

List of All Chemicals

P Colchicum autumnale (Liliaceae)

Common name(s)

Meadow Saffron; Autumn Crocus

How used

Medicinal

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Chemical	Part <input type="button" value="All"/>	Low PPM	High PPM	StdDev	*Reference
2-ACETYL-2-DEMETHYLCOLCHICINE	Plant	--	--		*
2-DEMETHYLCOLCHICINE	Tuber	--	--		*
Activities (1)					
Antitubulin IC50=3.7 uM					
2-DESMETHYLDEACETYLCOLCHICINE	Tuber	--	--		*
2-HYDROXY-6-METHOXYBENZOIC-ACID	Tuber	--	--		*
3-ACETYL-3-DEMETHYLCOLCHICINE	Plant	--	--		*
3-DEMETHYL-BETA-LUMICOLCHICINE	Tuber	--	--		*
3-DEMETHYL-GAMMA-LUMICOLCHICINE	Tuber	--	--		*
3-DEMETHYLCOLCHICINE	Tuber	--	--		*
3-DESMETHYLDEMECOLCINE	Tuber	--	--		*
3-METHYL-COLCHICINE	Tuber	--	--		*
6-METHOXY-SALICYLIC-ACID	Tuber	--	--		*
ALPHA-LUMICOLCHICINE	Tuber	--	--		*
APIGENIN	Tuber	--	--		*

Activities (101)	
11B-HSD-Inhibitor	
AntiADD	
AntiHIV IC72=200 ug/ml	
AntiHIV IC50=143 ug/ml	
Antiaflatoxin IC50=9.52 uM	
Antiaflatoxin IC50=2.57 ppm	
Antiaggregant	
Antiaging	
Antiallergic	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antiangiogenic 4 uM	
Antiarrhythmic	
Antibacterial	Recio, M. C., Rios, J. L., and Villar, A., A review of some antimicrobial compounds isolated from medicinal plants reported in the literature 1978-1988, Phytotherapy Research, 3(4), 1989, 117-125.
Anticancer (Lung)	
Anticomplementary	
Antidermatitic	
Antiestrogenic	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
Antiherpetic 20-54 ug/ml	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antihistaminic IC50=10-35 uM	
Antiinflammatory #NAME?	
Antiinflammatory IC~65=1,000 uM	
Antileukemic 20-50 uM	

Antimelanomic 1-50 uM	
Antimetastatic 1-50 uM	
Antimutagenic ID50=10-40 nM	Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.
Antimutagenic ID50=0.55 ug/ml	
Antioxidant 1.5 x Vit. E	
Antioxidant IC28.5=62.5 ug/ml	
Antiperistaltic	
Antiproliferant 1-50 uM	
Antiproliferant IC50=155 uM	
Antispasmodic EC50=1-5 uM	
Antistress 10 mg/kg	
Antithyroid	Jim Duke's personal files.
Antitumor 1-50 uM	
Antitumor (Breast) 1-50 uM	
Antitumor (Lung)	
Antitumor (Skin)	
Antiviral 20-54 ug/ml	
Anxiolytic 10 mg/kg	
Apoptotic 12-60 uM	
Aromatase-Inhibitor IC65=1 uM/l	Journal of Medicinal Food 2: 235.1999.
Beta-Glucuronidase-Inhibitor IC50=--40 uM	
CNS-Depressant	
COX-1-Inhibitor IC65=1,000 uM	
COX-2-Inhibitor IC>65=1,000 uM	
COX-2-Inhibitor <40 uM	
COX-2-Inhibitor IC50=<15 uM	
Calcium-Antagonist?	Biochimica & Biophysica Acta, 1115: 69, 1991.
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Choleretic	
Cyclooxygenase-Inhibitor	
Cytochrome-P450-1A1-Inhibitor	
Cytotoxic IC88=10 ug/ml	Planta Medica, 57: A113, 1991.
Cytotoxic 1-50 uM	
Cytotoxic IC50=9.5 uM	
DNA-Protective	
Deiodinase-Inhibitor	Jim Duke's personal files.
Differentiator MIC=30 uM	
Differentiator IC40=40 uM	
Diuretic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Estrogenic EC50=0.1-25 uM/l	Journal of Medicinal Food 2: 227.1999.
Estrogenic 16% genistein	
Estrogenic EC50=1 uM	
HIF-1alpha-Inhibitor	
Hyaluronidase-Inhibitor IC50+=50-250 uM	
Hypotensive	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
ICAM-1-Inhibitor	
IKK-Inhibitor	
Inotropic	
Interleukin-6-Inhibitor	
MAO-Inhibitor	
MAPK-Inhibitor	
Musculotropic	Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Mutagenic	
Myorelaxant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
NADH-Oxidase-Inhibitor	
NF-kB-Inhibitor	
NO-Synthase-Inhibitor 5-50 uM	

Nodulation-Signal	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Ornithine-Decarboxylase-Inhibitor	
P21-Inducer 10-70 uM	
PKC-Inhibitor IC50=10 uM	
PTK-Inhibitor 10-100 uM	
Pesticide	
Polyamine-Synthesis-Inhibitor	
Progestational	
Protein-Kinase-C-Inhibitor IC50=10-40 uM	
Quinone-Reductase-Inducer 20 uM	Uda, Y., Price, K. R., Williamson, G., Rhodes, M. J. C. 1997. Induction of the Anticarcinogenic Marker Enzyme, Quinone Reductase, in Murine Hepatoma Cells In Vitro by Flavonoids. <i>Cancer Lett.</i> , 120 (2): 213-216.
Radioprotective	
Sedative 30-100 mg/kg	
Sunscreen	
TNF-alpha-Inhibitor IC50=3.27 uM	
Topoisomerase-I-Inhibitor	Santti, R., Makela, S., Strauss, L., Korman, J., Kostian, M. L. 1998. Phytoestrogens: Potential Endocrine Disruptors in Males. <i>Toxicol Ind Health</i> , 14: 223-237.
Topoisomerase-II-Inhibitor 50 ug/ml	Azuma, Y., Onishi, Y., Sato, Y., Kizaki, H. 1995. Effects of Protein Tyrosine Kinase Inhibitors With Different Modes of Action on Topoisomerase Activity and Death of IL-2-Dependent CTLL-2-Cells. <i>J Biochemistry</i> , 118: 312-318.
Topoisomerase-II-Inhibitor IC28=18 uM	
Topoisomerase-II-Inhibitor IC45=180 uM	
Uterotrophic EC50=0.1-25 uM/l	Journal of Medicinal Food 2: 227.1999.
VEGF-Inhibitor IC50=2-7 uM	
Vasodilator	
Xanthine-Oxidase-Inhibitor 0.36 uM	
iNOS-Inhibitor IC50=<15 uM	

AUTUMNALINE	Plant	--	--	*
BENZOIC-ACID	Tuber	--	--	*

Activities (20)	
Allergenic	Martindale's 28th
Anesthetic	
Antibacterial 33-1,250 ppm	
Antibacterial MBC=800 ug/ml	
Antiotitic	Martindale's 28th
Antipyretic	
Antisalmonella MIC=800 ug/ml	
Antiseptic 800 ug/ml	
Antiyeast MFC=1,600 ug/ml	
Choleretic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Expectorant	
FLavor FEMA 250	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Fungicide MFC=1,600 ug/ml	
Insectifuge	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Pesticide	
Phytoalexin	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Tyrosinase-Inhibitor ID50=710 uM	
Tyrosinase-Inhibitor ID50=640 uM	
Uricosuric	
Vulnerary	

BETA-LUMICOLCHICINE	Tuber	--	--	*
CHELIDONIC-ACID	Plant	--	--	*

Activities (2)	
Antiwart	Mitchell, J. and Rook, A.J. 1923. <i>Botanical Dermatology: plants and plant products injurious to the skin.</i> Vancouver: Greengrass, 1979. xiii, 787 p.: ill.
Irritant	Mitchell, J. and Rook, A.J. 1923. <i>Botanical Dermatology: plants and plant products injurious to the skin.</i> Vancouver: Greengrass, 1979. xiii, 787 p.: ill.

COLCHAMINE	Tuber	--	--	*
Activities (5)				
Antiflu				
Antiviral	Vlietinck, A.J. and Dommissse, R.A. eds. 1985. Advances in Medicinal Plant Research. Wiss. Verlag. Stuttgart.			
Neoplastic				
Pesticide				
Teratogenic				
COLCHICENE	Tuber	--	--	*
COLCHICERINE	Tuber	--	--	*
COLCHICINE	Tuber	800.0	12300.0	*

Activities (44)

AntiBehcet's	Martindale's 28th
AntiHIV EC50=0.01 uM	
AntiPaget's 600 ug/3x/day/man	Martindale's 29th
Antiamyloidotic	Martindale's 29th
Antiarthritic	
Antibacterial	
Anticirrhotic 1-2 mg/man/day	Martindale's 28th
Antidermatitic	Martindale's 29th
Antierythemic	Martindale's 29th
Antiherpetic	
Antiinflammatory	
Antileukemic	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Antimalarial 500 ug/10x/day/man	Martindale's 28th
Antimelanomic ED50=0.18 ug/ml	J. Ethnopharmacology, 32: 117.
Antimeningitic 500 ug/2x/man/day	Martindale's 28th
Antimitotic 2 mg/kg scu mus	Borchard, R. E., Barnes, C. D., and Eltherton, L. G. 1991. <i>Drug Dosage in Laboratory Animals: A Handbook</i> . (3rd Ed.) The Telford Press, Inc., P. O. Box 287, Caldwell NJ 07006.
Antiperocarditis 500-1,000 ug/man/day	
Antipodagric 3-6mg man/day/	Martindale's 28th
Antipolyserositic 500-600 ug/2-3 x day/man/	Martindale's 28th
Antipsoriac	Martindale's 28th
Antipyretic	
Antirheumatic	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Antisarcomic ED50=0.047 ug/ml	J. Ethnopharmacology, 32: 117.
Antithrombocytopenic 600 ug/2-4x/man/day	Martindale's 29th
Antitrypanosomic	Nigg, H.N. and Seigler, D.S., eds. 1992. <i>Phytochemical Resources for Medicine and Agriculture</i> . Plenum Press, New York. 445 pp.
Antitubulin IC50=2.4 uM	
Antitumor (Breast) ED50=0.022 ug/ml	J. Ethnopharmacology, 32: 117.
Antitumor (Colon) ED50=0.0071 ug/ml	J. Ethnopharmacology, 32: 117.
Antitumor (Lung) ED50=0.043 ug/ml	J. Ethnopharmacology, 32: 117.
Antivasculitic 600 ug/2x/man/day	Martindale's 29th
CNS-Paralytic	
CNS-Stimulant	
Carcinogenic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Cardioactive 15 mg/kg scu rbt	Borchard, R. E., Barnes, C. D., and Eltherton, L. G. 1991. <i>Drug Dosage in Laboratory Animals: A Handbook</i> . (3rd Ed.) The Telford Press, Inc., P. O. Box 287, Caldwell NJ 07006.
Cytotoxic IC50=0.018 uM	
Emetic	Cooper-Driver, G. A., <i>Chemical substances in plants toxic to animals</i> , pp. 213-47 in Rechcigl, M., Jr., ed. <i>CRC Handbook of Naturally Occurring Food Toxicants</i> , CRC Press, Boca Raton, 1983, 339 pp.
Hepatoprotective	
Hypertensive	
Irritant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Pesticide	
Purgative	
Respiradepressant	
Sympathomimetic	
Uricosuric	

COLCHIFOLINE	Plant	--	--	*
DEMECOLCEINE	Plant	--	--	*
DEMECOLCINE	Plant	--	--	*

Activities (7)	
Antileukemic	
Antimitotic	
Antipodagric	
Antitubulin IC50=2.4 uM	
Antitumor	Merck 11th Edition
MDR-Inhibitor ED50=78 ng/ml	Tang-Wai, D. F., Brossi, A., Arnold, L. D., Gros, P. 1993. The Nitrogen of the Acetamido Group of Colchicine Modulates P-Glycoprotein-Mediated Multidrug Resistance. <i>Biochemistry</i> , 32(25): 6470-6476.
Marrow-Suppressant	Martindale's 28th

GAMMA-LUMICOLCHICINE	Tuber	--	--	*
N-ACETYLDEMECOLCINE	Plant	--	--	*
N-DEACETYL-N-METHYLCOLCHICINE	Tuber	--	--	*
N-FORMYL-N-DEACETYLCOLCHICINE	Tuber	--	--	*
N-METHYLDESACETYLCOLCHICINE	Tuber	--	--	*
O-ACETYLCOLCHICEINE	Plant	--	--	*
O-DEMETHYL-N-DEACETYLCOLCHICINE	Tuber	--	--	*
SALICYLIC-ACID	Plant	--	--	*

Activities (34)					
Aldose-Reductase-Inhibitor 724.6 uM	Toyomizu, M., Sugiyama, S., Jin, R. L., Nakatsu, T. 1993. Alpha-Glucosidase and Aldose Reductase Inhibitors: Constituents of Cashew, <i>Anacardium occidentale</i> , Nut Shell Liquids. <i>Phytotherapy Research</i> , 7(3): 252-254.				
Analgesic					
Antiarthritic	Madaus, G. 1976. <i>Lehrbuch der Biologischen Hilfsmittel</i> . Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.				
Antibacterial	Martindale's 28th				
Antidandruff	A.L.L. Hunting. <i>Encyclopedia of Shampoo Ingredients</i> . Micelle Press, Cranford NJ. 467 pp.				
Antidermatotic					
Antieczemic					
Antiichthyosic	Martindale's 29th				
Antiinflammatory	Pharmazie, 46: 156, 1991.				
Antineuralgic	Madaus, G. 1976. <i>Lehrbuch der Biologischen Hilfsmittel</i> . Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.				
Antioncychomycotic	Martindale's 29th				
Antioxidant	Huang, K. C. 1993. <i>The Pharmacology of Chinese Herbs</i> . CRC Press, Boca Raton, FL 388 pp.				
Antiperiodic					
Antipodagric					
Antipsoriac					
Antipyretic					
Antirheumatic					
Antiseborrheic					
Antiseptic	A.L.L. Hunting. <i>Encyclopedia of Shampoo Ingredients</i> . Micelle Press, Cranford NJ. 467 pp.				
Antitumor					
Antitympanitic	Merck 11th Edition				
COX-2-Inhibitor	Newmark, T. M. and Schulick, P. 2000. <i>Herbal Cox-2 Inhibition - Nature's Challenge to Arthritis, Cancer & Alzheimer's Disease</i> . Hohm Press, Prescott AZ.				
Cancer-Preventive	Stitt, P. A. <i>Why George Should Eat Broccoli</i> . Dougherty Co, Milwaukee, WI, 1990, 399 pp.				
Comedolytic	Martindale's 29th				
Cyclooxygenase-Inhibitor					
Dermatitigenic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.				
Fungicide MIC 1,000 ug/ml					
Hypoglycemic	<i>Economic & Medicinal Plant Research</i> , 6: 158.				
Insectifuge	Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (<i>Asteraceae</i>). <i>Economic Botany</i> 48(2): 111-120, 1994.				
Keratolytic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.				
Pesticide					
Thermogenic 130 ppm					
Tineacide	Martindale's 29th				
Ulcerogenic					
STARCH	Tuber	--	210000.0	-1.08	*

Activities (5)

Absorbent	Martindale's 29th
Antidote (Iodine)	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antinesidioblastosic	Martindale's 29th
Emollient	Martindale's 29th
Poultice	Martindale's 29th