Variation of glucosinolate accumulation among different organs and developmental stages of Arabidopsis thaliana

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#	Paper	IF	Citations
766	Functional analysis of the tandem-duplicated P450 genes SPS/BUS/CYP79F1 and CYP79F2 in glucosinolate biosynthesis and plant development by Ds transposition-generated double mutants. **2004**, 135, 840-8		57
765	Successful herbivore attack due to metabolic diversion of a plant chemical defense. **2004**, 101, 4859-64		375
764	Desulfoglucosinolate sulfotransferases from Arabidopsis thaliana catalyze the final step in the biosynthesis of the glucosinolate core structure. **2004**, 279, 50717-25		153
763	Chapter two The biochemical and molecular origins of aliphatic glucosinolate diversity in Arabidopsis thaliana. **2004**, 38, 19-38		1
762	Secondary metabolites and plant/environment interactions: a view through Arabidopsis thaliana tinged glasses. *Plant, Cell and Environment*, **2004**, 27, 675-684	8.4	261
761	Characterization of the Arabidopsis TU8 glucosinolate mutation, an allele of TERMINAL FLOWER2. **2004**, 54, 671-82		50
760	Volatiles released from cotton plants in response to Helicoverpa zea feeding damage on cotton flower buds. **2004**, 218, 824-32		80
759	Metabolic profiling of the Arabidopsis pkl mutant reveals selective derepression of embryonic traits. **2004**, 219, 489-99		38
758	Correlation of glucosinolate content to myrosinase activity in horseradish (Armoracia rusticana). **2004**, 52, 6950-5		56
757	Bioassay for assessing resistance of Arabidopsis thaliana L. (Heynh.) to the adult crucifer flea beetle, Phyllotreta cruciferae (Goeze) (Coleoptera: Chrysomelidae). **2005**, 85, 225-235		10
756	Geographic and evolutionary diversification of glucosinolates among near relatives of Arabidopsis thaliana (Brassicaceae). *Phytochemistry*, **2005**, 66, 1321-33	4	108
755	The tu8 mutation of Arabidopsis thaliana encoding a heterochromatin protein 1 homolog causes defects in the induction of secondary metabolite biosynthesis. **2005**, 7, 348-57		28
754	Arabidopsis IQD1, a novel calmodulin-binding nuclear protein, stimulates glucosinolate accumulation and plant defense. **2005**, 43, 79-96		178
753	Secondary metabolites influence Arabidopsis/Botrytis interactions: variation in host production and pathogen sensitivity. **2005**, 44, 25-36		225
752	Leaf surface wax layers of Brassicaceae lack feeding stimulants for Phaedon cochleariae. **2005**, 115, 41-50		34
751	The glucosinolate-myrosinase system in an ecological and evolutionary context. *Current Opinion in Plant Biology*, **2005**, 8, 264-71	9.9	187
750	Analysis of the glucosinolate pattern of Arabidopsis thaliana seeds by capillary zone electrophoresis coupled to electrospray ionization-mass spectrometry. **2005**, 26, 1513-22		62

749	Testing the optimal defense theory and the growth-differentiation balance hypothesis in Arabidopsis thaliana. **2005**, 146, 169-78		59
748	Metabolite profiling of Arabidopsis thaliana (L.) plants transformed with an antisense chalcone synthase gene. **2005**, 1, 181-198		26
747	Within-plant variation in glucosinolate concentrations of Raphanus sativus across multiple scales. **2005**, 31, 1711-32		47
746	Testing Predictions of the âEvolution of Increased Competitive Abilityâ Hypothesis for an Invasive Crucifer. **2005**, 19, 533-550		51
745	Expression profiling of metabolic genes in response to methyl jasmonate reveals regulation of genes of primary and secondary sulfur-related pathways in Arabidopsis thaliana. **2005**, 86, 491-508		96
744	An expression and bioinformatics analysis of the Arabidopsis serine carboxypeptidase-like gene family. **2005**, 138, 1136-48		85
743	A toxic mutator and selection alternative to the non-Mendelian RNA cache hypothesis for hothead reversion. **2005**, 17, 2856-8		16
742	Structural complexity, differential response to infection, and tissue specificity of indolic and phenylpropanoid secondary metabolism in Arabidopsis roots. **2005**, 138, 1058-70		158
741	Major signaling pathways modulate Arabidopsis glucosinolate accumulation and response to both phloem-feeding and chewing insects. **2005**, 138, 1149-62		339
740	AtVAM3 is required for normal specification of idioblasts, myrosin cells. **2006**, 47, 164-75		81
739	Biology and biochemistry of glucosinolates. **2006**, 57, 303-33		1561
738	Behavior of glucosinolates in pickling cruciferous vegetables. **2006**, 54, 9430-6		39
737	Glucosinolate metabolism and its control. **2006**, 11, 89-100		521
736	The three desulfoglucosinolate sulfotransferase proteins in Arabidopsis have different substrate specificities and are differentially expressed. **2006**, 273, 122-36		71
735	Arabidopsis myrosinases TGG1 and TGG2 have redundant function in glucosinolate breakdown and insect defense. **2006**, 46, 549-62		293
734	DOF transcription factor AtDof1.1 (OBP2) is part of a regulatory network controlling glucosinolate biosynthesis in Arabidopsis. **2006**, 47, 10-24		200
733	Metabolic changes in Arabidopsis thaliana expressing the feedback-resistant anthranilate synthase alpha subunit gene OASA1D. *Phytochemistry*, **2006**, 67, 2349-62	4	33
732	Gene expression and glucosinolate accumulation in Arabidopsis thaliana in response to generalist and specialist herbivores of different feeding guilds and the role of defense signaling pathways. *Phytochemistry*, **2006**, 67, 2450-62	4	226

731	Glucosinolate and trichome defenses in a natural Arabidopsis lyrata population. **2006**, 32, 2351-73		58
730	Effects of glucosinolate and myrosinase levels in Brassica juncea on a glucosinolate-sequestering herbivore â□and vice versa. **2006**, 16, 191-201		45
729	Determination of glucosinolates in traditional Chinese herbs by high-performance liquid chromatography and electrospray ionization mass spectrometry. **2006**, 386, 2225-32		42
728	A heritable glucosinolate polymorphism within natural populations of Barbarea vulgaris. *Phytochemistry*, **2006**, 67, 1214-23	4	55
727	Effect of nitrogen and sulfur fertilization on glucosinolates in the leaves and roots of broccoli sprouts (Brassica oleracea var. italica). **2006**, 86, 1512-1516		89
726	Branched-chain aminotransferase4 is part of the chain elongation pathway in the biosynthesis of methionine-derived glucosinolates in Arabidopsis. **2006**, 18, 2664-79		132
725	Natural variation in MAM within and between populations of Arabidopsis lyrata determines glucosinolate phenotype. **2006**, 173, 1629-36		31
724	Two Arabidopsis genes (IPMS1 and IPMS2) encode isopropylmalate synthase, the branchpoint step in the biosynthesis of leucine. **2007**, 143, 970-86		69
723	Arabidopsis-insect interactions. **2007**, 5, e0107		22
722	MAM3 catalyzes the formation of all aliphatic glucosinolate chain lengths in Arabidopsis. **2007**, 144, 60-71		146
721	Glucosinolate profiling of seeds and sprouts of B. oleracea varieties used for food. **2007**, 114, 234-242		94
720	Host plant-dependent metabolism of 4-hydroxybenzylglucosinolate in Pieris rapae: substrate specificity and effects of genetic modification and plant nitrile hydratase. **2007**, 37, 1119-30		20
719	Flower vs. leaf feeding by Pieris brassicae: glucosinolate-rich flower tissues are preferred and sustain higher growth rate. **2007**, 33, 1831-44		114
718	Sulfur in Plants An Ecological Perspective. **2007**,		18
717	Liquid chromatography with conventional detection. **2007**, 475-507		
716	Metabolic characterization of Brassica rapa leaves by NMR spectroscopy. **2007**, 55, 7936-43		76
715	Mapping of QTL for resistance against the crucifer specialist herbivore Pieris brassicae in a new Arabidopsis inbred line population, Da(1)-12 x Ei-2. **2007**, 2, e578		41
714	Determination of oleanolic acid, ursolic acid and amygdalin in the flower of Eriobotrya japonica Lindl. by HPLC. **2007**, 21, 755-61		46

713	Identification of a flavin-monooxygenase as the S-oxygenating enzyme in aliphatic glucosinolate biosynthesis in Arabidopsis. **2007**, 50, 902-10		186
712	The R2R3-MYB transcription factor HAG1/MYB28 is a regulator of methionine-derived glucosinolate biosynthesis in Arabidopsis thaliana. **2007**, 51, 247-61		296
711	Suppression of Digitaria sanguinalis and Amaranthus palmeri using autumn-sown glucosinolate-producing cover crops in organically grown bell pepper. **2007**, 47, 425-432		36
710	Ontogenetic switches from plant resistance to tolerance: minimizing costs with age?. **2007**, 10, 177-87		97
709	Myzus persicae (green peach aphid) feeding on Arabidopsis induces the formation of a deterrent indole glucosinolate. **2007**, 49, 1008-19		273
708	The transcription factor HIG1/MYB51 regulates indolic glucosinolate biosynthesis in Arabidopsis thaliana. **2007**, 50, 886-901		294
707	Characterization of seed-specific benzoyloxyglucosinolate mutations in Arabidopsis thaliana. **2007**, 51, 1062-76		84
706	Induction of plant responses by a sequestering insect: Relationship of glucosinolate concentration and myrosinase activity. **2007**, 8, 13-25		49
705	The effect of sulfur nutrition on plant glucosinolate content: physiology and molecular mechanisms. **2007**, 9, 573-81		196
704	Cell- and tissue-specific localization and regulation of the epithiospecifier protein in Arabidopsis thaliana. **2007**, 64, 173-85		45
703	Specificity of induction responses in Sinapis alba L. and their effects on a specialist herbivore. **2007**, 33, 1582-97		32
702	The desert locust, Schistocerca gregaria, detoxifies the glucosinolates of Schouwia purpurea by desulfation. **2007**, 33, 1542-55		52
701	Distinct roles of the pepper hypersensitive induced reaction protein gene CaHIR1 in disease and osmotic stress, as determined by comparative transcriptome and proteome analyses. **2008**, 227, 409-25		54
700	Species-specific and leaf-age dependent effects of ultraviolet radiation on two Brassicaceae. *Phytochemistry*, **2007**, 68, 875-85	4	94
699	Sinapis phylogeny and evolution of glucosinolates and specific nitrile degrading enzymes. *Phytochemistry*, **2008**, 69, 2937-49	4	57
698	Glucosinolates in Brassica foods: bioavailability in food and significance for human health. **2008**, 7, 213-229		268
697	Increased terpenoid accumulation in cotton (Gossypium hirsutum) foliage is a general wound response. **2008**, 34, 508-22		65
696	Glucosinolate profiles change during the life cycle and mycorrhizal colonization in a Cd/Zn hyperaccumulator Thlaspi praecox (Brassicaceae). **2008**, 34, 1038-44		22

695	Effects of ionizing radiation on the growth and allyl isothiocyanate accumulation of Wasabia japonica in vitro and ex vitro. **2008**, 44, 51-58		8
694	Microchip analysis of plant glucosinolates. **2008**, 29, 2280-7		14
693	Primary or secondary? Versatile nitrilases in plant metabolism. *Phytochemistry*, **2008**, 69, 2655-67	4	84
692	Determination of the absolute configuration of the glucosinolate methyl sulfoxide group reveals a stereospecific biosynthesis of the side chain. *Phytochemistry*, **2008**, 69, 2737-42	4	24
691	Epithiospecifier protein activity in broccoli: the link between terminal alkenyl glucosinolates and sulphoraphane nitrile. *Phytochemistry*, **2008**, 69, 2765-73	4	56
690	Critical evaluation and statistical validation of a hydroponic culture system for Arabidopsis thaliana. **2008**, 46, 212-8		57
689	Revised determination of free and complexed myrosinase activities in plant extracts. **2008**, 46, 506-16		42
688	HAG2/MYB76 and HAG3/MYB29 exert a specific and coordinated control on the regulation of aliphatic glucosinolate biosynthesis in Arabidopsis thaliana. *New Phytologist*, **2008**, 177, 627-642	9.8	205
687	Transcriptional and biochemical signatures of divergence in natural populations of two species of New Zealand alpine Pachycladon. **2008**, 17, 4740-53		20
686	Towards global understanding of plant defence against aphids--timing and dynamics of early Arabidopsis defence responses to cabbage aphid (Brevicoryne brassicae) attack. *Plant, Cell and Environment*, **2008**, 31, 1097-115	8.4	216
685	The glutathione-deficient mutant pad2-1 accumulates lower amounts of glucosinolates and is more susceptible to the insect herbivore Spodoptera littoralis. **2008**, 55, 774-86		162
684	Sulfur Assimilation and Abiotic Stress in Plants. **2008**,		15
683	Evolution of drought tolerance and defense: dependence of tradeoffs on mechanism, environment and defense switching. **2008**, 117, 231-244		39
682	Effect of light conditions on the contents of glucosinolates in germinating seeds of white mustard, red radish, white radish, and rapeseed. **2008**, 56, 9087-93		45
681	Indole-3-acetonitrile production from indole glucosinolates deters oviposition by Pieris rapae. **2008** , 146, 916-26		100
680	Arabidopsis branched-chain aminotransferase 3 functions in both amino acid and glucosinolate biosynthesis. **2008**, 146, 1028-39		92
679	Genotype, age, tissue, and environment regulate the structural outcome of glucosinolate activation. **2008**, 147, 415-28		85
678	Proteome-wide characterization of seed aging in Arabidopsis: a comparison between artificial and natural aging protocols. **2008**, 148, 620-41		273

677	Glucosinolates and trichomes track tissue value in two sympatric mustards. **2008**, 89, 763-72		25
676	Nonuniform distribution of glucosinolates in Arabidopsis thaliana leaves has important consequences for plant defense. **2008**, 105, 6196-201		221
675	A role for gene duplication and natural variation of gene expression in the evolution of metabolism. **2008**, 3, e1838		83
674	The impact of the absence of aliphatic glucosinolates on insect herbivory in Arabidopsis. **2008**, 3, e2068		178
673	Comparison of Glucosinolate Profiles in Leaf and Seed Tissues of Different Brassica napus Crops. **2008**, 133, 551-558		56
672	Omics-based approaches to methionine side chain elongation in Arabidopsis: characterization of the genes encoding methylthioalkylmalate isomerase and methylthioalkylmalate dehydrogenase. **2009**, 50, 1181-90		72
671	Functional proteomics of Arabidopsis thaliana guard cells uncovers new stomatal signaling pathways. **2008**, 20, 3210-26		226
670	Understanding the regulation of aspartate metabolism using a model based on measured kinetic parameters. **2009**, 5, 271		93
669	Nitrile-specifier proteins involved in glucosinolate hydrolysis in Arabidopsis thaliana. **2009**, 284, 12057-70		98
668	Brassica and Its Close Allies: Cytogenetics and Evolution. **2009**, 21-187		48
667	The gene controlling the indole glucosinolate modifier1 quantitative trait locus alters indole glucosinolate structures and aphid resistance in Arabidopsis. **2009**, 21, 985-99		160
666	The plastidic bile acid transporter 5 is required for the biosynthesis of methionine-derived glucosinolates in Arabidopsis thaliana. **2009**, 21, 1813-29		97
665	Disruption of adenosine-5'-phosphosulfate kinase in Arabidopsis reduces levels of sulfated secondary metabolites. **2009**, 21, 910-27		159
664	Development-dependent effects of UV radiation exposure on broccoli plants and interactions with herbivorous insects. **2009**, 66, 61-68		47
663	Inducible expression of a Nep1-like protein serves as a model trigger system of camalexin biosynthesis. *Phytochemistry*, **2009**, 70, 185-9	4	19
662	Evolution of nitrilases in glucosinolate-containing plants. *Phytochemistry*, **2009**, 70, 1680-6	4	50
661	Indole glucosinolate breakdown and its biological effects. **2009**, 8, 101-120		170
660	Root and shoot glucosinolates: a comparison of their diversity, function and interactions in natural and managed ecosystems. **2009**, 8, 171-186		145

659	The âmustard oil bombâ□not so easy to assemble?! Localization, expression and distribution of the components of the myrosinase enzyme system. **2009**, 8, 69-86		178
658	Piecing together the transport pathway of aliphatic glucosinolates. **2009**, 8, 53-67		45
657	Indolic glucosinolates at the crossroads of tryptophan metabolism. **2009**, 8, 25-37		24
656	Specific and coordinated control of indolic and aliphatic glucosinolate biosynthesis by R2R3-MYB transcription factors in Arabidopsis thaliana. **2009**, 8, 3-13		98
655	Regulation and function of specifier proteins in plants. **2009**, 8, 87-99		52
654	Herbivore induction of the glucosinolateâmyrosinase defense system: major trends, biochemical bases and ecological significance. **2009**, 8, 149-170		201
653	Arabidopsis thaliana encodes a bacterial-type heterodimeric isopropylmalate isomerase involved in both Leu biosynthesis and the Met chain elongation pathway of glucosinolate formation. **2009**, 71, 227-39		50
652	Biochemical markers for cabbage seedpod weevil (Ceutorhynchus obstrictus (Marsham)) resistance in canola (Brassica napus L.). **2009**, 170, 297-308		9
651	Glucosinolate Profiles of Arabidopsis thaliana in Response to Cadmium Exposure. **2009**, 200, 109-117		14
650	Genotypeâenvironment interactions affect flower and fruit herbivory and plant chemistry of Arabidopsis thaliana in a transplant experiment. **2009**, 24, 1161-1171		9
649	The effects of arbuscular mycorrhizal fungi on direct and indirect defense metabolites of Plantago lanceolata L. **2009**, 35, 833-43		113
648	MS/MS spectral tag-based annotation of non-targeted profile of plant secondary metabolites. **2009**, 57, 555-77		191
647	Kinetics and substrate specificities of desulfo-glucosinolate sulfotransferases in Arabidopsis thaliana. **2009**, 135, 140-9		31
646	Ecological genomics of Boechera stricta: identification of a QTL controlling the allocation of methionine- vs branched-chain amino acid-derived glucosinolates and levels of insect herbivory. **2009**, 102, 465-74		53
645	Exogenous glucosinolate produced by Arabidopsis thaliana has an impact on microbes in the rhizosphere and plant roots. **2009**, 3, 1243-57		171
644	Crocidolomia pavonana larval foraging: behavior and feeding site preferences on cabbage, Brassica oleracea. **2009**, 133, 154-164		11
643	Characterization of glucosinolate--myrosinase system in developing salt cress Thellungiella halophila. **2009**, 136, 1-9		22
642	Metabolomics-oriented isolation and structure elucidation of 37 compounds including two anthocyanins from Arabidopsis thaliana. *Phytochemistry*, **2009**, 70, 1017-29	4	105

641	Myrosinases from root and leaves of Arabidopsis thaliana have different catalytic properties. *Phytochemistry*, **2009**, 70, 1345-54	4	57
640	Role of glucosinolates in insect-plant relationships and multitrophic interactions. **2009**, 54, 57-83		645
639	Volatile constituents throughout Brassica oleracea L. Var. acephala germination. **2009**, 57, 6795-802		24
638	Growing hardier crops for better health: Salinity tolerance and the nutritional value of broccoli. **2009**, 57, 572-78		99
637	Belowground Herbivory and Plant Defenses. **2009**, 40, 373-391		147
636	Ontogenetic changes of 2-propenyl and 3-indolylmethyl glucosinolates in Brassica carinata leaves as affected by water supply. **2009**, 57, 7259-63		72
635	The influence of metabolically engineered glucosinolates profiles in Arabidopsis thaliana on Plutella xylostella preference and performance. **2010**, 20, 1-9		22
634	Widely targeted metabolomics and coexpression analysis as tools to identify genes involved in the side-chain elongation steps of aliphatic glucosinolate biosynthesis. **2010**, 39, 1067-75		29
633	Leaf and floral parts feeding by orange tip butterfly larvae depends on larval position but not on glucosinolate profile or nitrogen level. **2010**, 36, 1335-45		17
632	Survey of glucosinolate variation in leaves of Brassica rapa crops. **2010**, 57, 1079-1089		45
631	Regulatory networks of glucosinolates shape Arabidopsis thaliana fitness. *Current Opinion in Plant Biology*, **2010**, 13, 348-53	9.9	66
630	The characterisation of AOP2: a gene associated with the biosynthesis of aliphatic alkenyl glucosinolates in Arabidopsis thaliana. **2010**, 10, 170		42
629	Potassium deficiency induces the biosynthesis of oxylipins and glucosinolates in Arabidopsis thaliana. **2010**, 10, 172		71
628	Adenosine-5'-phosphosulfate kinase is essential for Arabidopsis viability. **2010**, 584, 119-23		40
627	Effect of salt stress on phenolic compounds, glucosinolates, myrosinase and antioxidant activity in radish sprouts. *Food Chemistry*, **2010**, 121, 1014-1019	8.5	166
626	Can sulfur fertilisation improve the effectiveness of trap crops for diamondback moth, Plutella xylostella (L.) (Lepidoptera: Plutellidae)?. **2010**, 66, 832-8		27
625	A new method for measuring relative growth rate can uncover the costs of defensive compounds in Arabidopsis thaliana. *New Phytologist*, **2010**, 187, 1102-1111	9.8	67
624	Disease resistance of Arabidopsis to Phytophthora brassicae is established by the sequential action of indole glucosinolates and camalexin. **2010**, 62, 840-51		136

623	Pleiotropic physiological consequences of feedback-insensitive phenylalanine biosynthesis in Arabidopsis thaliana. **2010**, 63, 823-35	47
622	Glucosinolate-accumulating S-cells in Arabidopsis leaves and flower stalks undergo programmed cell death at early stages of differentiation. **2010**, 64, 456-69	79
621	Glucosinolates in broccoli sprouts (Brassica oleracea var. italica) as conditioned by sulphate supply during germination. **2010**, 75, C673-7	33
620	A complex interplay of three R2R3 MYB transcription factors determines the profile of aliphatic glucosinolates in Arabidopsis. **2010**, 153, 348-63	174
619	AtMetExpress development: a phytochemical atlas of Arabidopsis development. **2010**, 152, 566-78	149
618	Metabolic Factory for Flavors in Fruits and Vegetables. **2010**, 705-727	
617	The seed composition of Arabidopsis mutants for the group 3 sulfate transporters indicates a role in sulfate translocation within developing seeds. **2010**, 154, 913-26	56
616	Root secretion of defense-related proteins is development-dependent and correlated with flowering time. **2010**, 285, 30654-65	86
615	Sulfite reductase defines a newly discovered bottleneck for assimilatory sulfate reduction and is essential for growth and development in Arabidopsis thaliana. **2010**, 22, 1216-31	131
614	Removing the mustard oil bomb from seeds: transgenic ablation of myrosin cells in oilseed rape (Brassica napus) produces MINELESS seeds. **2010**, 61, 1683-97	29
613	Glucosinolates, structures and analysis in food. **2010**, 2, 310	283
612	Intra-specific differences in root and shoot glucosinolate profiles among white cabbage (Brassica oleracea var. capitata) cultivars. **2010**, 58, 411-7	36
611	Biosynthesis of glucosinolates--gene discovery and beyond. **2010**, 15, 283-90	586
610	Glucosinolate profile variation of growth stages of wild radish (Raphanus raphanistrum). **2010**, 58, 3309-15	25
609	Variation of glucosinolates in wild radish (Raphanus raphanistrum) accessions. **2010**, 58, 11626-32	18
608	Glucosinolate breakdown in Arabidopsis: mechanism, regulation and biological significance. **2010**, 8, e0134	182
607	Two-phase resolution of polyploidy in the Arabidopsis metabolic network gives rise to relative and absolute dosage constraints. **2011**, 23, 1719-28	111
606	Glucosinolates profile of "mugnolo", a variety of Brassica oleracea L. native to southern Italy (Salento). **2011**, 77, 287-92	17

605	Effect of sucrose and mannitol on the accumulation of health-promoting compounds and the activity of metabolic enzymes in broccoli sprouts. **2011**, 128, 159-165		104
604	Effect of glucose on glucosinolates, antioxidants and metabolic enzymes in Brassica sprouts. **2011**, 129, 535-540		51
603	Metabolite profiling of Arabidopsis seedlings in response to exogenous sinalbin and sulfur deficiency. *Phytochemistry*, **2011**, 72, 1767-78	4	21
602	Metabolomic characterization of the possible involvement of a Cytochrome P450, CYP81F4, in the biosynthesis of indolic glucosinolate in Arabidopsis. **2011**, 28, 379-385		13
601	Glucosinolates in the new oilseed crop meadowfoam: natural variation in Section Inflexae of Limnanthes, a new glucosinolate in L.´floccosa, and QTL analysis in L.´alba. **2011**, 130, 352-359		7
600	Control of sulfur partitioning between primary and secondary metabolism. **2011**, 65, 96-105		91
599	Elemental formula annotation of polar and lipophilic metabolites using (13) C, (15) N and (34) S isotope labelling, in combination with high-resolution mass spectrometry. **2011**, 68, 364-76		240
598	Conservation and clade-specific diversification of pathogen-inducible tryptophan and indole glucosinolate metabolism in Arabidopsis thaliana relatives. *New Phytologist*, **2011**, 192, 713-26	9.8	69
597	Is the effect of priming plants, and a functional JAR1, negligible on the foraging behaviour and development of a generalist lepidopteran, Helicoverpa armigera?. **2011**, 141, 78-87		2
596	Insect herbivore counteradaptations to the plant glucosinolate-myrosinase system. *Phytochemistry*, **2011**, 72, 1566-75	4	186
595	A thiocyanate-forming protein generates multiple products upon allylglucosinolate breakdown in Thlaspi arvense. *Phytochemistry*, **2011**, 72, 1699-709	4	28
594	Impact of hydroxylated and non-hydroxylated aliphatic glucosinolates in Arabidopsis thaliana crosses on plant resistance against a generalist and a specialist herbivore. **2011**, 21, 171-180		10
593	Screening, identification and quantification of glucosinolates in black radish (Raphanus sativus L. niger) based dietary supplements using liquid chromatography coupled with a photodiode array and liquid chromatography-mass spectrometry. **2011**, 1218, 4395-405		45
592	Modulation of sulfur metabolism enables efficient glucosinolate engineering. **2011**, 11, 12		37
591	Metabolomics of Arabidopsis Thaliana. **2011**, 157-180		6
590	Identification and quantitative determination of glucosinolates in seeds and edible parts of Korean Chinese cabbage. *Food Chemistry*, **2011**, 128, 1115-1120	8.5	33
589	Glucosinolate content and myrosinase activity evolution in three maca (Lepidium meyenii Walp.) ecotypes during preharvest, harvest and postharvest drying. *Food Chemistry*, **2011**, 127, 1576-1583	8.5	56
588	Using knockout mutants to reveal the growth costs of defensive traits. **2011**, 278, 2598-603		94

587	Pseudomonas sax genes overcome aliphatic isothiocyanate-mediated non-host resistance in Arabidopsis. **2011**, 331, 1185-8		144
586	Unique defense strategy by the endoplasmic reticulum body in plants. **2011**, 52, 2039-49		63
585	Metabolic engineering in Nicotiana benthamiana reveals key enzyme functions in Arabidopsis indole glucosinolate modification. **2011**, 23, 716-29		139
584	Cytosolic γ-glutamyl peptidases process glutathione conjugates in the biosynthesis of glucosinolates and camalexin in Arabidopsis. **2011**, 23, 2456-69		91
583	Flavonoids, phenolics, and antioxidant capacity in the flower of Eriobotrya japonica Lindl. *International Journal of Molecular Sciences*, **2011**, 12, 2935-45	6.3	41
582	Combining genome-wide association mapping and transcriptional networks to identify novel genes controlling glucosinolates in Arabidopsis thaliana. **2011**, 9, e1001125		205
581	Glucosinolates are produced in trichomes of Arabidopsis thaliana. *Frontiers in Plant Science*, **2012**, 3, 242	6.2	28
580	Isolation and expression of glucosinolate synthesis genes CYP83A1 and CYP83B1 in Pak Choi (Brassica rapa L. ssp. chinensis var. communis (N. Tsen & S.H. Lee) Hanelt). *International Journal of Molecular Sciences*, **2012**, 13, 5832-43	6.3	10
579	Real-time analysis of sulfur-containing volatiles in Brassica plants infested with root-feeding Delia radicum larvae using proton-transfer reaction mass spectrometry. **2012**, 2012, pls021		35
578	UV-B irradiation changes specifically the secondary metabolite profile in broccoli sprouts: induced signaling overlaps with defense response to biotic stressors. **2012**, 53, 1546-60		163
577	CML42-mediated calcium signaling coordinates responses to Spodoptera herbivory and abiotic stresses in Arabidopsis. **2012**, 159, 1159-75		167
576	Crosstalk between above- and belowground herbivores is mediated by minute metabolic responses of the host Arabidopsis thaliana. **2012**, 63, 6199-210		50
575	Mixtures of plant secondary metabolites. 56-77		28
574	The Effect of Storage in Controlled Atmosphere on the Quality and Health-Promoting Components of Broccoli (Brassica Oleracea bar. Italica). **2012**, 77, 89-100		5
573	Defence on demand: mechanisms behind optimal defence patterns. **2012**, 110, 1503-14		117
572	Benzoylation and sinapoylation of glucosinolate R-groups in Arabidopsis. **2012**, 72, 411-22		66
571	Metabolic and evolutionary costs of herbivory defense: systems biology of glucosinolate synthesis. *New Phytologist*, **2012**, 196, 596-605	9.8	117
570	Multi-dimensional regulation of metabolic networks shaping plant development and performance. **2012**, 63, 3353-65		42

569	Glucosinolate variation in leaves of Brassica rapa crops. **2012**, 67, 283-8		25
568	Metabolic fingerprinting of Tomato Mosaic Virus infected Solanum lycopersicum. **2012**, 169, 1586-96		45
567	Germination stimulants of Phelipanche ramosa in the rhizosphere of Brassica napus are derived from the glucosinolate pathway. **2012**, 25, 993-1004		56
566	Investigation of glucosinolate profile and qualitative aspects in sprouts and roots of horseradish (Armoracia rusticana) using LC-ESI-hybrid linear ion trap with Fourier transform ion cyclotron resonance mass spectrometry and infrared multiphoton dissociation. **2012**, 60, 7474-82		27
565	Are we ready for genome-scale modeling in plants?. **2012**, 191-192, 53-70		49
564	A gain-of-function polymorphism controlling complex traits and fitness in nature. **2012**, 337, 1081-4		132
563	Engineering glucosinolates in plants: current knowledge and potential uses. **2012**, 168, 1694-717		38
562	Methane emissions from sheep fed fresh brassicas (Brassica spp.) compared to perennial ryegrass (Lolium perenne). **2012**, 176, 107-116		52
561	Influence of fermentation conditions of Brassica oleracea L. var. capitata on the volatile glucosinolate hydrolysis compounds of sauerkrauts. **2012**, 48, 16-23		25
560	Metabolism of glucosinolate-derived isothiocyanates to glutathione conjugates in generalist lepidopteran herbivores. **2012**, 42, 174-82		80
559	UVR8 mediates UV-B-induced Arabidopsis defense responses against Botrytis cinerea by controlling sinapate accumulation. **2012**, 5, 642-52		158
558	Characterization of recombinant nitrile-specifier proteins (NSPs) of Arabidopsis thaliana: dependency on Fe(II) ions and the effect of glucosinolate substrate and reaction conditions. *Phytochemistry*, **2012**, 84, 7-17	4	22
557	Antimicrobial Properties of Organosulfur Compounds. **2012**, 127-156		6
556	Chemical warfare or modulators of defence responses - the function of secondary metabolites in plant immunity. *Current Opinion in Plant Biology*, **2012**, 15, 407-14	9.9	119
555	NRT/PTR transporters are essential for translocation of glucosinolate defence compounds to seeds. **2012**, 488, 531-4		312
554	Seasonal low temperature plays an important role in increasing metabolic content of secondary metabolites in Withania somnifera (L.) Dunal and affects the time of harvesting. **2012**, 34, 2027-2031		17
553	A fast and precise method to identify indolic glucosinolates and camalexin in plants by combining mass spectrometric and biological information. **2012**, 60, 8648-58		19
552	Magnitude and timing of leaf damage affect seed production in a natural population of Arabidopsis thaliana (Brassicaceae). **2012**, 7, e30015		22

551	Molecular Genetics of Glucosinolate Biosynthesis in Brassicas: Genetic Manipulation and Application Aspects. **2012**,		4
550	Dietary Phytochemicals and Microbes. **2012**,		28
549	Electron paramagnetic resonance investigation of different plant organs after gamma irradiation. **2012**, 55, 237-240		6
548	Sulfur-containing secondary metabolites from Arabidopsis thaliana and other Brassicaceae with function in plant immunity. **2012**, 13, 1846-59		54
547	Species-specific responses of herbivores to within-plant and environmentally mediated between-plant variability in plant chemistry. **2012**, 22, 101-111		57
546	Relationships between nitrogen, dry matter accumulation and glucosinolates in Eruca sativa Mills. The applicability of the critical NO3-N levels approach. **2012**, 354, 347-358		11
545	Effect of salt treatment on the glucosinolate-myrosinase system in Thellungiella salsuginea. **2012**, 355, 363-374		28
544	Possible evolution of alliarinoside biosynthesis from the glucosinolate pathway in Alliaria petiolata. **2012**, 279, 1545-62		15
543	Mass spectrometry imaging of glucosinolates in Arabidopsis flowers and siliques. *Phytochemistry*, **2012**, 77, 110-8	4	40
542	Glucosinolate structures in evolution. *Phytochemistry*, **2012**, 77, 16-45	4	345
541	Expression pattern of the glucosinolate side chain biosynthetic genes MAM1 and MAM3 of Arabidopsis thaliana in different organs and developmental stages. **2012**, 53, 77-83		19
540	Responses of Arabidopsis thaliana plant lines differing in hydroxylation of aliphatic glucosinolate side chains to feeding of a generalist and specialist caterpillar. **2012**, 55, 52-9		22
539	Engineering of benzylglucosinolate in tobacco provides proof-of-concept for dead-end trap crops genetically modified to attract Plutella xylostella (diamondback moth). **2012**, 10, 435-42		43
538	Ecotype dependent expression and alternative splicing of epithiospecifier protein (ESP) in Arabidopsis thaliana. **2012**, 78, 361-75		14
537	Molecular cloning and expression of squalene synthase and 2,3-oxidosqualene cyclase genes in persimmon (Diospyros kaki L.) fruits. **2012**, 39, 1125-32		4
536	Effects of sulfur fertilization on the accumulation of health-promoting phytochemicals in radish sprouts. **2013**, 61, 7552-9		17
535	The emerging field of transport engineering of plant specialized metabolites. **2013**, 24, 263-70		52
534	Variation in glucosinolates in pak choi cultivars and various organs at different stages of vegetative growth during the harvest period. **2013**, 14, 309-17		17

533	Interaction of glucosinolate content of Arabidopsis thaliana mutant lines and feeding and oviposition by generalist and specialist lepidopterans. *Phytochemistry*, **2013**, 86, 36-43	4	35
532	Legume Genomics. **2013**,		4
531	Hairy roots, callus, and mature plants of Arabidopsis thaliana exhibit distinct glucosinolate and gene expression profiles. **2013**, 115, 45-54		15
530	Making new molecules--evolution of structures for novel metabolites in plants. *Current Opinion in Plant Biology*, **2013**, 16, 112-7	9.9	38
529	Plant metabolomics: from experimental design to knowledge extraction. **2013**, 1069, 279-312		6
528	Horseradish (Armoracia rusticana), a neglected medical and condiment species with a relevant glucosinolate profile: a review. **2013**, 60, 1923-1943		38
527	Genotypic variation of the glucosinolate profile in pak choi (Brassica rapa ssp. chinensis). **2013**, 61, 1943-53		58
526	Use of Metabolomics and Transcriptomics to Gain Insights into the Regulation and Biosynthesis of Medicinal Compounds: Hypericum as a Model. **2013**, 395-411		3
525	Evolution of flux control in the glucosinolate pathway in Arabidopsis thaliana. **2013**, 30, 14-23		43
524	The consequences of alternating diet on performance and food preferences of a specialist leaf beetle. **2013**, 59, 840-7		22
523	Desulfo-glucosinolate sulfotransferases isolated from several Arabidopsis thaliana ecotypes differ in their sequence and enzyme kinetics. **2013**, 63, 15-23		8
522	Ozone fumigation results in accelerated growth and persistent changes in the antioxidant system of Brassica oleracea L. var. capitata f. alba. **2013**, 170, 1259-66		19
521	Could abiotic environment shape fleshy fruit traits? A field study of the desert shrub Ochradenus baccatus. **2013**, 92, 34-41		14
520	Effects of phytohormones and jasmonic acid on glucosinolate content in hairy root cultures of Sinapis alba and Brassica rapa. **2013**, 169, 624-35		39
519	Arabidopsis wat1 (walls are thin1)-mediated resistance to the bacterial vascular pathogen, Ralstonia solanacearum, is accompanied by cross-regulation of salicylic acid and tryptophan metabolism. **2013**, 73, 225-39		85
518	Plant chemical defense: at what cost?. **2013**, 18, 250-8		212
517	Evaluation of glucosinolate variation in a collection of turnip (Brassica rapa) germplasm by the analysis of intact and desulfo glucosinolates. **2013**, 61, 3984-93		44
516	Patterns of secondary metabolite allocation to fruits and seeds in Piper reticulatum. **2013**, 39, 1373-84		26

515	High-resolution metabolic mapping of cell types in plant roots. **2013**, 110, E1232-41		102
514	Glucose signalling positively regulates aliphatic glucosinolate biosynthesis. **2013**, 64, 1097-109		64
513	Diurnal and light regulation of sulphur assimilation and glucosinolate biosynthesis in Arabidopsis. **2013**, 64, 1039-48		103
512	Homoeologous GSL-ELONG gene replacement for manipulation of aliphatic glucosinolates in Brassica rapa L. by marker assisted selection. *Frontiers in Plant Science*, **2013**, 4, 55	6.2	6
511	The physiological importance of glucosinolates on plant response to abiotic stress in Brassica. *International Journal of Molecular Sciences*, **2013**, 14, 11607-25	6.3	200
510	Induced production of 1-methoxy-indol-3-ylmethyl glucosinolate by jasmonic acid and methyl jasmonate in sprouts and leaves of pak choi (Brassica rapa ssp. chinensis). *International Journal of Molecular Sciences*, **2013**, 14, 14996-5016	6.3	58
509	PRIMe Update: innovative content for plant metabolomics and integration of gene expression and metabolite accumulation. **2013**, 54, e5		72
508	Four genes encoding MYB28, a major transcriptional regulator of the aliphatic glucosinolate pathway, are differentially expressed in the allopolyploid Brassica juncea. **2013**, 64, 4907-21		50
507	A trio of viral proteins tunes aphid-plant interactions in Arabidopsis thaliana. **2013**, 8, e83066		49
506	Genetic regulation of glucoraphanin accumulation in Beneforté broccoli. *New Phytologist*, **2013**, 198, 1085-1095	9.8	87
505	Targeted silencing of BjMYB28 transcription factor gene directs development of low glucosinolate lines in oilseed Brassica juncea. **2013**, 11, 855-66		58
504	Integration of biosynthesis and long-distance transport establish organ-specific glucosinolate profiles in vegetative Arabidopsis. **2013**, 25, 3133-45		109
503	Drought-induced trans-generational tradeoff between stress tolerance and defence: consequences for range limits?. **2013**, 5, plt038		15
502	Proteome analysis of peroxisomes from etiolated Arabidopsis seedlings identifies a peroxisomal protease involved in β-oxidation and development. **2013**, 163, 1518-38		48
501	The Critical Assessment of Small Molecule Identification (CASMI): Challenges and Solutions. **2013**, 3, 517-38		25
500	Glucosinolates in Two Endemic Plants of the Aurinia Genus and their Chemotaxonomic Significance. **2013**, 8, 1934578X1300801		4
499	The small subunit 1 of the Arabidopsis isopropylmalate isomerase is required for normal growth and development and the early stages of glucosinolate formation. **2014**, 9, e91071		16
498	Identification of metabolic QTLs and candidate genes for glucosinolate synthesis in Brassica oleracea leaves, seeds and flower buds. **2014**, 9, e91428		36

497	Insect attraction versus plant defense: young leaves high in glucosinolates stimulate oviposition by a specialist herbivore despite poor larval survival due to high saponin content. **2014**, 9, e95766		58
496	. **2014**,		12
495	Upon bolting the GTR1 and GTR2 transporters mediate transport of glucosinolates to the inflorescence rather than roots. **2014**, 9, e27740		24
494	The multi-protein family of sulfotransferases in plants: composition, occurrence, substrate specificity, and functions. *Frontiers in Plant Science*, **2014**, 5, 556	6.2	64
493	ER bodies in plants of the Brassicales order: biogenesis and association with innate immunity. *Frontiers in Plant Science*, **2014**, 5, 73	6.2	72
492	Elucidating the role of transport processes in leaf glucosinolate distribution. **2014**, 166, 1450-62		48
491	Influence of cultivar and fertilizer approach on curly kale (Brassica oleracea L. var. sabellica). 1. Genetic diversity reflected in agronomic characteristics and phytochemical concentration. **2014**, 62, 11393-402		18
490	Reaktivitt und Stabilitt von Glucosinolaten und ihren Abbauprodukten in Lebensmitteln. **2014**, 126, 11614-11635		17
489	Linking phytochrome to plant immunity: low red´:´far-red ratios increase Arabidopsis susceptibility to Botrytis cinerea by reducing the biosynthesis of indolic glucosinolates and camalexin. *New Phytologist*, **2014**, 204, 342-54	9.8	47
488	Exploring the Arabidopsis sulfur metabolome. **2014**, 77, 31-45		47
487	The metabolism of methylsulfinylalkyl- and methylthioalkyl-glucosinolates by a selection of human gut bacteria. **2014**, 58, 875-83		57
486	Involvement of the electrophilic isothiocyanate sulforaphane in Arabidopsis local defense responses. **2015**, 167, 251-61		33
485	Involvement of a glucosinolate (sinigrin) in the regulation of water transport in Brassica oleracea grown under salt stress. **2014**, 150, 145-60		25
484	Topsoil drying combined with increased sulfur supply leads to enhanced aliphatic glucosinolates in Brassica juncea leaves and roots. *Food Chemistry*, **2014**, 152, 190-6	8.5	24
483	Feeding damage by Bagrada hilaris (Hemiptera: Pentatomidae) and impact on growth and chlorophyll content of Brassicaceous plant species. **2014**, 8, 89-100		43
482	Costs of Resistance in Plants: From Theory to Evidence. **2014**, 263-307		79
481	Chemical defenses (glucosinolates) of native and invasive populations of the range expanding invasive plant Rorippa austriaca. **2014**, 40, 363-70		10
480	MYB34, MYB51, and MYB122 distinctly regulate indolic glucosinolate biosynthesis in Arabidopsis thaliana. **2014**, 7, 814-28		195

479	Dynamic proteomics emphasizes the importance of selective mRNA translation and protein turnover during Arabidopsis seed germination. **2014**, 13, 252-68		94
478	Profiling of secondary metabolites in root exudates of Arabidopsis thaliana. *Phytochemistry*, **2014**, 108, 35-46	4	121
477	Developmental changes in leaf phenolics composition from three artichoke cvs. (Cynara scolymus) as determined via UHPLC-MS and chemometrics. *Phytochemistry*, **2014**, 108, 67-76	4	29
476	Sinigrin and sinalbin quantification in mustard seed using high performance liquid chromatographyâ□time-of-flight mass spectrometry. **2014**, 35, 120-126		14
475	Evaluating extraction conditions of glucosinolate hydrolytic products from seeds of Eruca sativa (Mill.) Thell. using GC-MS. **2014**, 79, C1964-9		17
474	Glucosinolate-related glucosides in Alliaria petiolata: sources of variation in the plant and different metabolism in an adapted specialist herbivore, Pieris rapae. **2014**, 40, 1063-79		19
473	Variation in nickel accumulation in leaves, reproductive organs and floral rewards in two hyperaccumulating Brassicaceae species. **2014**, 383, 349-356		19
472	Reactivity and stability of glucosinolates and their breakdown products in foods. **2014**, 53, 11430-50		188
471	bHLH05 is an interaction partner of MYB51 and a novel regulator of glucosinolate biosynthesis in Arabidopsis. **2014**, 166, 349-69		71
470	Pronounced effects of slug herbivory on seedling recruitment of Brassica cultivars and accessions, especially those with low levels of aliphatic glucosinolates. **2014**, 15, 607-615		11
469	DELLA proteins modulate Arabidopsis defences induced in response to caterpillar herbivory. **2014**, 65, 571-83		28
468	Glucosinolate profile and distribution among plant tissues and phenological stages of field-grown horseradish. *Phytochemistry*, **2014**, 106, 178-187	4	37
467	A Multi-Layered Screening Method to Identify Plant Regulatory Genes. **2014**, 11, 293-303		0
466	Biofumigation potential of Brassicaceae cultivars to Verticillium dahliae. **2014**, 140, 341-352		42
465	Evolution in an ancient detoxification pathway is coupled with a transition to herbivory in the drosophilidae. **2014**, 31, 2441-56		67
464	Functional identification of genes responsible for the biosynthesis of 1-methoxy-indol-3-ylmethyl-glucosinolate in Brassica rapa ssp. chinensis. **2014**, 14, 124		14
463	Concentration- and time-dependent effects of isothiocyanates produced from Brassicaceae shoot tissues on the pea root rot pathogen Aphanomyces euteiches. **2014**, 62, 4584-91		10
462	Effect of 2, 4-epibrassinolide on main health-promoting compounds in broccoli sprouts. **2014**, 58, 287-292		15

461	Glucoraphanin, sulforaphane and myrosinase activity in germinating broccoli sprouts as affected by growth temperature and plant organs. **2014**, 9, 70-77		68
460	Split dose fertilization with urea increases glucosinolate contents in white cabbage (Brassica oleracea L. var. capitata) under experimental pot conditions. **2014**, 168, 64-72		7
459	Metabolomic profiling and antioxidant activity of some Acacia species. **2014**, 21, 400-8		37
458	The role of glucosinolates and the jasmonic acid pathway in resistance of Arabidopsis thaliana against molluscan herbivores. **2014**, 23, 1188-1203		58
457	Elicitation: a tool for enriching the bioactive composition of foods. **2014**, 19, 13541-63		187
456	Sequential light programs shape kale (Brassica napus) sprout appearance and alter metabolic and nutrient content. **2014**, 1, 8		40
455	Effects of abscisic acid on glucosinolate content, isothiocyanate formation and myrosinase activity in cabbage sprouts. **2015**, 50, 1839-1846		11
454	Collard landraces are novel sources of glucoraphanin and other aliphatic glucosinolates. **2015**, 134, 350-355		6
453	Metabolomics Based on UPLC-QTOF/MS Applied for the Discrimination of Cynanchum wilfordii and Cynanchum auriculatum. **2015**, 05,		2
452	Comparison of Glucosinolate Profiles in Different Tissues of Nine Brassica Crops. **2015**, 20, 15827-41		88
451	The conserved transcription factors, MYB115 and MYB118, control expression of the newly evolved benzoyloxy glucosinolate pathway in Arabidopsis thaliana. *Frontiers in Plant Science*, **2015**, 6, 343	6.2	24
450	The impact of the absence of aliphatic glucosinolates on water transport under salt stress in Arabidopsis thaliana. *Frontiers in Plant Science*, **2015**, 6, 524	6.2	38
449	Allelopathic effects of glucosinolate breakdown products in Hanza [Boscia senegalensis (Pers.) Lam.] processing waste water. *Frontiers in Plant Science*, **2015**, 6, 532	6.2	8
448	Investigation of the multifunctional gene AOP3 expands the regulatory network fine-tuning glucosinolate production in Arabidopsis. *Frontiers in Plant Science*, **2015**, 6, 762	6.2	10
447	Atmospheric H2S and SO2 as sulfur source for Brassica juncea and Brassica rapa: impact on the glucosinolate composition. *Frontiers in Plant Science*, **2015**, 6, 924	6.2	13
446	Diversified glucosinolate metabolism: biosynthesis of hydrogen cyanide and of the hydroxynitrile glucoside alliarinoside in relation to sinigrin metabolism in Alliaria petiolata. *Frontiers in Plant Science*, **2015**, 6, 926	6.2	19
445	Phytochemical variation: How to resolve the quality controversies of herbal medicinal products?. **2015**, 5, 118-127		29
444	Metal hyperaccumulation in Brassicaceae mediates defense against herbivores in the field and improves growth. **2015**, 157, 3-10		24

443	Three genes encoding AOP2, a protein involved in aliphatic glucosinolate biosynthesis, are differentially expressed in Brassica rapa. **2015**, 66, 6205-18		21
442	The IDA/IDA-LIKE and PIP/PIP-LIKE gene families in Arabidopsis: phylogenetic relationship, expression patterns, and transcriptional effect of the PIPL3 peptide. **2015**, 66, 5351-65		45
441	Glucosinolates in seeds, sprouts and seedlings of cabbage and black radish as sources of bioactive compounds. **2015**, 95, 681-687		2
440	Isolation and identification of 4-□hamnosyloxy benzyl glucosinolate in Noccaea caerulescens showing intraspecific variation. *Phytochemistry*, **2015**, 110, 166-71	4	33
439	Ecotype variability in growth and secondary metabolite profile in Moringa oleifera: impact of sulfur and water availability. **2015**, 63, 2852-61		43
438	Quantification of plant surface metabolites by matrix-assisted laser desorption-ionization mass spectrometry imaging: glucosinolates on Arabidopsis thaliana leaves. **2015**, 81, 961-72		55
437	Within-plant distribution of 1,4-benzoxazin-3-ones contributes to herbivore niche differentiation in maize. *Plant, Cell and Environment*, **2015**, 38, 1081-93	8.4	36
436	Isatis canescens is a rich source of glucobrassicin and other health-promoting compounds. **2015**, 95, 158-64		11
435	Evaluating the impact of sprouting conditions on the glucosinolate content of Brassica oleracea sprouts. *Phytochemistry*, **2015**, 115, 252-60	4	40
434	Transcriptional networks governing plant metabolism. **2015**, 3-4, 56-64		24
433	Plant defence mechanisms and enzymatic transformation products and their potential applications in food preservation: Advantages and limitations. **2015**, 46, 49-59		20
432	Auxin and Tryptophan Homeostasis Are Facilitated by the ISS1/VAS1 Aromatic Aminotransferase in Arabidopsis. **2015**, 201, 185-99		12
431	Plant defence responses in oilseed rape MINELESS plants after attack by the cabbage moth Mamestra brassicae. **2015**, 66, 579-92		16
430	Bioactive maca (Lepidium meyenii) alkamides are a result of traditional Andean postharvest drying practices. *Phytochemistry*, **2015**, 116, 138-148	4	62
429	Genomic origin, expression differentiation and regulation of multiple genes encoding CYP83A1, a key enzyme for core glucosinolate biosynthesis, from the allotetraploid Brassica juncea. **2015**, 241, 651-65		17
428	Quantitative evaluation of IAA conjugate pools in Arabidopsis thaliana. **2015**, 241, 539-48		10
427	Suppression of Verticillium dahliae by glucosinolate-containing seed meal amendments. **2015**, 142, 239-249		10
426	The cytosolic branched-chain aminotransferases of Arabidopsis thaliana influence methionine supply, salvage and glucosinolate metabolism. **2015**, 88, 119-31		13

425	The Glucosinolate Biosynthetic Gene AOP2 Mediates Feed-back Regulation of Jasmonic Acid Signaling in Arabidopsis. **2015**, 8, 1201-12		51
424	Transport of defense compounds from source to sink: lessons learned from glucosinolates. **2015**, 20, 508-14		67
423	Coselected genes determine adaptive variation in herbivore resistance throughout the native range of Arabidopsis thaliana. **2015**, 112, 4032-7		77
422	Indole Glucosinolate Biosynthesis Limits Phenylpropanoid Accumulation in Arabidopsis thaliana. **2015**, 27, 1529-46		70
421	Identification, quantification, spatiotemporal distribution and genetic variation of major latex secondary metabolites in the common dandelion (Taraxacum officinale agg.). *Phytochemistry*, **2015**, 115, 89-98	4	48
420	The Formation, Structure and Activity of Phytochemicals. **2015**,		2
419	Substantial reprogramming of the Eutrema salsugineum (Thellungiella salsuginea) transcriptome in response to UV and silver nitrate challenge. **2015**, 15, 137		17
418	Metabolic Analysis of Sulfur Metabolism During Leaf Senescence. **2015**, 99-105		0
417	Metabolism of Glucosinolates and Their Hydrolysis Products in Insect Herbivores. **2015**, 163-194		9
416	Deciphering priming-induced improvement of rapeseed (Brassica napus L.) germination through an integrated transcriptomic and proteomic approach. **2015**, 231, 94-113		93
415	The Effects of Conventional and Non-conventional Processing on Glucosinolates and Its Derived Forms, Isothiocyanates: Extraction, Degradation, and Applications. **2015**, 7, 357-381		170
414	Decreased sulforaphene concentration and reduced myrosinase activity of radish (Raphanus sativus L.) root during cold storage. **2015**, 100, 219-225		26
413	Metabolic Engineering of Aliphatic Glucosinolates in Hairy Root Cultures of Arabidopsis thaliana. **2015**, 33, 598-608		11
412	Quantitative Trait Loci Mapping and Candidate Gene Identification for Seed Glucosinolates in Brassica rapa L.. **2016**, 56, 942-956		3
411	Arabidopsis Myrosinase Genes AtTGG4 and AtTGG5 Are Root-Tip Specific and Contribute to Auxin Biosynthesis and Root-Growth Regulation. *International Journal of Molecular Sciences*, **2016**, 17,	6.3	25
410	Insect Detoxification of Glucosinolates and Their Hydrolysis Products. **2016**, 80, 199-245		33
409	Complex Environments Interact With Plant Development to Shape Glucosinolate Profiles. **2016**, 80, 15-30		12
408	Effect of Drought on Herbivore-Induced Plant Gene Expression: Population Comparison for Range Limit Inferences. *Plants*, **2016**, 5,	4.5	4

407	The Lipopolysaccharide-Induced Metabolome Signature in Arabidopsis thaliana Reveals Dynamic Reprogramming of Phytoalexin and Phytoanticipin Pathways. **2016**, 11, e0163572		21
406	Augmenting Sulfur Metabolism and Herbivore Defense in Arabidopsis by Bacterial Volatile Signaling. *Frontiers in Plant Science*, **2016**, 7, 458	6.2	55
405	Modification of Leaf Glucosinolate Contents in Brassica oleracea by Divergent Selection and Effect on Expression of Genes Controlling Glucosinolate Pathway. *Frontiers in Plant Science*, **2016**, 7, 1012	6.2	15
404	Fire and Brimstone: Molecular Interactions between Sulfur and Glucosinolate Biosynthesis in Model and Crop Brassicaceae. *Frontiers in Plant Science*, **2016**, 7, 1735	6.2	17
403	NSP-Dependent Simple Nitrile Formation Dominates upon Breakdown of Major Aliphatic Glucosinolates in Roots, Seeds, and Seedlings of Columbia-0. *Frontiers in Plant Science*, **2016**, 7, 1821	6.2	34
402	Differential induction of plant chemical defenses by parasitized and unparasitized herbivores: consequences for reciprocal, multitrophic interactions. **2016**, 125, 1398-1407		29
401	Diamondback moth performance and preference for leaves of Brassica oleracea of different ages and strata. **2016**, 140, 627-635		17
400	Effect of growth temperature on glucosinolate profiles in Arabidopsis thaliana accessions. *Phytochemistry*, **2016**, 130, 106-18	4	16
399	Aversion and attraction to harmful plant secondary compounds jointly shape the foraging ecology of a specialist herbivore. **2016**, 6, 3256-68		16
398	Glucosinolate Breakdown. **2016**, 125-169		42
397	Automation of chemical assignment for identifying molecular formula of S-containing metabolites by combining metabolomics and chemoinformatics with 34S labeling. **2016**, 12, 1		8
396	Cell wall composition and penetration resistance against the fungal pathogen Colletotrichum higginsianum are affected by impaired starch turnover in Arabidopsis mutants. **2017**, 68, 701-713		24
395	Glucose enhances indolic glucosinolate biosynthesis without reducing primary sulfur assimilation. **2016**, 6, 31854		27
394	The N-end rule pathway regulates pathogen responses in plants. **2016**, 6, 26020		30
393	Intraspecific variation in defense against a generalist lepidopteran herbivore in populations of Eruca sativa (Mill.). **2016**, 6, 363-74		9
392	Sulforaphene identified from radish (Raphanus sativus L.) seeds possesses antimicrobial properties against multidrug-resistant bacteria and methicillin-resistant Staphylococcus aureus. **2016**, 24, 131-141		16
391	Dynamics of glucosinolate-myrosinase system during Plutella xylostella interaction to a novel host Lepidium latifolium L. **2016**, 250, 1-9		5
390	Something in the air? The impact of volatiles on mollusc attack of oilseed rape seedlings. **2016**, 117, 1073-82		9

389	Comparative analysis of MYB28 homologs and development of a MYB28-specific marker in Brassica napus L.. **2016**, 36, 1		3
388	Different Narrow-Band Light Ranges Alter Plant Secondary Metabolism and Plant Defense Response to Aphids. **2016**, 42, 989-1003		20
387	Spatio-Temporal Variation of Terpenoids in Wild Plants of Pentalinon´andrieuxii. **2016**, 13, 1521-1526		3
386	Major effects of glucosinolates and minor effects of erucic acid on predation of Brassica seeds by mice. **2016**, 17, 706-713		0
385	Effects of light-emitting diode treatments on Brevicoryne brassicae performance mediated by secondary metabolites in Brussels sprouts. **2016**, 123, 321-330		14
384	Glucosinolates from Host Plants Influence Growth of the Parasitic Plant Cuscuta gronovii and Its Susceptibility to Aphid Feeding. **2016**, 172, 181-97		30
383	Rhizosecretion of stele-synthesized glucosinolates and their catabolites requires GTR-mediated import in Arabidopsis. **2017**, 68, 3205-3214		15
382	Analysis and Quantification of Glucosinolates. **2016**, 1, 385-409		28
381	Glucosinolate diversity within a phylogenetic framework of the tribe´Cardamineae (Brassicaceae) unraveled with HPLC-MS/MS and´NMR-based analytical distinction of 70 desulfoglucosinolates. *Phytochemistry*, **2016**, 132, 33-56	4	42
380	Transcriptome and Metabolite analysis reveal candidate genes of the cardiac glycoside biosynthetic pathway from Calotropis procera. **2016**, 6, 34464		32
379	Methyl Transfer in Glucosinolate Biosynthesis Mediated by Indole Glucosinolate O-Methyltransferase 5. **2016**, 172, 2190-2203		32
378	Is protection against florivory consistent with the optimal defense hypothesis?. **2016**, 16, 32		17
377	Effect of atmospheric carbon dioxide levels and nitrate fertilization on glucosinolate biosynthesis in mechanically damaged Arabidopsis plants. **2016**, 16, 68		11
376	Influence of nitrogen and sulfur fertilization on glucosinolate content and composition of horseradish plants harvested at different developmental stages. **2016**, 38, 1		6
375	Pathogen-Responsive MPK3 and MPK6 Reprogram the Biosynthesis of Indole Glucosinolates and Their Derivatives in Arabidopsis Immunity. **2016**, 28, 1144-62		82
374	Regulatory and Functional Aspects of Indolic Metabolism in Plant Systemic Acquired Resistance. **2016**, 9, 662-681		40
373	Glucosinolates in broccoli (Brassica oleracea L. var. italica) as affected by postharvest temperature and radiation treatments. **2016**, 116, 16-25		39
372	A mode of action of glucosinolate-derived isothiocyanates: Detoxification depletes glutathione and cysteine levels with ramifications on protein metabolism in Spodoptera littoralis. **2016**, 71, 37-48		46

371	The rolB gene activates secondary metabolism in Arabidopsis calli via selective activation of genes encoding MYB and bHLH transcription factors. **2016**, 102, 70-9		24
370	Glucosinolate Desulfation by the Phloem-Feeding Insect Bemisia tabaci. **2016**, 42, 230-5		27
369	Root Glucosinolate Profiles for Screening of Radish (Raphanus sativus L.) Genetic Resources. **2016**, 64, 61-70		27
368	Nitrogen split dose fertilization, plant age and frost effects on phytochemical content and sensory properties of curly kale (Brassica oleracea L. var. sabellica). *Food Chemistry*, **2016**, 197, 530-8	8.5	19
367	Frugal chemoprevention: targeting Nrf2 with foods rich in sulforaphane. **2016**, 43, 146-153		90
366	Effects of light quality on main health-promoting compounds and antioxidant capacity of Chinese kale sprouts. *Food Chemistry*, **2016**, 196, 1232-8	8.5	101
365	Jasmonate response decay and defense metabolite accumulation contributes to age-regulated dynamics of plant insect resistance. **2017**, 8, 13925		111
364	Mild osmotic stress promotes 4-methoxy indolyl-3-methyl glucosinolate biosynthesis mediated by the MKK9-MPK3/MPK6 cascade in Arabidopsis. **2017**, 36, 543-555		11
363	KEAP1 and Done? Targeting the NRF2 Pathway with Sulforaphane. **2017**, 69, 257-269		128
362	Evolutionary responses to climate change in a range expanding plant. **2017**, 184, 543-554		13
361	Root and shoot glucosinolate allocation patterns follow optimal defence allocation theory. **2017**, 105, 1256-1266		24
360	Biosynthesis and bioactivity of glucosinolates and their production in plant in vitro cultures. **2017**, 246, 19-32		37
359	Brassica aphid (Hemiptera: Aphididae) populations are conditioned by climatic variables and parasitism level: a study case of Tri□gulo Mineiro, Brazil. **2017**, 107, 410-418		15
358	Metabolic profiling of glucosinolates and their hydrolysis products in a germplasm collection of Brassica rapa turnips. **2017**, 100, 392-403		39
357	Developmental age and UV-B exposure co-determine antioxidant capacity and flavonol accumulation in Arabidopsis leaves. **2017**, 140, 19-25		29
356	Regulation of Glucosinolate Metabolism: From Model Plant Arabidopsis thaliana to Brassica Crops. **2017**, 163-199		8
355	How does a plant orchestrate defense in time and space? Using glucosinolates in Arabidopsis as case study. *Current Opinion in Plant Biology*, **2017**, 38, 142-147	9.9	72
354	A Generalist Herbivore Copes with Specialized Plant Defence: the Effects of Induction and Feeding by Helicoverpa armigera (Lepidoptera: Noctuidae) Larvae on Intact Arabidopsis thaliana (Brassicales) Plants. **2017**, 43, 608-616		12

353	Albugo-imposed changes to tryptophan-derived antimicrobial metabolite biosynthesis may contribute to suppression of non-host resistance to Phytophthora infestans in Arabidopsis thaliana. **2017**, 15, 20		20
352	Exploring growth-defence trade-offs in Arabidopsis: phytochrome B inactivation requires JAZ10 to suppress plant immunity but not to trigger shade-avoidance responses. *Plant, Cell and Environment*, **2017**, 40, 635-644	8.4	35
351	Changes in rocket salad phytochemicals within the commercial supply chain: Glucosinolates, isothiocyanates, amino acids and bacterial load increase significantly after processing. *Food Chemistry*, **2017**, 221, 521-534	8.5	32
350	Arsenic affects the production of glucosinolate, thiol and phytochemical compounds: A comparison of two Brassica cultivars. **2017**, 111, 144-154		23
349	Sulforaphene in Raphanus sativus L. var. caudatus Alef increased in late-bolting stage as well as anticancer activity. **2017**, 7, 998-1004		9
348	Gamma radiation treatment activates glucomoringin synthesis in Moringa oleifera. **2017**, 27, 569-575		5
347	Plants are Not Sitting Ducks: Teaching Module on Plant Biochemical Interactions with Insects. **2017**, 46, 170001		1
346	Molecular constraints on resistance-tolerance trade-offs. **2017**, 98, 2528-2537		15
345	Translocation of heavy metals from soils into floral organs and rewards of Cucurbita pepo: Implications for plant reproductive fitness. **2017**, 145, 235-243		15
344	Short-term drought and long-term climate legacy affect production of chemical defenses among plant ecotypes. **2017**, 141, 124-131		4
343	Improvement of Glucosinolate in Cruciferous Crops. **2017**, 407-450		
342	A Straightforward Method for Glucosinolate Extraction and Analysis with High-pressure Liquid Chromatography (HPLC). **2017**,		32
341	Metabolic Changes during Storage of Brassica napus Seeds under Moist Conditions and the Consequences for the Sensory Quality of the Resulting Virgin Oil. **2017**, 65, 11073-11084		4
340	Genetic Components of Root Architecture Remodeling in Response to Salt Stress. **2017**, 29, 3198-3213		80
339	Initiation of ER Body Formation and Indole Glucosinolate Metabolism by the Plastidial Retrograde Signaling Metabolite, MEcPP. **2017**, 10, 1400-1416		20
338	Valorization of Vegetable Wastes. **2017**, 53-88		2
337	Feeding behaviour of generalist pests on Brassica juncea: implication for manipulation of glucosinolate biosynthesis pathway for enhanced resistance. *Plant, Cell and Environment*, **2017**, 40, 2109-2120	8.4	12
336	Nutritional compound analysis and morphological characterization of spider plant (Cleome gynandra) - an African indigenous leafy vegetable. **2017**, 100, 284-295		29

335	Effects of salt stress imposed during two growth phases on cauliflower production and quality. **2017**, 97, 1552-1560		22
334	Changes in cytokinins are sufficient to alter developmental patterns of defense metabolites in Nicotiana attenuata. **2017**, 89, 15-30		17
333	PYK10 myrosinase reveals a functional coordination between endoplasmic reticulum bodies and glucosinolates in Arabidopsis thaliana. **2017**, 89, 204-220		72
332	Effects of seed priming, salinity and methyl jasmonate treatment on bioactive composition of Brassica oleracea var. capitata (white and red varieties) sprouts. **2017**, 97, 2291-2299		25
331	Costs of Resistance in Plants: From Theory to Evidence. **2017**, 263-307		10
330	. **2017**,		4
329	Evaluation of the Nutritional Quality of Chinese Kale (Brassica alboglabra Bailey) Using UHPLC-Quadrupole-Orbitrap MS/MS-Based Metabolomics. **2017**, 22,		22
328	Is a Potential Major Regulator of Glucosinolate Content across Developmental Stages of (Brassicaceae). *Frontiers in Plant Science*, **2017**, 8, 876	6.2	14
327	Molecular Characterization of MYB28 Involved in Aliphatic Glucosinolate Biosynthesis in Chinese Kale (var. Bailey). *Frontiers in Plant Science*, **2017**, 8, 1083	6.2	13
326	Isothiocyanates, Nitriles, and Epithionitriles from Glucosinolates Are Affected by Genotype and Developmental Stage in Varieties. *Frontiers in Plant Science*, **2017**, 8, 1095	6.2	63
325	Enriching Glucoraphanin in Through Replacement of with Non-functional Genes. *Frontiers in Plant Science*, **2017**, 8, 1329	6.2	9
324	How Glucosinolates Affect Generalist Lepidopteran Larvae: Growth, Development and Glucosinolate Metabolism. *Frontiers in Plant Science*, **2017**, 8, 1995	6.2	58
323	Glucosinolate-Derived Isothiocyanates Inhibit Arabidopsis Growth and the Potency Depends on Their Side Chain Structure. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	23
322	Rapid Separation of Indole Glucosinolates in Roots of Chinese Cabbage (Subsp. Pekinensis) by High-Performance Liquid Chromatography with Diode Array Detection. **2017**, 2017, 5125329		11
321	Testing the optimal defense hypothesis in nature: Variation for glucosinolate profiles within plants. **2017**, 12, e0180971		18
320	Can narrow-bandwidth light from UV-A to green alter secondary plant metabolism and increase Brassica plant defenses against aphids?. **2017**, 12, e0188522		15
319	The Environmental Fluctuations of some Bioactive Nutraceutical Compounds in Zilla spinosa Inhabiting Arid Habitats. **2017**, 9, 494-502		
318	Origin and evolution of transporter substrate specificity within the NPF family. **2017**, 6,		48

317	Genome-wide nucleotide diversity and associations with geography, ploidy level and glucosinolate profiles in Aethionema arabicum (Brassicaceae). **2018**, 304, 619-630		8
316	Plasticity of plant defense and its evolutionary implications in wild populations of Boechera stricta. **2018**, 72, 1034-1049		21
315	Different vegetative growth stages of Kimchi cabbage (Brassica rapa L.) exhibit specific glucosinolate composition and content. **2018**, 59, 355-362		4
314	Mechanisms of glacial-to-future atmospheric CO effects on plant immunity. *New Phytologist*, **2018**, 218, 752-761	9.8	17
313	Midge (Diptera: Cecidomyiidae) injury to Brassicaceae in field trials in northeastern Saskatchewan, Canada. **2018**, 150, 637-651		3
312	Reduced Arogenate Dehydratase Expression: Ramifications for Photosynthesis and Metabolism. **2018**, 177, 115-131		7
311	Effects of application timing of saline irrigation water on broccoli production and quality. **2018**, 203, 97-104		23
310	Prevention of fungal spoilage in food products using natural compounds: A review. **2018**, 58, 2002-2016		32
309	Impact of chloride (NaCl, KCl) and sulphate (Na2SO4, K2SO4) salinity on glucosinolate metabolism in Brassica rapa. **2018**, 204, 137-146		26
308	Knock-Down of the Phosphoserine Phosphatase Gene Effects Rather N- Than S-Metabolism in. *Frontiers in Plant Science*, **2018**, 9, 1830	6.2	4
307	The Photorespiratory Gene Mutation Alters Sulfur Assimilation and Its Crosstalk With Carbon and Nitrogen Metabolism in. *Frontiers in Plant Science*, **2018**, 9, 1709	6.2	10
306	Iron is a centrally bound cofactor of specifier proteins involved in glucosinolate breakdown. **2018**, 13, e0205755		16
305	Metabolomics of Arabidopsis Thaliana. **2018**, 157-180		0
304	A naturally occurring variation in the gene is associated with aliphatic glucosinolate accumulation in leaves. **2018**, 5, 69		8
303	Production of bioactive cyclotides in somatic embryos of Viola odorata. *Phytochemistry*, **2018**, 156, 135-141	4	9
302	Benzyl Cyanide Leads to Auxin-Like Effects Through the Action of Nitrilases in. *Frontiers in Plant Science*, **2018**, 9, 1240	6.2	9
301	Locally and systemically induced glucosinolates follow optimal defence allocation theory upon root herbivory. *Functional Ecology*, **2018**, 32, 2127-2137	5.6	9
300	Chemistry of Himalayan Phytochemicals. **2018**, 121-166		8

299	The Effect of Single and Multiple SERAT Mutants on Serine and Sulfur Metabolism. *Frontiers in Plant Science*, **2018**, 9, 702	6.2	6
298	Elevated CO and O alter the feeding efficiency of Acyrthosiphon pisum and Aphis craccivora via changes in foliar secondary metabolites. **2018**, 8, 9964		7
297	Insecticidal properties of Solanum nigrum and Armoracia rusticana extracts on reproduction and development of Drosophila melanogaster. **2018**, 162, 454-463		9
296	Challenges in Optimal Utilization of Bioactive Molecules Clinically. **2018**, 1-28		
295	Genotypic Variation of Glucosinolates and Their Breakdown Products in Leaves of Brassica rapa. **2018**, 66, 5481-5490		24
294	Extended darkness induces internal turnover of glucosinolates in Arabidopsis thaliana leaves. **2018**, 13, e0202153		11
293	Isothiocyanates from Brassica Vegetables-Effects of Processing, Cooking, Mastication, and Digestion. **2018**, 62, e1701069		45
292	Food Sources of Antidiabetic Phenolic Compounds. **2019**, 45-82		1
291	A highly resolved food web for insect seed predators in a species-rich tropical forest. **2019**, 22, 1638-1649		23
290	Sequence analysis of BocAOP2.1 gene in cabbage. **2019**,		
289	Role of Phenolic Phytochemicals in Diabetes Management. **2019**,		3
288	Compatibility Potential of Brassica Species and Mustard Seed Meal with Pseudomonas fluorescens for Biological Control of Soilborne Plant Diseases. **2019**, 217-231		1
287	Individual and interactive effects of herbivory on plant fitness: endopolyploidy as a driver of genetic variation in tolerance and resistance. **2019**, 190, 847-856		5
286	Exploring the basis of 2-propenyl and 3-butenyl glucosinolate synthesis by QTL mapping and RNA-sequencing in Brassica juncea. **2019**, 14, e0220597		4
285	The Biosynthesis of Glucosinolates: Insights, Inconsistencies, and Unknowns. **2019**, 969-1000		6
284	Nutritional Quality Improvement in Plants. **2019**,		1
283	Induced production of indol-3-ylmethyl glucosinolates in hairy roots of Chinese cabbage (Brassica rapa subsp. pekinensis): perspectives to enhance the content of bioactive compounds. **2019**, 49-56		1
282	Glucosinolate Content in Dormant and Germinating Seeds Is Affected by Non-Functional Alleles of Classical Myrosinase and Nitrile-Specifier Protein Genes. *Frontiers in Plant Science*, **2019**, 10, 1549	6.2	10

281	Evolutionary constraint on low elevation range expansion: Defense-abiotic stress-tolerance trade-off in crosses of the ecological model. **2019**, 9, 11532-11544		7
280	Natural Variation of Glucosinolates and Their Breakdown Products in Broccoli (var) Seeds. **2019**, 67, 12528-12537		18
279	Negative Regulation of Age-Related Developmental Leaf Senescence by the IAOx Pathway, PEN1, and PEN3. *Frontiers in Plant Science*, **2019**, 10, 1202	6.2	2
278	Metabolic Changes and Increased Levels of Bioactive Compounds in White Radish (Raphanus sativus L. cv. 01) Sprouts Elicited by Oligochitosan. **2019**, 9, 467		6
277	Correction to: Aphid-induction of defence-related metabolites in Arabidopsis thaliana is dependent upon density, aphid species and duration of infestation. **2019**, 13, 805-806		
276	Leaf metabolic signatures induced by real and simulated herbivory in black mustard (Brassica nigra). **2019**, 15, 130		13
275	Atypical Myrosinase as a Mediator of Glucosinolate Functions in Plants. *Frontiers in Plant Science*, **2019**, 10, 1008	6.2	26
274	Challenges in Optimal Utilization of Bioactive Molecules Clinically. **2019**, 109-136		3
273	Leaf Endoplasmic Reticulum Bodies Identified in Arabidopsis Rosette Leaves Are Involved in Defense against Herbivory. **2019**, 179, 1515-1524		34
272	Effects of 5-aminolevulinic Acid on the Bioactive Compounds and Seedling Growth of Oilseed Rape (Brassica napus L.). **2019**, 62, 181-194		3
271	Genetic architecture of glucosinolate variation in Brassica napus. **2019**, 240, 152988		19
270	The Structure and Function of Major Plant Metabolite Modifications. **2019**, 12, 899-919		103
269	Glucosinolate variability between turnip organs during development. **2019**, 14, e0217862		6
268	Chemodiversity of the Glucosinolate-Myrosinase System at the Single Cell Type Resolution. *Frontiers in Plant Science*, **2019**, 10, 618	6.2	25
267	Glucosinolate Distribution in the Aerial Parts of , a Disruption Mutant of the Sulfate Transporter SULTR1;2, in Mature Plants. *Plants*, **2019**, 8,	4.5	6
266	Remobilization and fate of sulphur in mustard. **2019**, 124, 471-480		4
265	The Ca Channel CNGC19 Regulates Arabidopsis Defense Against Spodoptera Herbivory. **2019**, 31, 1539-1562		52
264	[Biosynthesis of indole glucosinolates and ecological role of secondary modification pathways]. **2019**, 342, 58-80		1

263	Effects of light conditions on growth and defense compound contents of Datura inoxia and D. stramonium. **2019**, 132, 473-480		4
262	Postharvest variation of major glucosinolate and their hydrolytic products in Brassicoraphanus âBB1â**2019**, 154, 70-78		11
261	Interspecific Differences in the Larval Performance of Pieris Butterflies (Lepidoptera: Pieridae) Are Associated with Differences in the Glucosinolate Profiles of Host Plants. **2019**, 19,		5
260	Sodium chloride primes JA-independent defense against (Fabricius) larvae in. **2019**, 14, 1607466		3
259	Transcriptional Reprogramming of Defence Pathways by the Entomopathogen Correlates With Resistance Against a Fungal Pathogen but Not Against Insects. **2019**, 10, 615		20
258	Transcriptome reveals the gene expression patterns of sulforaphane metabolism in broccoli florets. **2019**, 14, e0213902		6
257	Postharvest storage and cooking techniques affect the stability of glucosinolates and myrosinase activity of Andean mashua tubers (Tropaeolum tuberosum). **2019**, 54, 2387-2395		5
256	Antagonistic selection and pleiotropy constrain the evolution of plant chemical defenses. **2019**, 73, 947-960		11
255	Methyl jasmonate, salicylic acid and abscisic acid enhance the accumulation of glucosinolates and sulforaphane in radish (Raphanus sativus L.) taproot. **2019**, 250, 159-167		9
254	L.: Glucosinolate Profile and Biological Potential. **2019**, 24,		16
253	Tritrophic metabolism of plant chemical defenses and its effects on herbivore and predator performance. **2019**, 8,		20
252	CIRCADIAN CLOCK-ASSOCIATED1 Controls Resistance to Aphids by Altering Indole Glucosinolate Production. **2019**, 181, 1344-1359		20
251	Scribbling the Cat: A Case of the "Miracle" Plant,. *Plants*, **2019**, 8,	4.5	14
250	Nutrient Levels in Brassicaceae Microgreens Increase Under Tailored Light-Emitting Diode Spectra. *Frontiers in Plant Science*, **2019**, 10, 1475	6.2	25
249	Quantification of Total Glucosinolates and Isothiocyanates for Common Brassicaceous Vegetables Consumed in the US Market Using Cyclocondensation and Thiocyanate Ion Measurement Methods. **2019**, 3, 313-321		4
248	Coordination of Glucosinolate Biosynthesis and Turnover Under Different Nutrient Conditions. *Frontiers in Plant Science*, **2019**, 10, 1560	6.2	21
247	Health-promoting phytochemicals and antioxidant capacity in different organs from six varieties of Chinese kale. **2019**, 9, 20344		18
246	Simultaneous direct determination of 15 glucosinolates in eight Brassica species by UHPLC-Q-Orbitrap-MS. *Food Chemistry*, **2019**, 282, 127-133	8.5	26

245	Relationship between conversion rate of glucosinolates to isothiocyanates/indoles and genotoxicity of individual parts of Brassica vegetables. **2019**, 245, 383-400		13
244	Two-tier morpho-chemical defence tactic in Aethionema via fruit morph plasticity and glucosinolates allocation in diaspores. *Plant, Cell and Environment*, **2019**, 42, 1381-1392	8.4	4
243	Epigenetic mapping of the metabolome reveals mediators of the epigenotype-phenotype map. **2019**, 29, 96-106		13
242	Plant glucosinolate content increases susceptibility to diamondback moth (Lepidoptera: Plutellidae) regardless of its diet. **2020**, 93, 491-506		8
241	Expression profiles of glucosinolate biosynthetic genes in turnip (Brassica rapa var. rapa) at different developmental stages and effect of transformed flavin-containing monooxygenase genes on hairy root glucosinolate content. **2020**, 100, 1064-1071		5
240	Growth and glucosinolate profiles of a common Asian green leafy vegetable, Brassica rapa subsp. chinensis var. parachinensis (choy sum), under LED lighting. **2020**, 261, 108922		16
239	Overexpression of HMG-CoA synthase promotes Arabidopsis root growth and adversely affects glucosinolate biosynthesis. **2020**, 71, 272-289		6
238	Distribution of primary and secondary metabolites among the leaf layers of headed cabbage (Brassica oleracea var. capitata). *Food Chemistry*, **2020**, 312, 126028	8.5	13
237	Regulation of Sugar and Storage Oil Metabolism by Phytochrome during De-etiolation. **2020**, 182, 1114-1129		6
236	Differential partitioning of thiols and glucosinolates between shoot and root in Chinese cabbage upon excess zinc exposure. **2020**, 244, 153088		6
235	Differential expression of major genes involved in the biosynthesis of aliphatic glucosinolates in intergeneric Baemoochae (Brassicaceae) and its parents during development. **2020**, 102, 171-184		13
234	Molecular targets in cancer prevention by 4-(methylthio)butyl isothiocyanate - A comprehensive review. **2020**, 241, 117061		9
233	The dilemma of âgoodâ and âbadâ glucosinolates and the potential to regulate their content. **2020**, 1-45		2
232	Glucosinolate structural diversity, identification, chemical synthesis and metabolism in plants. *Phytochemistry*, **2020**, 169, 112100	4	150
231	Proteomic and metabolic profile analysis of low-temperature storage responses in Ipomoea batata Lam. tuberous roots. **2020**, 20, 435		4
230	The Garden Candytuft (Iberis umbellata L.): At the Crossroad of Copper Accumulation and Glucosinolates. **2020**, 8, 1116		1
229	The Molecular Basis of Host Selection in a Crucifer-Specialized Moth. **2020**, 30, 4476-4482.e5		13
228	Glucosinolate catabolism during postharvest drying determines the ratio of bioactive macamides to deaminated benzenoids in Lepidium meyenii (maca) root flour. *Phytochemistry*, **2020**, 179, 112502	4	1

227	Sequence Analysis of BocAOP2.2 Gene in Cabbage. **2020**, 1549, 032034		
226	Effects of Light-Emitting Diodes on the Accumulation of Phenolic Compounds and Glucosinolates in Brassica juncea Sprouts. **2020**, 6, 77		9
225	Phytochemical and Biological Activity Studies on (Watercress) Microshoot Cultures Grown in RITA Temporary Immersion Systems. **2020**, 25,		7
224	Glucosinolate Biosynthesis and the GlucosinolateâMyrosinase System in Plant Defense. **2020**, 10, 1786		21
223	An Integrated Metabolomics Study of Glucosinolate Metabolism in Different Brassicaceae Genera. **2020**, 10,		6
222	Chemical Priming by Isothiocyanates Protects Against Intoxication by Products of the Mustard Oil Bomb. *Frontiers in Plant Science*, **2020**, 11, 887	6.2	3
221	Glucosinolate Content in Brassica Genetic Resources and Their Distribution Pattern within and between Inner, Middle, and Outer Leaves. *Plants*, **2020**, 9,	4.5	4
220	Morphologically and physiologically diverse fruits of two Lepidium species differ in allocation of glucosinolates into immature and mature seed and pericarp. **2020**, 15, e0227528		1
219	Effect of experimental DNA demethylation on phytohormones production and palatability of a clonal plant after induction via jasmonic acid. **2020**, 129, 1867-1876		1
218	Detoxification of plant defensive glucosinolates by an herbivorous caterpillar is beneficial to its endoparasitic wasp. **2020**, 29, 4014-4031		11
217	Growth, Nutritional Quality and Health-Promoting Compounds in Chinese Kale Grown under Different Ratios of Red:Blue LED Lights. **2020**, 10, 1248		6
216	Identification of MAM1s in Regulation of 3C Glucosinolates Accumulation in Allopolyploid Brassica juncea. **2020**, 6, 409-418		0
215	Sequence Analysis of BocAOP2.3 Gene in Cabbage. **2020**, 1549, 032035		
214	A Comprehensive Gene Inventory for Glucosinolate Biosynthetic Pathway in. **2020**, 68, 7281-7297		25
213	Exploring Uncharted Territories of Plant Specialized Metabolism in the Postgenomic Era. **2020**, 71, 631-658		39
212	Characterization of Arabidopsis CYP79C1 and CYP79C2 by Glucosinolate Pathway Engineering in Shows Substrate Specificity Toward a Range of Aliphatic and Aromatic Amino Acids. *Frontiers in Plant Science*, **2020**, 11, 57	6.2	10
211	In Substrate Recognition and Tissue- as Well as Plastid Type-Specific Expression Define the Roles of Distinct Small Subunits of Isopropylmalate Isomerase. *Frontiers in Plant Science*, **2020**, 11, 808	6.2	1
210	Harvesting at different time-points of day affects glucosinolate metabolism during postharvest storage of broccoli. **2020**, 136, 109529		6

209	Biological Effects of Glucosinolate Degradation Products from Horseradish: A Horse that Wins the Race. **2020**, 10,		13
208	Sulfur Deficiency-Induced Glucosinolate Catabolism Attributed to Two Glucosidases, BGLU28 and BGLU30, is Required for Plant Growth Maintenance under Sulfur Deficiency. **2020**, 61, 803-813		15
207	Glucosinolate Abundance and Composition in Brassicaceae Influence Sequestration in a Specialist Flea Beetle. **2020**, 46, 186-197		9
206	Exploring glucosinolates diversity in Brassicaceae: a genomic and chemical assessment for deciphering abiotic stress tolerance. **2020**, 150, 151-161		10
205	Endoplasmic reticulum-derived bodies enable a single-cell chemical defense in Brassicaceae plants. **2020**, 3, 21		13
204	The dynamic response of the Arabidopsis root metabolome to auxin and ethylene is not predicted by changes in the transcriptome. **2020**, 10, 679		10
203	Microwave-Assisted versus Conventional Isolation of Glucosinolate Degradation Products from L. and Their Cytotoxic Activity. **2020**, 10,		7
202	Performance of cabbage stem flea beetle larvae (Psylliodes chrysocephala) in brassicaceous plants and the effect of glucosinolate profiles. **2020**, 168, 200-208		4
201	Involvement of BGLU30 in Glucosinolate Catabolism in the Arabidopsis Leaf under Dark Conditions. **2020**, 61, 1095-1106		2
200	Molecular authentication and phytochemical assessment of Ruscus hyrcanus Woron. (Asparagaceae) based on trnH- psbA barcoding and HPLC-PDA analysis. **2020**, 25, 101585		2
199	FRS7 and FRS12 recruit NINJA to regulate expression of glucosinolate biosynthesis genes. *New Phytologist*, **2020**, 227, 1124-1137	9.8	7
198	Diverse Allyl Glucosinolate Catabolites Independently Influence Root Growth and Development. **2020**, 183, 1376-1390		10
197	Stability and bioaccessibility during ex vivo digestion of glucoraphenin and glucoraphasatin from Matthiola incana (L.) R. Br.. **2020**, 90, 103483		2
196	Effect of Thermal Processing on Key Phytochemical Compounds in Green Leafy Vegetables: A Review. **2020**, 1-29		9
195	-Derived Anticancer Agents: Towards a Green Approach to Beat Cancer. **2020**, 12,		19
194	Root-type ferredoxin-NADP oxidoreductase isoforms in Arabidopsis thaliana: Expression patterns, location and stress responses. *Plant, Cell and Environment*, **2021**, 44, 548-558	8.4	0
193	Characterization of glucosinolates in 80 broccoli genotypes and different organs using UHPLC-Triple-TOF-MS method. *Food Chemistry*, **2021**, 334, 127519	8.5	18
192	Genome-wide association mapping for key seed metabolites using a large panel of natural and derived forms of Brassica rapa L.. **2021**, 159, 113073		0

191	Effect of temperature and insect herbivory on the regulation of glucosinolate-myrosinase system in Lepidium latifolium. **2021**, 172, 53-63		3
190	Specialized metabolites in seeds. **2021**, 35-70		2
189	Resource allocation strategies among vegetative growth, sexual reproduction, asexual reproduction and defense during growing season of Aconitum kusnezoffii Reichb. **2021**, 105, 957-977		3
188	Evolutionary changes in the glucosinolate biosynthetic capacity in species representing Capsella, Camelina and Neslia genera. *Phytochemistry*, **2021**, 181, 112571	4	6
187	Blue and UV-A light wavelengths positively affected accumulation profiles of healthy compounds in pak-choi. **2021**, 101, 1676-1684		7
186	Full Issue PDF. **2021**, 1, 1-74		
185	Effect of Photoperiod on Chinese Kale () Sprouts Under White or Combined Red and Blue Light. *Frontiers in Plant Science*, **2020**, 11, 589746	6.2	8
184	Quantitative Proteomics and Phosphoproteomics Support a Role for Mut9-Like Kinases in Multiple Metabolic and Signaling Pathways in Arabidopsis. **2021**, 20, 100063		3
183	Distinct Arabidopsis Responses to Two Generalist Caterpillar Species Differing in Host Breadth. **2021**, 1, 21-39		1
182	Effect of different growth stages of rapeseed (brassica rapa L.) on nutrient intake and digestibility, nitrogen balance, and rumen fermentation kinetics in sheep diets. **2021**, 20, 698-706		2
181	Multiple indole glucosinolates and myrosinases defend Arabidopsis against Tetranychus urticae herbivory.		1
180	Environmental Conditions and Agronomical Factors Influencing the Levels of Phytochemicals in Brassica Vegetables Responsible for Nutritional and Sensorial Properties. **2021**, 11, 1927		6
179	ADAP is a possible negative regulator of glucosinolate biosynthesis in Arabidopsis thaliana based on clustering and gene expression analyses. **2021**, 134, 327-339		3
178	Cross-Species Metabolic Profiling of Floral Specialized Metabolism Facilitates Understanding of Evolutional Aspects of Metabolism Among Brassicaceae Species. *Frontiers in Plant Science*, **2021**, 12, 640141	6.2	1
177	Differential glucosinolate profiles of radish leaves in response to postharvest drying treatment. **2021**, 62, 581-592		1
176	Black Rot Disease Decreases Young Brassica oleracea Plantsâ Biomass but Has No Effect in Adult Plants. **2021**, 11, 569		2
175	Engineering and optimization of the 2-phenylethylglucosinolate production in Nicotiana benthamiana by combining biosynthetic genes from Barbarea vulgaris and Arabidopsis thaliana. **2021**, 106, 978-992		1
174	Temperature mitigation strategies in Lepidium latifolium L., a sleeper weed from Ladakh himalayas. **2021**, 184, 104352		

173	Retrograde sulfur flow from glucosinolates to cysteine in. **2021**, 118,		13
172	Adaptations of Plutella xylostella adult females and larvae to waxy host plants. 1		0
171	Jasmonic acid regulating glucosinolates-myrosinase system of cabbage sprouts. **2021**, 86, 197-204		
170	Genetic variation, environment and demography intersect to shape Arabidopsis defense metabolite variation across Europe. **2021**, 10,		10
169	GTR1 and GTR2 transporters differentially regulate tissue-specific glucosinolate contents and defence responses in the oilseed crop Brassica juncea. *Plant, Cell and Environment*, **2021**, 44, 2729-2743	8.4	4
168	Glucosinolate profiles and phylogeny in Barbarea compared to other tribe Cardamineae (Brassicaceae) and Reseda (Resedaceae), based on a library of ion trap HPLC-MS/MS data of reference desulfoglucosinolates. *Phytochemistry*, **2021**, 185, 112658	4	5
167	Bioengineering potato plants to produce benzylglucosinolate for improved broad-spectrum pest and disease resistance. **2021**, 30, 649-660		0
166	Comparison of glucosinolate diversity in the crucifer tribe Cardamineae and the remaining order Brassicales highlights repetitive evolutionary loss and gain of biosynthetic steps. *Phytochemistry*, **2021**, 185, 112668	4	6
165	Herbivore feeding behavior validates optimal defense theory for specialized metabolites within plants.		
164	Metabolic profiling reveals an increase in stress-related metabolites in Arabidopsis thaliana exposed to honeybees. **2021**, 64, 141-151		
163	Water Deficiency and Induced Defense Against a Generalist Insect Herbivore in Desert and Mediterranean Populations of Eruca sativa. **2021**, 47, 768-776		0
162	Multiple indole glucosinolates and myrosinases defend Arabidopsis against Tetranychus urticae herbivory. **2021**, 187, 116-132		2
161	Identification of a Sulfatase that Detoxifies Glucosinolates in the Phloem-Feeding Insect and Prefers Indolic Glucosinolates. *Frontiers in Plant Science*, **2021**, 12, 671286	6.2	3
160	Irrigation timing as a glucosinolate alteration factor in radish (Raphanus sativus L.) (Gya Labuk and Tsentay Labuk) in the Indian Trans-Himalayan region of Ladakh. **2021**, 100, 103904		1
159	Precursor-Boosted Production of Metabolites in Microshoots Grown in Plantform Bioreactors, and Antioxidant and Antimicrobial Activities of Biomass Extracts. **2021**, 26,		1
158	Investigation of glucosinolates in the desert plant Ochradenus baccatus (Brassicales: Resedaceae). Unveiling glucoochradenin, a new arabinosylated glucosinolate. *Phytochemistry*, **2021**, 187, 112760	4	2
157	Modulatory Effect of 4-(methylthio)butyl Isothiocyanate Isolated From Thell. on DMBA Induced Overexpression of Hypoxia and Glycolytic Pathway in Sprague-Dawley Female Rats. **2021**, 12, 728296		0
156	Comparative transcriptomic analyses of glucosinolate metabolic genes during the formation of Chinese kale seeds. **2021**, 21, 394		2

155	Extra-large G-proteins influence plant response to Sclerotinia sclerotiorum by regulating glucosinolate metabolism in Brassica juncea. **2021**, 22, 1180-1194	3
154	Jasmonate signaling restricts root soluble sugar accumulation and drives root-fungus symbiosis loss at flowering by antagonizing gibberellin biosynthesis. **2021**, 309, 110940	3
153	Rapid specialization of counter defenses enables two-spotted spider mite to adapt to novel plant hosts. **2021**, 187, 2608-2622	1
152	Genome- and transcriptome-wide association studies reveal the genetic basis and the breeding history of seed glucosinolate content in Brassica napus. **2021**,	9
151	Structural Studies of Aliphatic Glucosinolate Chain-Elongation Enzymes. **2021**, 10,	0
150	Application and mechanism of benzyl-isothiocyanate, a natural antimicrobial agent from cruciferous vegetables, in controlling postharvest decay of strawberry. **2021**, 180, 111604	2
149	The physiological role of mitochondrial ADNT1 carrier during senescence in Arabidopsis. **2021**, 2, 100019	
148	Glucosinolate variation among organs, growth stages and seasons suggests its dominant accumulation in sexual over asexual-reproductive organs in white radish. **2022**, 291, 110617	3
147	Brassica Vegetables: Rich Sources of Neuroprotective Compounds. **2021**, 327-341	
146	Analytical Methods for Quantification and Identification of Intact Glucosinolates in Arabidopsis Roots Using LC-QqQ(LIT)-MS/MS. **2021**, 11,	4
145	Glucosinolates. 1-8	4
144	Participation of Phytochemicals in Plant Development and Growth. **2009**, 269-279	6
143	Sulfur in biotic interactions of plants. **2007**, 197-224	9
142	Resources for Metabolomics. **2011**, 469-503	2
141	Regulation of Glucosinolate Metabolism: From Model Plant Arabidopsis thaliana to Brassica Crops. **2016**, 1-37	2
140	Sulfotransferases and Their Role in Glucosinolate Biosynthesis. **2008**, 149-166	5
139	At the Crossroads of Metal Hyperaccumulation and Glucosinolates: Is There Anything Out There?. **2010**, 139-161	4
138	Plasticity of plant defense and its evolutionary implications in wild populations of Boechera stricta.	2

137	Rapid specialization of counter defenses enables two-spotted spider mite to adapt to novel plant hosts.	1
136	Growth under high light and elevated temperature affects metabolic responses and accumulation of health-promoting metabolites in kale varieties.	1
135	A systems biology approach identifies a R2R3 MYB gene subfamily with distinct and overlapping functions in regulation of aliphatic glucosinolates. **2007**, 2, e1322	255
134	A topological map of the compartmentalized Arabidopsis thaliana leaf metabolome. **2011**, 6, e17806	84
133	Verticillium suppression is associated with the glucosinolate composition of Arabidopsis thaliana leaves. **2013**, 8, e71877	29
132	Overexpression of Three Glucosinolate Biosynthesis Genes in Brassica napus Identifies Enhanced Resistance to Sclerotinia sclerotiorum and Botrytis cinerea. **2015**, 10, e0140491	32
131	Gene Expression Analysis of Pak Choi in Response to Vernalization. **2015**, 10, e0141446	17
130	Functional metabolomics as a tool to analyze Mediator function and structure in plants. **2017**, 12, e0179640	7
129	Diurnal Variation of Essential of the Oil Components of Pycnocycla spinosa Decne. ex Boiss. **2014**, 9, 35-8	8
128	Composition of Secondary Metabolites in Various Parts of 'Seolhyang' Strawberry Plants. **2013**, 31, 224-230	2
127	Secondary Metabolite Profiling in Various Parts of Tomato Plants. **2014**, 32, 252-260	9
126	An evolutionarily young defense metabolite influences the root growth of plants via the ancient TOR signaling pathway. **2017**, 6,	53
125	Aphid Species and Feeding Location on Canola Influences the Impact of Glucosinolates on a Native Lady Beetle Predator.. **2022**, 51, 52-62	
124	Variation in the Accumulation of Phytochemicals and Their Bioactive Properties among the Aerial Parts of Cauliflower. **2021**, 10,	5
123	Why Fruits and Vegetables Are Good for Health. **2005**, 333-396	
122	Macronutrient Use Efficiency â Sulfur in Arabidopsis thaliana. **2014**, 51-91	1
121	UV-B Elicitation of Secondary Plant Metabolites. **2016**, 387-414	3
120	Glucosinolate biosynthesis and functional roles. **2016**, 157-183	

119	An evolutionarily young defense metabolite influences the root growth of plants via the ancient TOR signaling pathway.	0
118	Feeding location of aphid prey affects life history traits of a native predator.	
117	Development of Brassica Oilseed Crops with Low Antinutritional Glucosinolates and Rich in Anticancer Glucosinolates. **2019**, 271-287	
116	Determination of glucosinolate contents in Brassica germplasm collections and inter- & intra-leaves distribution pattern using UPLC-MS/MS Multiple Reaction Monitoring scan mode.	2
115	Glucosinolates Constituents and Cytotoxic Activities of Lepidium sativum L. Callus Cultures. **2019**, 12, 138-148	0
114	Exploring the basis of 2-propenyl and 3-butenyl glucosinolate synthesis by QTL mapping and RNA-sequencing in Brassica juncea.	
113	Morphologically and physiologically diverse fruits of two Lepidium species differ in allocation of glucosinolates into immature and mature seed and pericarp.	
112	Top-Down Metabolomics Approaches: Nitrogen- and Sulfur-Omics by Ultrahigh-Resolution Fourier Transform Ion Cyclotron Resonance-Mass Spectrometry. **2020**, 138-155	
111	Engineering and optimization of the 2-phenylethylglucosinolate production in Nicotiana benthamiana by combining biosynthetic genes from Barbarea vulgaris and Arabidopsis thaliana.	0
110	Identification of growth inhibitor of Sclerotinia sclerotiorum in Indian mustard leaf. **2020**, 9, 28-36	
109	Protein bodies of the endoplasmic reticulum in Arabidopsis thaliana (Brassicaceae): origin, structural and biochemical features, functional significance. **2020**, 77, 480-494	
108	Tissue-specific distribution of primary and secondary metabolites of Baemoochae (Brassicoraphanus) and its changes as a function of developmental stages. **2021**, 150, 110796	1
107	The Arabidopsis electron-transfer flavoprotein:ubiquinone oxidoreductase is required during normal seed development and germination. **2021**,	1
106	Genetic variation, environment and demography intersect to shape Arabidopsis defense metabolite variation across Europe.	1
105	Insights into profiling of glucosinolates and genes involved in its metabolic pathway accompanying post-harvest yellowing of broccoli. **2022**, 185, 111780	0
104	Herbivore feeding preference corroborates optimal defense theory for specialized metabolites within plants. **2021**, 118,	4
103	Effect of soaking, germination and roasting on the proximate composition, antinutrient content and some physicochemical properties of defatted Moringa oleifera seed flour.	1
102	An efficient Agrobacterium tumefaciens-mediated transformation of apical meristem in radish (Raphanus sativus L.) using a needle perforation. **2022**, 148, 305	0

101	Comparative responses of glucosinolates in Baemoochae and its parent plants, radish and Chinese cabbage, during development. **2022**, 295, 110870		
100	Chemistry of plant extracts. **2022**, 39-73		1
99	Rocket ((L.) Cav.) vs. Copper: The Dose Makes the Poison?. **2022**, 27,		0
98	Glucosinolate Profiles in Different Organs of 111 Radish Accessions and Candidate Genes Involved in Converting Glucobrassicin to 4-Hydroxyglucobrassicin.. **2022**,		2
97	Analysis of Glucosinolate Content and Metabolism Related Genes in Different Parts of Chinese Flowering Cabbage.. *Frontiers in Plant Science*, **2021**, 12, 767898	6.2	1
96	Impacts of elicitors on metabolite production and on antioxidant˙potential and tyrosinase inhibition in watercress microshoot cultures.. **2022**, 106, 619		1
95	Flowers prepare thyselves: Leaf and root herbivores induce specific changes in floral phytochemistry with consequences for plant interactions with florivores.. *New Phytologist*, **2021**,	9.8	0
94	A non-proteinogenic amino acid, Ł-tyrosine, accumulates in young rice leaves via long-distance phloem transport from mature leaves.. **2022**,		
93	A plant balancing act: Meshing new and existing metabolic pathways towards an optimized system.. *Current Opinion in Plant Biology*, **2022**, 66, 102173	9.9	0
92	Metabolite Characteristics Analysis of Siliques and Effects of Lights on the Accumulation of Glucosinolates in Siliques of Rapeseed.. *Frontiers in Plant Science*, **2022**, 13, 817419	6.2	
91	Insights into glucosinolate accumulation and metabolic pathways in Isatis indigotica Fort.. **2022**, 22, 78		2
90	Phytochemical and In Silico ADME/Tox Analysis of Extract with Antioxidant, Antibacterial and Anticancer Potential against Caco-2 and HCT-116 Colorectal Carcinoma Cell Lines.. **2022**, 27,		5
89	Leaf bacterial community structure and variation in wild ruderal plants are shaped by the interaction of host species and defense chemistry with environment.		
88	Perspectives for integrated insect pest protection in oilseed rape breeding.. **2022**, 1		1
87	Glucosinolates as an effective tool in plant-parasitic nematodes control: Exploiting natural plant defenses. **2022**, 176, 104497		2
86	Transcriptomic and metabolic analyses revealed the modulatory effect of vernalization on glucosinolate metabolism in radish (Raphanus sativus L.).. **2021**, 11, 24023		0
85	Integrated omics reveal novel functions and underlying mechanisms of the receptor kinase FERONIA in Arabidopsis thaliana.. **2022**,		2
84	Image_1.pdf. **2019**,		

83 Table_1.docx. **2019**,

82 Table_2.docx. **2019**,

81 Table_3.docx. **2019**,

80 Table_4.docx. **2019**,

79 Table_5.docx. **2019**,

78 Table_6.docx. **2019**,

77 Data_Sheet_1.xlsx. **2018**,

76 Data_Sheet_2.pdf. **2018**,

75 Data_Sheet_3.pdf. **2018**,

74 Data_Sheet_1.PDF. **2020**,

73 Data_Sheet_2.PDF. **2020**,

72 Data_Sheet_3.PDF. **2020**,

71 Data_Sheet_4.PDF. **2020**,

70 Data_Sheet_5.PDF. **2020**,

69 Presentation_1.pdf. **2020**,

68 Table_1.pdf. **2020**,

67 Data_Sheet_1.pdf. **2018**,

66 Data_Sheet_1.docx. **2020**,

65 Data_Sheet_2.xlsx. **2020**,

64 DataSheet_1.pdf. **2020**,

63 DataSheet_2.pdf. **2020**,

62 Data_Sheet_1.PDF. **2019**,

61 Image_1.TIF. **2018**,

60 Image_1.tif. **2019**,

59 Image_2.tif. **2019**,

58 Image_3.tif. **2019**,

57 Image_4.tif. **2019**,

56 Image_5.tif. **2019**,

55 Image_6.tif. **2019**,

54 Image_7.tif. **2019**,

53 Image_8.tif. **2019**,

52 Table_1.docx. **2019**,

51 Table_2.docx. **2019**,

50 Table_3.xlsx. **2019**,

49 Data_Sheet_1.xlsx. **2018**,

48 Data_Sheet_2.PDF. **2018**,

47	Image_1.pdf. **2018**,		
46	Image_1.jpg. **2019**,		
45	Table_1.docx. **2019**,		
44	Table_1.pdf. **2019**,		
43	Presentation_1.pdf. **2019**,		
42	DataSheet_1.zip. **2019**,		
41	IQD1 Involvement in Hormonal Signaling and General Defense Responses Against .. *Frontiers in Plant Science*, **2022**, 13, 845140	6.2	
40	Factors driving the within-plant patterns of resource exploitation in a herbivore. *Functional Ecology*,	5.6	0
39	Plant metabolism and defence strategies in the flowering stage: time-dependent responses of leaves and flowers under attack. *Plant, Cell and Environment*,	8.4	1
38	Specialist root herbivore modulates plant transcriptome and downregulates defensive secondary metabolites in a brassicaceous plant. *New Phytologist*,	9.8	
37	Variation in Glucosinolate Accumulation among Different Sprout and Seedling Stages of Broccoli (Brassica oleracea var. italica). *Plants*, **2022**, 11, 1563	4.5	1
36	Genome-scale modeling of the primary-specialized metabolism interface. *Current Opinion in Plant Biology*, **2022**, 68, 102244	9.9	
35	Identification and quantification of intact glucosinolates at different vegetative growth periods in Chinese cabbage cultivars by UHPLC-Q-TOF-MS. *Food Chemistry*, **2022**, 393, 133414	8.5	1
34	Development of a quantification method for routine analysis of glucosinolates and camalexin in brassicaceous small-sized samples by simultaneous extraction prior to liquid chromatography determination. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2022**, 1205, 123348	3.2	
33	Making small molecules in plants: A chassis for synthetic biology-based production of plant natural products. *Journal of Integrative Plant Biology*,	8.3	1
32	BcWRKY33A Enhances Resistance to Botrytis cinerea via Activating BcMYB51-3 in Non-Heading Chinese Cabbage. *International Journal of Molecular Sciences*, **2022**, 23, 8222	6.3	
31	Effects of intraspecific density and plant size on garlic mustard (Alliaria petiolata) sinigrin concentration.		
30	Bio-Management of Root-Knot Nematodes on Cucumber Using Biocidal Effects of Some Brassicaceae Crops. **2022**, 8, 699		1

29	Glutathione degradation activity of γ-glutamyl peptidase 1 manifests its dual roles in primary and secondary sulfur metabolism in Arabidopsis.	1
28	Reduced glucosinolate content in oilseed rape (Brassica napus L.) by random mutagenesis of BnMYB28 and BnCYP79F1 genes.	
27	Diversity of glucosinolates among common Brassicaceae vegetables in China. **2022**,	0
26	Tris(methylthio)methane produced by Mortierella hyalina affects sulfur homeostasis in Arabidopsis. **2022**, 12,	
25	Soil variation among natural habitats alters glucosinolate content in a wild perennial mustard.	
24	Effect of LED lights on the growth, nutritional quality and glucosinolate content of broccoli, cabbage and radish microgreens. **2023**, 401, 134088	2
23	Insights into Profiling of 24-Epibrassinolide Treatment Alleviating the Loss of Glucosinolates in Harvested Broccoli.	0
22	Ablation of glucosinolate accumulation in the oil crop Camelina sativa by targeted mutagenesis of genes encoding the transporters GTR1 and GTR2 and regulators of biosynthesis MYB28 and MYB29.	1
21	Metabolomics-centered mining of plant metabolic diversity and function: past decade and future perspectives. **2022**,	3
20	Variation Characteristics of Glucosinolate Contents in Leaf Mustard (Brassica juncea). **2022**, 12, 2287	0
19	Defense versus growth trade-offs: Insights from glucosinolates and their catabolites.	0
18	Sulfate supplementation affects nutrient and photosynthetic status of Arabidopsis thaliana and Nicotiana tabacum differently under prolonged exposure to cadmium. **2023**, 445, 130527	1
17	The Impact of Nitrile-Specifier Proteins on Indolic Carbinol and Nitrile Formation in Homogenates of Arabidopsis thaliana. **2022**, 27, 8042	0
16	PAMP-Induced secreted Peptide-Like 6 (PIPL6) functions as an amplifier of plant immune response through RLK7 and WRKY33 module.	0
15	Volatile Chemical Variation of Essential Oils and Their Correlation with Insects, Phenology, Ontogeny and Microclimate: Piper mollicomum Kunth, a Case of Study. **2022**, 11, 3535	0
14	Glucosinolate catabolism maintains glucosinolate profiles and transport in sulfur-starvedArabidopsis.	0
13	Specialized metabolites as versatile tools in shaping plant-microbe associations. **2022**,	0
12	Evidence of glucosinolates translocation from inflorescences to stems during postharvest storage of broccoli. **2023**,	0

11	Genetic Improvement of Camelina sativa (L.) Crantz: Opportunities and Challenges. **2023**, 12, 570	0
10	Age-specific allocation of glucosinolates within plant reproductive tissues. **2023**, 331, 111690	0
9	Brassinosteroids fine-tune secondary and primary sulfur metabolism through BZR1-mediated transcriptional regulation.	0
8	Reduced glucosinolate content in oilseed rape (Brassica napus L.) by random mutagenesis of BnMYB28 and BnCYP79F1 genes. **2023**, 13,	1
7	Transcriptomic and epigenomic analyses revealed that polycomb repressive complex 2 regulates not only developmental but also stress responsive metabolism in Brassica rapa. 14,	0
6	Enhancing health-promoting isothiocyanates in Chinese kale sprouts via manipulating BoESP. **2023**, 10,	0
5	Developing multifunctional crops by engineering Brassicaceae glucosinolate pathways. **2023**, 100565	0
4	Formation, immunomodulatory activities, and enhancement of glucosinolates and sulforaphane in broccoli sprouts: a review for maximizing the health benefits to human. 1-31	0
3	Life history and chemical defense interact to drive patterns of adaptation in an annual monkeyflower. **2023**, 77, 370-383	0
2	Indole-3-Carbinol: Occurrence, Health-Beneficial Properties, and Cellular/Molecular Mechanisms. **2023**, 14, 347-366	0
1	BoMyrosinase plays an essential role in sulforaphane accumulation in response to selenite treatment in broccoli. **2023**,	0