

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Oryza sativa*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(+)-DEHYDROVOMIFOLIOL	Petiole	1	1		
0	1-RHAMNONO-1,4-LACTONE	Plant	--	--		
0	12(S),13(S)-EPOXY-11(R)-HYDROXY-OCTADECACIS-9,CIS15-DIEN-1-OIC-ACID	Shoot	0.9	0.9		
0	12(S),13(S)-EPOXY-11(S)-HYDROXY-OCTADECACIS-9,CIS15-DIEN-1-OIC-ACID	Shoot	0.4	0.4		
0	15,16-DIHYDROCORONARIC-ACID	Shoot	0.8	0.8		
0	2,4-DINITROPHENYLHYDRAZONE	Seed	--	--		
0	2-C-HYDROXY-METHYL-D-ERYTHRONO-1,4-LACTONE	Plant	--	--		
0	2-C-METHYL-D-ERYTHRONO-1,4-LACTONE	Plant	--	--		
0	2-DEOXY-D-LYXONO-1,4-LACTONE	Plant	--	--		
0	24-METHYL-24-METHOXYCYCLOARTANOL	Plant	--	--		
5	24-METHYLENE-CYCLOARTANOL	Plant	--	--		
0	25-ETHOXY-24-METHOXYCYCLOARTANOL	Plant	--	--		
0	25-HYDROXY-24-METHOXYCYCLOARTANOL	Plant	--	--		
0	3-DEOXY-D-ARABINO-HEXONO-1,4-LACTONE	Plant	--	--		
0	5'O-(BETA-D-GLUCOPYRANOSYL)-PYROXIDINE	Fruit	--	--		
0	9,10-DIOXYSTEARIC-ACID	Plant	--	--		
6	ACETALDEHYDE	Plant	--	--		
3	ACETONE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	ADENINE	Seed	--	--		
12	ALLANTOIN	Seed	--	--		
0	ALPHA-GLUCAN	Tissue Culture	--	--		
32	ALPHA-TOCOPHEROL	Seed	--	--		
0	AMYLOSE	Seed	--	131075	1.4142135623730951	
1	ANTHERAXANTHIN	Plant	--	--		
0	ARABINOSE	Seed	--	--		
0	ARACHIDIC-ACID	Seed	--	--		
2	ARSENIC	Seed	0.211	0.211	1.5951685300488623	
0	ARUNDOIN	Shoot	--	--		
112	ASCORBIC-ACID	Seed	--	--		
0	ASH	Plant	75000	185800	1.17044840101269	
0	ASH	Seed	7000	57000	0.2743045673616218	
2	ASPARAGINE	Juice	--	--		
3	ASPARTIC-ACID	Hay	--	--		
1	BEHENIC-ACID	Seed	--	--		
53	BETA-CAROTENE	Seed	--	--		
0	BETA-CYCLOORYSTENOL	Seed	--	--		
47	BETA-SITOSTEROL	Juice	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
47	BETA-SITOSTEROL	Sprout Seedling	--	--		
0	BUTANAL	Plant	--	--		
3	CADMIUM	Seed	0.18	0.18	-0.25689996156193823	
28	CALCIUM	Seed	71	364	-0.6946712393018217	
28	CALCIUM	Plant	1900	3300	-1.1006215509188604	
2	CAMPESTEROL	Plant	--	--		
0	CARBOHYDRATES	Plant	420000	478000	-1.251678356200235	
0	CARBOHYDRATES	Seed	734000	892000	1.4648817782331274	
1	CARLINOSIDE	Leaf	--	--		
0	CASTASTERONE	Protoplast	13.6	13.6		
0	CELLOPENTAOSYLSITOSTEROL	Plant	--	--		
0	CELLOTETRAOSYLSITOSTEROL	Plant	--	--		
1	CELLULOSE	Petiole	190000	210000		
1	CELLULOSE	Plant	340000	534600	1.878590737597453	
0	CERAMIDE	Shoot	15	15		
0	CERYL-CEROTATE	Fruit	--	--		
20	CHOLINE	Seed	880	880	-0.7457854239115329	
0	CHRYSANTHEMIN	Plant	--	--		
0	COPROSTAN	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CORONARIC-ACID	Shoot	0.1	0.1		
0	CYANIDIN-5-GLYCOSIDE	Leaf	--	--		
0	CYANIDIN-DIGLYCOSIDE	Leaf	--	--		
0	CYANIDIN-MONOGLYCOSIDE	Leaf	--	--		
5	CYANIN	Plant	--	--		
0	CYCLOARTANOL	Plant	--	--		
7	CYCLOARTENOL	Plant	--	--		
0	CYCLOBRANOL	Plant	--	--		
3	CYCLOEUCALENOL	Seed	--	--		
0	CYLINDRIN	Shoot	--	--		
13	CYSTEINE	Plant	--	--		
0	D-ALANYL-D-ALANINE	Leaf	--	--		
0	D-ALANYL-GLYCINE	Leaf	--	--		
0	D-ARABINO-1,4-LACTONE	Plant	--	--		
0	D-ERYTHRONO-1,4-LACTONE	Plant	--	--		
0	D-LYXONO-1,4-LACTONE	Plant	--	--		
0	DESOXYCORTICOSTEROL	Plant	--	--		
0	DEXTRIN	Seed	15600	20500		
0	DIGLYCOSYL-CERAMIDE	Shoot	2	2		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DIHYDRO-BETA-SITOSTEROL	Petiole	--	--		
2	DIMETHYL-AMINE	Seed	--	--		
0	DNA-POLYMERASE	Tissue Culture	--	--		
0	DOLICHOSTERONE	Protoplast	8.4	8.4		
5	ERGOSTEROL	Sprout Seedling	--	--		
0	ESTERASE	Plant	--	--		
0	FAT	Plant	9000	15000	-0.5363375309297539	
0	FAT	Seed	15000	27000	-1.255672714114354	
61	FERULIC-ACID	Plant	--	--		
15	FIBER	Plant	334000	350000	0.9403887658445301	
15	FIBER	Seed	8000	121000	-0.10879993730972154	
6	FURFURAL	Petiole	90000	100000		
0	GAMMA-SITOSTEROL	Sprout Seedling	--	--		
14	GAMMA-TOCOPHEROL	Seed	--	--		
7	GLUCOSE	Seed	14500	26500	0.1017379479496296	
0	GLUCOTRICIN	Plant	--	--		
8	GLUTAMIC-ACID	Hay	--	--		
12	GLYCINE	Plant	--	--		
6	GUANIDINE	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	GUANINE	Seed	--	--		
5	HEXANAL	Plant	--	--		
3	HEXANOL	Plant	--	--		
0	HYPOXANTHINE	Plant	--	--		
0	INDOLE-3-ACETIC-ACID-MYOINOSITOL	Seed	4.5	4.5		
0	INEKETONE	Petiole	0.003	0.003		
6	IRON	Seed	14	85	-0.3056949154022057	
0	ISOARBORINOL	Shoot	--	--		
0	ISOCERYL-ISOCEROTATE	Fruit	--	--		
16	ISOEUGENOL	Plant	--	--		
3	ISOLEUCINE	Hay	--	--		
0	ISOSCOPARIN-2'-GLUCOSIDE	Plant	--	--		
0	ISOSCOPARIN-2'-GLUCOSIDE-6''-FERULIC-ESTER	Plant	--	--		
0	ISOSCOPARIN-2'-GLUCOSIDE-6''-P-COUMARIC-ESTER	Plant	--	--		
0	KERACYANIN	Plant	--	--		
0	KILOCALORIES	Seed	3410	4100	-0.5938556383361421	
0	LEAD	Seed	0.9	0.9	-0.44545068276647354	
20	LECITHIN	Plant	--	--		
2	LEUCINE	Hay	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	LIGNIN	Plant	45000	255300	0.6921533291790163	
1	LIGNOCERIC-ACID	Seed	--	--		
27	LINOLEIC-ACID	Seed	6600	11880	-0.8160445962099575	
0	LINOLENIC-ACID	Seed	--	--		
15	LUTEIN	Plant	--	--		
4	LYSINE	Hay	--	--		
1	LYSOLECITHIN	Seed	--	--		
65	MAGNESIUM	Plant	1100	2200	-0.5793608934861032	
1	MERCURY	Seed	0.167	0.167	0.29845806205818587	
15	METHIONINE	Plant	--	--		
0	MOMILACTONE-A	Petiole	4	4		
0	MOMILACTONE-B	Petiole	1	1		
0	MOMILACTONE-C	Plant	--	--		
0	MONOGLYCOSYL-CERAMIDE	Shoot	250	250		
0	MYRICYL-CEROTATE	Fruit	--	--		
0	NAPHTHALINE	Sprout Seedling	--	--		
0	NEOCARLINOSIDE	Plant	--	--		
1	NEOSCHAFTOSIDE	Leaf	--	--		
2	NEOXANTHIN	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
39	NIACIN	Seed	40	65	0.6619614710877286	
3	NICKEL	Seed	1.632	1.632	-0.5968299278537603	
1	NICOTIANAMINE	Sprout Seedling	--	--		
18	OLEIC-ACID	Seed	4500	8100	-0.9125134555320537	
0	ORYZABRANS	Seed	--	--		
0	ORYZALEXIN-A	Leaf	1	1.4		
0	ORYZALEXIN-B	Leaf	0.6	0.6		
0	ORYZALEXIN-C	Leaf	5.4	5.4		
0	ORYZALEXIN-D	Leaf	--	--		
0	ORYZANOL-A	Seed	--	--		
0	ORYZANOL-B	Seed	--	--		
0	ORYZANOLE	Plant	--	--		
0	ORYZARANS	Root	--	--		
0	ORYZAROL	Stem	--	--		
0	ORYZENIN	Seed	--	--		
9	OXALIC-ACID	Seed	46	46	-0.665731071264505	
12	P-AMINOBENZOIC-ACID	Plant	--	--		
25	P-COUMARIC-ACID	Petiole	0.9	0.9		
13	P-HYDROXY-BENZOIC-ACID	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	PALMITIC-ACID	Seed	1800	3240	-0.6327493366692233	
1	PANGAMIC-ACID	Petiole	--	--		
11	PANTOTHENIC-ACID	Seed	6	17	0.026882779342101273	
0	PELARGONIC-ACID	Plant	--	--		
0	PENTANAL	Plant	--	--		
0	PENTOSANS	Plant	209000	209000	0.9100079231294709	
4	PHOSPHORUS	Seed	528	5588	0.0620074671795556	
4	PHOSPHORUS	Plant	600	3478	-0.05317465610198457	
0	PHYTIN	Seed	--	--		
0	PHYTIN-PHOSPHORUS	Seed	211	2235	0.6856065892013916	
0	PHYTOCEREBROSIDE	Plant	--	--		
14	POTASSIUM	Seed	1000	2431	-0.891663999037337	
14	POTASSIUM	Plant	12000	12600	-0.6414067491432748	
0	PRIMULIN	Seed	--	--		
0	PROPANAL	Plant	--	--		
0	PROTEIN	Seed	58000	85000	-1.3236180788428549	
0	PROTEIN	Hay	--	--		
0	PROTEIN	Plant	34000	45000	-1.0527678817886632	
43	PYRIDOXINE	Seed	4	10	0.9653072991634226	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	QUINIC-ACID	Leaf	--	--		
0	RHAMNOGALACTURONAN-I	Tissue Culture	--	--		
15	RIBOFLAVIN	Seed	0.5	0.7	-1.0823929498985099	
0	RIBOTIDE-CIS-ZEATIN	Root	--	--		
0	RIBOTIDE-TRANS-ZEATIN	Root	--	--		
0	SATIVIC-ACID	Sprout Seedling	--	--		
1	SCHAFTOSIDE	Leaf	--	--		
1	SERINE	Plant	--	--		
14	SHIKIMIC-ACID	Leaf	--	--		
0	SILICA	Plant	140000	140000	1.3350996146640455	
1	SILICIC-ACID	Leaf	--	--		
1	SODIUM	Plant	3500	3500	-0.11033102759800023	
1	SODIUM	Seed	90	939	0.7748692106587315	
10	SQUALENE	Seed	--	--		
5	STARCH	Seed	722000	749000	1.7770468558505592	
8	STEARIC-ACID	Seed	150	270	-0.5595319571095223	
12	STIGMASTEROL	Juice	--	--		
14	SUCROSE	Seed	3000	4800	-0.6296023412117899	
14	SULFUR	Plant	1000	1000	-1.215569358934881	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TARAXANTHIN	Plant	--	--		
31	THIAMIN	Seed	2.2	3.9	-0.6403921875557287	
4	THREONINE	Hay	--	--		
0	TOCOPHERONE	Wax	--	--		
2	TRANS-ACONITIC-ACID	Shoot	--	--		
0	TRIACONTANOL-(1)	Sprout Seedling	--	--		
9	TRICIN	Petiole	0.066	0.066		
9	TRICIN	Plant	--	--		
0	TRICIN-5-GLUCOSIDE	Plant	--	--		
0	TRICIN-5-O-BETA-D-GLUCOSIDE	Plant	--	--		
0	TRIGLYCOSYL-CERAMIDE	Shoot	1	1		
15	TRIGONELLINE	Sprout Seedling	--	--		
1	TRIMETHYLAMINE	Seed	--	--		
8	TYROSINE	Plant	--	--		
0	UNDECYLIC-ACID	Plant	--	--		
0	URACIL	Seed	--	--		
3	VALINE	Hay	--	--		
24	VANILLIC-ACID	Plant	--	--		
0	VERNOLIC-ACID	Shoot	0.1	0.1		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	VIOLANTHIN	Plant	--	--		
2	VIOLAXANTHIN	Plant	--	--		
0	WATER	Seed	103000	103000	-0.4781694174621389	
1	XANTHINE	Plant	--	--		
3	XANTHOPHYLL	Plant	--	--		
3	XYLOSE	Seed	--	--		