

Dr. Duke's Phytochemical and Ethnobotanical Databases
Biological Activities found in Crocus sativus

Activity	Chemical Count
(-)-Chronotropic	2
(-)-Inotropic	2
11B-HSD-Inhibitor	2
5-Alpha-Reductase-Inhibitor	4
5-Lipoxygenase-Inhibitor	2
Abortifacient	1
Absorbent	1
Acaricide	5
ACE-Inhibitor	3
Acetylcholinergic	1
AChE-Inhibitor	1
Adjuvant	1
Aldehyde-Oxidase-Inhibitor	1
Aldose-Reductase-Inhibitor	5
Allelochemic	8
Allelopathic	3
Allergenic	11
Alpha-Reductase-Inhibitor	1
Analgesic	7
Androgenic?	1
Anemiagenic	1
Anesthetic	3
Angiotensin-Receptor-Blocker	1
Anthelmintic	2
Antiacetylcholine	1
Antiacetylcholinesterase	7
Antiacid	1

Activity	Chemical Count
Antiacne	5
AntiADD	1
Antiadenomic	1
Antiaflatoxin	2
Antiaggregant	3
Antiaging	2
Antialcoholic	4
Antialdosteronic	1
Antialkali?	1
Antialkalotic	1
Antiallergenic	1
Antiallergic	6
Antialopepic	3
Antialzheimeran	3
Antialzheimeran?	2
Antianaphylactic	3
Antiandrogenic	3
Antianemic	2
Antiangiogenic	1
Antianorectic	2
Antiarabiflavinotic	1
Antiarrhythmic	1
Antiarteriosclerotic	2
Antiarthritic	5
Antiasthmatic	4
Antiatherosclerotic	2
Antibacillary	1

Activity	Chemical Count
Antibackache	2
Antibacterial	16
Antiberiberi	2
Antibronchitic	2
Anticancer	3
Anticancer (Bladder)	1
Anticancer (Breast)	2
Anticancer (Cervix)	1
Anticancer (Pancreas)	1
Anticancer (Prostate)	1
Anticancer (Skin)	1
Anticanker	1
Anticarcinomic	2
Anticarcinomic (Breast)	1
Anticardiospasmic	2
Anticariogenic	5
Anticarpal-Tunnel	1
Anticataract	4
Anticatarrh	1
Anticephalagic	1
Anticervicaldysplasic	2
Anticheilitic	1
Anticholinesterase	2
Anticolic	1
Anticolitic	3
Anticomplement	1
Anticomplementary	1

Activity	Chemical Count
Anticonvulsant	1
Anticoronary	2
AntiCrohn's	1
Anticystitic	1
Antidecubitic	3
Antideliriant	2
Antidementia	1
Antidepressant	2
Antidepressant?	1
Antidermatitic	1
Antidiabetic	5
Antidiabetic?	1
Antidiarrheic	1
Antidiscotic	1
Antidote (Acetaminophen)	1
Antidote (Hypoglycin-A)	1
Antidote (Iodine)	1
Antidote (Paracetamol)	1
Antidysenteric	1
Antidyskinetic	1
Antidyspeptic	1
Antieczemic	2
Antiedemic	3
Antielastase	1
Antiemetic	1
Antiencephalitic	1
Antiencephalopathic	7

Activity	Chemical Count
Antiepileptic	2
Antiescherichic	2
Antiesophagitic	1
Antiestrogenic	1
Antifatigue	4
Antifeedant	8
Antifertility	3
Antifibrinolytic	2
Antifibrosarcomic	1
Antifibrositic	1
Antiflu	4
Antigastric	2
Antigastritic	3
Antigingivitic	3
Antiglossitic	1
Antiglutamaergic	1
Antigonadotrophic	1
Antigonadotropic	1
Antigranular	1
AntiGTF	1
Antihalitosisic	1
Antihangover	2
Antiheartburn	2
Antihelicobacter	1
Antihepatitic	1
Antihepatotic	1
Antihepatotoxic	3

Activity	Chemical Count
Antiherpetic	5
Antihistaminic	5
AntiHIV	3
Antihomocystinuric	1
Antihydrophobic	1
Antihyperammonemic	1
Antihyperkeratotic	1
Antihyperlipidemic	1
Antihypertensive	3
Antihypoxic	1
Antiichthyotic	1
Antiimplantation	1
Antiimpotence	1
Antiinfertility	1
Antiinflammatory	14
Antiischemic	1
Antikeratitic	1
Antiketotic	2
Antilaryngitic	1
Antileishmanic	1
Antileukemic	5
Antileukoplakic	1
Antileukotriene	2
Antileukotriene-D4	2
Antilipoperoxidant	2
Antilithic	2
Antilupus	1

Activity	Chemical Count
AntiLyme	2
Antilymphocytic	1
Antilymphomic	2
Antimaculitic	1
Antimalarial	2
Antimange	1
Antimastitic	1
Antimelanomic	2
Antimenorrhagic	1
Antimetastatic	1
Antimetastatic (Stomach)	1
Antimigraine	3
Antimite	1
Antimorphinic	1
AntiMS	1
Antimutagenic	7
Antimyocarditic	3
Antinauseant	1
Antinephritic	2
Antinesidioblastosic	1
Antineuralgic	3
Antineurasthenic	2
Antineuritic	2
Antineuropathic	2
Antinitrosaminic	3
Antinociceptive	3
Antiobesity	2

Activity	Chemical Count
Antiosteoporotic	2
Antiotitic	1
Antiototic	1
Antioxidant	20
Antioxidant?	2
Antiozenic	1
Antipancreatic	1
Antipapillomic	1
Antiparkinsonian	3
Antipellagic	1
Antiperiodontal	2
Antiperiodontic	3
Antiperistaltic	1
Antipermeability	1
Antiperoxidant	2
AntiPGE2	1
Antipharyngitic	2
Antiphenylketonuric	1
Antiphotophobic	2
Antipityriasis	1
Antiplaque	6
Antiplasmodial	2
AntiPMS	3
Antipneumonic	1
Antipodriac	1
Antipolio	1
Antipoliomyelitic	2

Activity	Chemical Count
Antiporphyrin	1
Antiproliferant	2
Antiprogesterone	1
Antiprostaglandin	5
Antipruritic	2
Antipsoriasis	2
Antipyretic	2
Antiradicular	4
Antiretardation	1
Antirheumatologic	1
Antirheumatic	2
Antirhinitic	1
Antisalmonella	2
Antisarcin	1
Antiseptic	13
Antiserotonin	1
Antishock	1
Antisickling	2
Antisinusitic	1
Antispasmodic	13
Antistaphylococcal	4
Antistreptococcal	1
Antistress	1
Antisyndrome-X	1
AntiTGF-beta	1
Antithiamin	1
Antithrombotic	1

Activity	Chemical Count
Antitrypanosomic	1
Antitubercular	1
Antitumor	8
Antitumor (Bladder)	2
Antitumor (Breast)	6
Antitumor (Cervix)	1
Antitumor (CNS)	1
Antitumor (Colon)	4
Antitumor (Kidney)	1
Antitumor (Lung)	3
Antitumor (Ovary)	1
Antitumor (Pancreas)	3
Antitumor (Prostate)	3
Antitumor (Skin)	1
Antitumor (Stomach)	2
Antitumor-Promoter	3
Antitussive	2
Antiulcer	12
Antiuremic	1
Antiuricosuric	1
Antivaricose	1
Antiviral	9
Antivertiginous	1
Antixerophthalmic	1
Antiyeast	1
Anxiolytic	1
Aphrodisiac	1

Activity	Chemical Count
Apoptotic	4
Aromatase-Inhibitor	2
Ascaricide	1
ATPase-Inhibitor	1
Bacteriostatic	1
Bacteristat	1
Barbituate-Synergist	1
Beta-Blocker	2
Beta-Glucuronidase-Inhibitor	1
Bradycardiac	1
Bronchoprotectant	1
Bronchorelaxant	1
Bruchifuge	1
Calmodulin-Antagonist	1
cAMP-Phosphodiesterase-Inhibitor	2
Cancer-Preventive	22
Candidicide	7
Candidistat	2
Capillariprotective	1
Carcinogenic	4
Cardioprotective	3
Cardiotonic	1
Carminative	2
Catabolic	1
Cataractagenic	1
Chemopreventive	2
Choleretic	6

Activity	Chemical Count
Cholesterolytic	1
CNS-Depressant	1
CNS-Stimulant	4
CNS-Toxic	1
Coleoptophile	1
Colorant	6
Comedolytic	1
COMP-Inhibitor	1
COMT-Inhibitor	1
Contraceptive	1
Convulsant	3
Copper-Chelator	2
Cosmetic	2
Counterirritant	3
COX-1-Inhibitor	2
COX-2-Inhibitor	5
Culicide	1
Cyclooxygenase-Inhibitor	3
Cytochrome-P450-1A2-Inhibitor	1
Cytochrome-P450-Inducer	1
Cytotoxic	3
Decongestant	2
Degranulant	1
Deiodinase-Inhibitor	1
Deliriant	1
Dentifrice	1
Deodorant	1

Activity	Chemical Count
Dermatitigenic	1
Detoxicant	1
Diaphoretic?	2
Differentiator	1
Diuretic	6
Dye	1
Ecboic	1
Edemagenic	1
Elastase-Inhibitor	1
Embryotoxic	1
Emetic	3
Emollient	1
Enterocontractant	2
Epileptigenic	1
Essential	6
Estrogenic	2
Expectorant	8
FLavor	19
Fungicide	11
Fungiphilic	1
Fungistat	1
GABA-nergic	1
Gastroprotective	2
Glucosyl-Transferase-Inhibitor	1
Glutathionigenic	1
Gram(+)-icide	1
Gram(-)-icide	1

Activity	Chemical Count
GST-Inducer	1
Hemolytic	1
Hemostat	1
Hepatomagenic	1
Hepatoprotective	7
Hepatotonic	1
Herbicide	10
Histaminic	1
HIV-RT-Inhibitor	2
Hypercholesterolemic	2
Hyperglycemic	2
Hypnotic	1
Hypoammonemic	1
Hypoarginanemic	1
Hypocholesterolemic	7
Hypoglycemic	4
Hypolipemic	1
Hypotensive	5
Hypothermic	1
Hypouricemic	1
ICAM-1-Inhibitor	1
Immunomodulator	4
Immunostimulant	2
Inflammatory	1
Inhalant	1
iNOS-Inhibitor	2
Inotropic	2

Activity	Chemical Count
Insect-Repellent	2
Insecticide	4
Insectifuge	17
Insectiphile	2
Insulinogenic	1
Interferon-Synergist	1
Interleukin-6-Inhibitor	1
Iodothyronine-Deiodinase-Inhibitor	1
Irritant	11
Irritant?	1
JNK-Inhibitor	1
Juvabional	1
Larvicide	1
Larvostat	3
Laxative	3
Leucocytogenic	1
Lipolytic	2
Lipotropic	1
Lipoxygenase-Inhibitor	3
Lubricant	2
MAO-A-Inhibitor	1
MAO-Inhibitor	1
Mast-Cell-Stabilizer	1
Memory-Enhancer	1
Metal-Chelator (Copper)	3
Metalloproteinase-Inhibitor	1
Metastatic	1

Activity	Chemical Count
MMP-9-Inhibitor	1
Monoamine-Precursor	2
Mosquitofuge	1
Motor-Depressant	2
Mucogenic	1
Mutagenic	3
Mycobactericide	1
Myorelaxant	3
NADH-Oxidase-Inhibitor	1
Natriuretic	1
Nematicide	9
Neoplastic	1
NEP-Inhibitor	1
Neuroexcitant	1
Neuroinhibitor	1
Neuroprotective	5
Neurotoxic	2
NF-kB-Inhibitor	2
NO-Genic	2
NO-Inhibitor	3
NO-Synthase-Inhibitor	1
Occuloirritant	1
Ornithine-Decarboxylase-Inhibitor	2
Oxidant	2
Oxidase-Inhibitor	1
Ozone-Scavenger	1
P450-2B1-Inhibitor	3

Activity	Chemical Count
P450-Inducer	3
P450-Inhibitor	1
PAF-Inhibitor	1
Pediculicide	1
Percutaneostimulant	1
Perfume	1
Perfumery	16
Peristaltic	1
Pesticide	24
PGE2-Inhibitor	1
Phagocytotic	2
Phospholipase-Inhibitor	1
Photosensitizer	1
Pigment	4
Piscicide	1
Pituitary-Stimulant	1
Plasmodicide	1
Poultice	1
Previtamin-A	1
Proliferant	1
Prooxidant	6
Propecic	4
Prostaglandin-Synthesis-Inhibitor	2
Protein-Kinase-C-Inhibitor	1
Protisticide	1
PTK-Inhibitor	1
Quinone-Reductase-Inducer	4

Activity	Chemical Count
Renoirritant	1
Respirainhibitor	1
Respirastimulant	1
Roborant	1
Rubefacient	2
Schizophrenigenic	1
Secretagogue	1
Secretolytic	1
Sedative	9
Soap	1
Spasmogenic	5
Spermicide	1
Spermigenic	1
Stimulant	1
Suppository	1
Surfactant	1
Sweetener	1
Teratologic	2
Termitifuge	1
Testosterone-Hydroxylase-Inducer	1
Thymoprotective	1
TNF-alpha-Inhibitor	2
Topoisomerase-I-Inhibitor	3
Topoisomerase-II-Inhibitor	3
Tranquilizer	2
Transdermal	5
Tremorigenic	1

Activity	Chemical Count
Trichomonicide	4
Tumor-Promoter	1
Tumorigenic	1
Tyrosinase-Inhibitor	2
Tyrosine-Kinase-Inhibitor	2
Ubiquiot	1
Uricosuric	2
Urine-Acidifier	1
Urine-Deodorant	1
Uterotonic	1
Uterotrophic	1
Vasodilator	5
Vasopressor	1
VEGF-Inhibitor	1
Verrucolytic	1
Vibriocide	1
Vulnerary	1
Xanthine-Oxidase-Inhibitor	1