

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

Activity	Chemical Count
Pesticide	24
Cancer-Preventive	22
Antioxidant	20
FLavor	19
Insectifuge	17
Perfumery	16
Antibacterial	16
Antiinflammatory	14
Antispasmodic	13
Antiseptic	13
Antiulcer	12
Fungicide	11
Irritant	11
Allergenic	11
Herbicide	10
Nematicide	9
Sedative	9
Antiviral	9
Antitumor	8
Antifeedant	8
Expectorant	8
Allelochemic	8
Antiencephalopathic	7
Analgesic	7
Antiacetylcholinesterase	7
Hypocholesterolemic	7
Hepatoprotective	7

Activity	Chemical Count
Candidicide	7
Antimutagenic	7
Antiallergic	6
Colorant	6
Antitumor (Breast)	6
Prooxidant	6
Essential	6
Diuretic	6
Choleretic	6
Antiplateau	6
COX-2-Inhibitor	5
Vasodilator	5
Antiarthritic	5
Aldose-Reductase-Inhibitor	5
Antihistaminic	5
Hypotensive	5
Transdermal	5
Neuroprotective	5
Spasmogenic	5
Anticariogenic	5
Antidiabetic	5
Antiacne	5
Antiherpetic	5
Acaricide	5
Antiprostaitic	5
Antileukemic	5
Insecticide	4

Activity	Chemical Count
Quinone-Reductase-Inducer	4
Propecic	4
Apoptotic	4
Antifatigue	4
Antiradicular	4
Antialcoholic	4
Antitumor (Colon)	4
Hypoglycemic	4
Pigment	4
5-Alpha-Reductase-Inhibitor	4
CNS-Stimulant	4
Carcinogenic	4
Trichomonicide	4
Antiflu	4
Anticataract	4
Immunomodulator	4
Antistaphylococcic	4
Antiasthmatic	4
Antitumor-Promoter	3
AntiHIV	3
Counterirritant	3
P450-2B1-Inhibitor	3
Antiaggregant	3
Lipoxygenase-Inhibitor	3
Anticancer	3
AntiPMS	3
Anesthetic	3

Activity	Chemical Count
Larvostat	3
Antidecubic	3
Cardioprotective	3
Cytotoxic	3
Antiandrogenic	3
Antitumor (Prostate)	3
Antihepatotoxic	3
Convulsant	3
Antinitrosaminic	3
Emetic	3
Topoisomerase-II-Inhibitor	3
Antifertility	3
Cyclooxygenase-Inhibitor	3
Antialzheimeran	3
Mutagenic	3
ACE-Inhibitor	3
Antitumor (Lung)	3
Antimyocarditic	3
Antigingivitic	3
Antimigraine	3
Antiperiodontic	3
Allelopathic	3
Antianaphylactic	3
Myorelaxant	3
Antitumor (Pancreas)	3
P450-Inducer	3
Metal-Chelator (Copper)	3

Activity	Chemical Count
Laxative	3
Topoisomerase-I-Inhibitor	3
Antihypertensive	3
Antiparkinsonian	3
Antiedemic	3
Antialopepic	3
Antinociceptive	3
Antineuralgic	3
NO-Inhibitor	3
Antigastric	3
Anticolitic	3
AntiLyme	2
Antialzheimeran?	2
Antirheumatic	2
Rubefacient	2
Antiosteoporotic	2
Monoamine-Precursor	2
Anticardiospasmic	2
5-Lipoxygenase-Inhibitor	2
Antipsoriac	2
Antileukotriene	2
Antineuritic	2
Tyrosine-Kinase-Inhibitor	2
Antiketotic	2
Neurotoxic	2
TNF-alpha-Inhibitor	2
HIV-RT-Inhibitor	2

Activity	Chemical Count
Chemopreventive	2
Antisickling	2
Antimelanomic	2
Antilymphomic	2
Insectiphile	2
Antisalmonella	2
Antilipoperoxidant	2
iNOS-Inhibitor	2
Antieczemic	2
Motor-Depressant	2
Estrogenic	2
Antihangover	2
Uricosuric	2
(-)-Inotropic	2
Oxidant	2
Anticancer (Breast)	2
Beta-Blocker	2
NO-Genic	2
Anthelmintic	2
Antigastric	2
Hyperglycemic	2
Antiperoxidant	2
Carminative	2
Anticoronary	2
Antimalarial	2
Antiescherichic	2
Candidistat	2

Activity	Chemical Count
Insect-Repellent	2
Antitumor (Stomach)	2
Antioxidant?	2
Gastroprotective	2
Immunostimulant	2
Cosmetic	2
Antiobesity	2
Antipruritic	2
Antiaflatoxin	2
Antineurasthenic	2
Enterocontractant	2
Tyrosinase-Inhibitor	2
Antipoliomyelitic	2
Antibronchitic	2
Antiplasmodial	2
Diaphoretic?	2
Antiatherosclerotic	2
Antipharyngitic	2
Phagocytotic	2
Antitussive	2
cAMP-Phosphodiesterase-Inhibitor	2
Anticervicaldysplasic	2
COX-1-Inhibitor	2
Antipyretic	2
Antileukotriene-D4	2
Antiaging	2
Antineuropathic	2

Activity	Chemical Count
(-)-Chronotropic	2
Ornithine-Decarboxylase-Inhibitor	2
Antiproliferant	2
Prostaglandin-Synthesis-Inhibitor	2
Antinephritic	2
Lubricant	2
NF-kB-Inhibitor	2
Antibackache	2
Aromatase-Inhibitor	2
Antiphotophobic	2
Hypercholesterolemic	2
Antideliriant	2
Antiartherosclerotic	2
Teratologic	2
Decongestant	2
Antiepileptic	2
Antianemic	2
Anticholinesterase	2
Antilithic	2
Inotropic	2
Copper-Chelator	2
Antiheartburn	2
Anticarcinomic	2
11B-HSD-Inhibitor	2
Antitumor (Bladder)	2
Lipolytic	2
Antiberiberi	2

Activity	Chemical Count
Tranquilizer	2
Antidepressant	2
Antifibrinolytic	2
Antianorectic	2
Antiperiodontal	2
Cytochrome-P450-1A2-Inhibitor	1
Antiemetic	1
Soap	1
Antiozenic	1
Mycobactericide	1
Glucosyl-Transferase-Inhibitor	1
Calmodulin-Antagonist	1
Anticephalagic	1
Verrucolytic	1
Acetylcholinergic	1
Percutaneostimulant	1
Inflammatory	1
Antidyskinetic	1
Antialkalotic	1
Antitumor (Ovary)	1
Antihepatic	1
Beta-Glucuronidase-Inhibitor	1
Uterotonic	1
COMT-Inhibitor	1
Antidote (Acetaminophen)	1
Antitumor (Cervix)	1
Memory-Enhancer	1

Activity	Chemical Count
Epileptogenic	1
AntiGTF	1
Anticancer (Prostate)	1
Occuloirritant	1
Antiporphyrin	1
Hypothermic	1
Antidermatitic	1
Antiacid	1
Antitrypanosomic	1
Antinauseant	1
Elastase-Inhibitor	1
Antiglossitic	1
Tremorigenic	1
Bacteristat	1
Antiimpotence	1
Hypoarginanemic	1
CNS-Toxic	1
Plasmodicide	1
Antistress	1
Antimite	1
Differentiator	1
Antifibrositic	1
Antibacillary	1
Antiphenylketonuric	1
Antihyperlipidemic	1
Dentifrice	1
Antiarrhythmic	1

Activity	Chemical Count
Sweetener	1
Antivertilgic	1
Antiperistaltic	1
Hepatomagenic	1
Anticomplementary	1
Phospholipase-Inhibitor	1
Spermicide	1
Antipapillomic	1
NADH-Oxidase-Inhibitor	1
Gram(+)-icide	1
Anticheilitic	1
Vulnerary	1
Adjuvant	1
Secretagogue	1
Antiototic	1
Fungistat	1
Bronchoprotectant	1
Anticarpal-Tunnel	1
Absorbent	1
P450-Inhibitor	1
Antidote (Iodine)	1
Respirainhibitor	1
Metalloproteinase-Inhibitor	1
Anticanker	1
Antiproganoid	1
Antileishmanic	1
ICAM-1-Inhibitor	1

Activity	Chemical Count
Antidiabetic?	1
AntiADD	1
Protein-Kinase-C-Inhibitor	1
Antinesidioblastosic	1
MAO-A-Inhibitor	1
Antigonadotrophic	1
Tumor-Promoter	1
Antipodriac	1
Previtamin-A	1
AntiTGF-beta	1
AntiMS	1
Leucocytogenic	1
Dye	1
Ascaricide	1
Neuroexcitant	1
Antipityriasic	1
Antihypoxic	1
Cholesterolytic	1
Antidementia	1
Antimetastatic	1
JNK-Inhibitor	1
Dermatitigenic	1
Termitifuge	1
Antiyeast	1
Antihydrophobic	1
Hepatotonic	1
Interferon-Synergist	1

Activity	Chemical Count
Degranulant	1
Antiangiogenic	1
Stimulant	1
Antiuricosuric	1
Antipellagic	1
GST-Inducer	1
Anticolic	1
Antilupus	1
Antielastase	1
Bruchifuge	1
Anticatarrh	1
VEGF-Inhibitor	1
Pediculicide	1
Antirheumatalgic	1
Antidysenteric	1
Antialkali?	1
Roborant	1
MMP-9-Inhibitor	1
Antihelicobacter	1
Anticarcinomic (Breast)	1
Urine-Deodorant	1
Ozone-Scavenger	1
Antileukoplakic	1
COMP-Inhibitor	1
Antidiscotic	1
PTK-Inhibitor	1
Mast-Cell-Stabilizer	1

Activity	Chemical Count
Antigranular	1
Anticancer (Pancreas)	1
NO-Synthase-Inhibitor	1
Antikeratitic	1
Antidepressant?	1
Antithrombic	1
Lipotropic	1
Edemagenic	1
Bacteriostatic	1
Antiimplantation	1
Hypoammonemic	1
Anemiagenic	1
Pituitary-Stimulant	1
Antistreptococcic	1
Larvicide	1
Antifibrosarcomic	1
Thymoprotective	1
Aphrodisiac	1
Antihyperkeratotic	1
Histaminic	1
Cataractagenic	1
Anticystitic	1
Antishock	1
Antimastitic	1
Iodothyronine-Deiodinase-Inhibitor	1
Deliriant	1
Antiestrogenic	1

Activity	Chemical Count
Antiarabiflavivotic	1
Surfactant	1
Hemostat	1
Anticomplement	1
Antilymphocytic	1
Cytochrome-P450-Inducer	1
Antiencephalitic	1
Antipancreatic	1
Glutathionigenic	1
Antihomocystinuric	1
Vibriocide	1
AChE-Inhibitor	1
Perfume	1
Antirhinitic	1
Inhalant	1
Antidyspeptic	1
Antiallergenic	1
Schizophrenigenic	1
Antiotitic	1
Mosquitofuge	1
Fungiphilic	1
Antihepatotic	1
Bradycardiac	1
Uterotrophic	1
Abortifacient	1
Contraceptive	1
Antidote (Hypoglycin-A)	1

Activity	Chemical Count
Renoirritant	1
Antitumor (CNS)	1
Antihalitotic	1
Anticancer (Skin)	1
Ubiquit	1
Antilaryngitic	1
Hypouricemic	1
Antitubercular	1
Embryotoxic	1
Antiglutamaergic	1
Anticancer (Bladder)	1
Barbituate-Synergist	1
Antipneumonic	1
Antiinfertility	1
Coleoptophile	1
Angiotensin-Receptor-Blocker	1
Poultice	1
Antisyndrome-X	1
Antimorphinic	1
NEP-Inhibitor	1
Photosensitizer	1
Antisinusitic	1
Antimenorrhagic	1
Irritant?	1
Deodorant	1
Antixerophthalmic	1
Antipermeability	1

Activity	Chemical Count
Cardiotonic	1
Anticonvulsant	1
Alpha-Reductase-Inhibitor	1
Antimaculitic	1
Insulinogenic	1
Spermigenic	1
Antiuremic	1
Natriuretic	1
Gram(-)-icide	1
Xanthine-Oxidase-Inhibitor	1
Aldehyde-Oxidase-Inhibitor	1
Peristaltic	1
Antisarcomic	1
Culicide	1
Secretolytic	1
Antitumor (Skin)	1
Mucogenic	1
GABA-nergic	1
Bronchorelaxant	1
Vasopressor	1
PAF-Inhibitor	1
Antiretardation	1
Antidote (Paracetamol)	1
Antialdosteronic	1
Respirastimulant	1
Antitumor (Kidney)	1
Metastatic	1

Activity	Chemical Count
Urine-Acidifier	1
Oxidase-Inhibitor	1
Comedolytic	1
Antidiarrheic	1
Antiadenomic	1
Protisticide	1
MAO-Inhibitor	1
Emollient	1
Antigonadotropic	1
Anticancer (Cervix)	1
Tumorigenic	1
Antipolio	1
Antiischemic	1
Hypolipemic	1
Antiacetylcholine	1
Proliferant	1
Antithiamin	1
Ecbolic	1
ATPase-Inhibitor	1
Neuroinhibitor	1
Antiichthyotic	1
Hypnotic	1
CNS-Depressant	1
Androgenic?	1
Piscicide	1
Antimetastatic (Stomach)	1
Juvabional	1

Activity	Chemical Count
Detoxicant	1
Testosterone-Hydroxylase-Inducer	1
Anxiolytic	1
AntiPGE2	1
Antihyperammonemic	1
Catabolic	1
AntiCrohn's	1
Antiserotonin	1
Antimange	1
Interleukin-6-Inhibitor	1
Deiodinase-Inhibitor	1
Antiesophagitic	1
Suppository	1
Antivaricose	1
Neoplastic	1
Hemolytic	1
Capillariprotective	1
PGE2-Inhibitor	1