Today Bio, 2023, 18, 100520.	2.6	13
102	Unveiling lignin structures and lignin-carbohydrate complex (LCC) linkages of bamboo (Phyllostachys) Tj ETQq1 1 0.784314 rgBT /Overlo 241, 124461.	3.6	3