

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Secale cereale

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	ALANINE	Seed	7110.0	7985.0	-0.46155864933856583	USDA's Ag Handbook 8 and sequelae)
14	ARGININE	Seed	8130.0	9130.0	-0.6567670132374697	USDA's Ag Handbook 8 and sequelae)
0	ASH	Seed		54750.0	0.2066298999420204	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	ASH	Seed	18000.0	24650.0	-0.698706761982425	USDA's Ag Handbook 8 and sequelae)
3	ASPARTIC-ACID	Seed	11770.0	13215.0	-0.8321794865282061	USDA's Ag Handbook 8 and sequelae)
28	CALCIUM	Seed	315.0	685.0	-0.6357170380027696	--
0	CARBOHYDRATES	Seed	697600.0	824720.0	1.197497465971126	--
0	CARBOHYDRATES	Leaf		848850.0	1.884772428005121	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
12	COPPER	Seed	4.0	5.0	-0.8902206512542384	USDA's Ag Handbook 8 and sequelae)
2	CYSTINE	Seed	3290.0	3695.0	0.37917414525937154	USDA's Ag Handbook 8 and sequelae)
0	FAT	Seed	14000.0	40425.0	-1.1849584370027075	USDA's Ag Handbook 8 and sequelae)
0	FAT	Leaf		23000.0	-0.666792373215361	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
15	FIBER	Seed	15000.0	20470.0	-0.902601987007855	--
15	FIBER	Leaf		400000.0	2.9488941655938468	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	GADOLEIC-ACID	Seed	130.0	145.0	-0.711246199603404	USDA's Ag Handbook 8 and sequelae)
8	GLUTAMIC-ACID	Seed	36610.0	41110.0	-0.025450099231021674	USDA's Ag Handbook 8 and sequelae)
12	GLYCINE	Seed	7010.0	7870.0	-0.4456307535018341	USDA's Ag Handbook 8 and sequelae)
7	HISTIDINE	Seed	3670.0	4120.0	-0.5327808364335734	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	IODINE	Seed	0.07	0.08	-0.27097512581352623	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
6	IRON	Seed	25.0	54.0	-0.44973041275366427	--
3	ISOLEUCINE	Seed	5490.0	6165.0	-0.5520749992815381	USDA's Ag Handbook 8 and sequelae)
0	KILOCALORIES	Seed	3350.0	3760.0	-0.8599530532358911	USDA's Ag Handbook 8 and sequelae)
2	LEUCINE	Seed	9800.0	11000.0	-0.5821092332941541	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Seed	9580.0	10760.0	-0.8256408674017415	USDA's Ag Handbook 8 and sequelae)
0	LINOLENIC-ACID	Seed	1570.0	1765.0	-0.5490496276580378	USDA's Ag Handbook 8 and sequelae)
4	LYSINE	Seed	6050.0	6795.0	-0.7184024064953151	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Seed	1185.0	1740.0	-0.47652374128694286	USDA's Ag Handbook 8 and sequelae)
14	MANGANESE	Seed	25.0	30.0	-0.2929994032843147	USDA's Ag Handbook 8 and sequelae)
15	METHIONINE	Seed	2480.0	2785.0	-0.3950230322261623	USDA's Ag Handbook 8 and sequelae)
13	MUFA	Seed	3030.0	3400.0	-0.7670120084510276	USDA's Ag Handbook 8 and sequelae)
6	MYRISTIC-ACID	Seed	30.0	35.0	-0.29554503732873066	USDA's Ag Handbook 8 and sequelae)
39	NIACIN	Seed	10.0	111.0	2.038930615906024	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
18	OLEIC-ACID	Seed	2800.0	3145.0	-0.9532464648448927	USDA's Ag Handbook 8 and sequelae)
13	PALMITIC-ACID	Seed	2710.0	3045.0	-0.6367728193895491	USDA's Ag Handbook 8 and sequelae)
2	PALMITOLEIC-ACID	Seed	100.0	110.0	-0.2958271085456021	USDA's Ag Handbook 8 and sequelae)
11	PANTOTHENIC-ACID	Seed	10.0	11.0	-0.6015458286550688	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PECTINS	Seed		11300.0	0.8890008890013334	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	PENTOSANS	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
7	PHENYLALANINE	Seed	6740.0	7570.0	-0.4741398577370256	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Seed	3725.0	4225.0	-0.29817757344740303	--
4	PHOSPHORUS	Leaf		1970.0	-0.552228548405069	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
14	POTASSIUM	Seed	2500.0	5090.0	-0.6578222271672043	--
14	POTASSIUM	Leaf		11500.0	-0.8321123080394769	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	PROLINE	Seed	14910.0	16745.0	1.0626753662232822	USDA's Ag Handbook 8 and sequelae)
0	PROTEIN	Seed	120000.0	196500.0	-0.3317678354413676	USDA's Ag Handbook 8 and sequelae)
0	PROTEIN	Leaf		73385.0	-1.3812727762460604	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	PUFA	Seed	11150.0	12520.0	-0.7106352803705182	USDA's Ag Handbook 8 and sequelae)
1	RAFFINOSE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
15	RIBOFLAVIN	Seed	1.0	2.0	-0.5841625019907875	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	SERINE	Seed	6810.0	7645.0	-0.5614032960948299	USDA's Ag Handbook 8 and sequelae)
0	SFA	Seed	2870.0	3225.0	-0.5467497559949652	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	SODIUM	Seed	45.0	70.0	-0.6045971399242164	USDA's Ag Handbook 8 and sequelae)
8	STEARIC-ACID	Seed	90.0	100.0	-0.5632203798403127	USDA's Ag Handbook 8 and sequelae)
14	SULFUR	Seed	1460.0	1640.0	-0.5061491862461437	USDA's Ag Handbook 8 and sequelae)
31	THIAMIN	Seed	3.0	3.0	-0.8551170555321612	USDA's Ag Handbook 8 and sequelae)
4	THREONINE	Seed	5320.0	5975.0	-0.48372854194682735	USDA's Ag Handbook 8 and sequelae)
0	TOCOPHEROLS	Seed		800.0	-0.08685621723269213	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
29	TRYPTOPHAN	Seed	1540.0	1730.0	-0.5439803413471287	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Seed	3390.0	3800.0	-0.9129855295852501	USDA's Ag Handbook 8 and sequelae)
3	VALINE	Seed	7470.0	8390.0	-0.4460276980659619	USDA's Ag Handbook 8 and sequelae)
0	VIT-B-6	Seed		3.0	-0.7480591991066328	USDA's Ag Handbook 8 and sequelae)
0	WATER	Seed	100000.0	110000.0	-0.45130749753349714	--
77	ZINC	Seed	35.0	45.0	-0.00374896208922453	USDA's Ag Handbook 8 and sequelae)