

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

Activity	Chemical Count
Xanthine-Oxidase-Inhibitor	1
Vulnerary	1
Vibriocide	1
Verrucolytic	1
VEGF-Inhibitor	1
Vasopressor	1
Vasodilator	5
Uterotrophic	1
Uterotonic	1
Urine-Deodorant	1
Urine-Acidifier	1
Uricosuric	2
Ubiquiot	1
Tyrosine-Kinase-Inhibitor	2
Tyrosinase-Inhibitor	2
Tumorigenic	1
Tumor-Promoter	1
Trichomonicide	4
Tremorigenic	1
Transdermal	5
Tranquilizer	2
Topoisomerase-II-Inhibitor	3
Topoisomerase-I-Inhibitor	3
TNF-alpha-Inhibitor	2
Thymoprotective	1
Testosterone-Hydroxylase-Inducer	1
Termitifuge	1

Activity	Chemical Count
Teratologic	2
Sweetener	1
Surfactant	1
Suppository	1
Stimulant	1
Spermigenic	1
Spermicide	1
Spasmogenic	5
Soap	1
Sedative	9
Secretolytic	1
Secretagogue	1
Schizophrenigenic	1
Rubefacient	2
Roborant	1
Respirastimulant	1
Respirainhibitor	1
Renoirritant	1
Quinone-Reductase-Inducer	4
PTK-Inhibitor	1
Protisticide	1
Protein-Kinase-C-Inhibitor	1
Prostaglandin-Synthesis-Inhibitor	2
Propecic	4
Prooxidant	6
Proliferant	1
Previtamin-A	1

Activity	Chemical Count
Poultice	1
Plasmodicide	1
Pituitary-Stimulant	1
Piscicide	1
Pigment	4
Photosensitizer	1
Phospholipase-Inhibitor	1
Phagocytotic	2
PGE2-Inhibitor	1
Pesticide	24
Peristaltic	1
Perfumery	16
Perfume	1
Percutaneostimulant	1
Pediculicide	1
PAF-Inhibitor	1
P450-Inhibitor	1
P450-Inducer	3
P450-2B1-Inhibitor	3
Ozone-Scavenger	1
Oxidase-Inhibitor	1
Oxidant	2
Ornithine-Decarboxylase-Inhibitor	2
Oculoirritant	1
NO-Synthase-Inhibitor	1
NO-Inhibitor	3
NO-Genic	2

Activity	Chemical Count
NF-kB-Inhibitor	2
Neurotoxic	2
Neuroprotective	5
Neuroinhibitor	1
Neuroexcitant	1
NEP-Inhibitor	1
Neoplastic	1
Nematicide	9
Natriuretic	1
NADH-Oxidase-Inhibitor	1
Myorelaxant	3
Mycobactericide	1
Mutagenic	3
Mucogenic	1
Motor-Depressant	2
Mosquitofuge	1
Monoamine-Precursor	2
MMP-9-Inhibitor	1
Metastatic	1
Metalloproteinase-Inhibitor	1
Metal-Chelator (Copper)	3
Memory-Enhancer	1
Mast-Cell-Stabilizer	1
MAO-Inhibitor	1
MAO-A-Inhibitor	1
Lubricant	2
Lipoxygenase-Inhibitor	3

Activity	Chemical Count
Lipotropic	1
Lipolytic	2
Leucocytogenic	1
Laxative	3
Larvostat	3
Larvicide	1
Juvabional	1
JNK-Inhibitor	1
Irritant?	1
Irritant	11
Iodothyronine-Deiodinase-Inhibitor	1
Interleukin-6-Inhibitor	1
Interferon-Synergist	1
Insulinogenic	1
Insectiphile	2
Insectifuge	17
Insecticide	4
Insect-Repellent	2
Inotropic	2
iNOS-Inhibitor	2
Inhalant	1
Inflammatory	1
Immunostimulant	2
Immunomodulator	4
ICAM-1-Inhibitor	1
Hypouricemic	1
Hypothermic	1

Activity	Chemical Count
Hypotensive	5
Hypolipemic	1
Hypoglycemic	4
Hypocholesterolemic	7
Hypoarginanemic	1
Hypoammonemic	1
Hypnotic	1
Hyperglycemic	2
Hypercholesterolemic	2
HIV-RT-Inhibitor	2
Histaminic	1
Herbicide	10
Hepatotonic	1
Hepatoprotective	7
Hepatomagenic	1
Hemostat	1
Hemolytic	1
GST-Inducer	1
Gram(-)icide	1
Gram(+)icide	1
Glutathionigenic	1
Glucosyl-Transferase-Inhibitor	1
Gastroprotective	2
GABA-nergic	1
Fungistat	1
Fungiphilic	1
Fungicide	11

Activity	Chemical Count
FLavor	19
Expectorant	8
Estrogenic	2
Essential	6
Epileptigenic	1
Enterocontractant	2
Emollient	1
Emetic	3
Embryotoxic	1
Elastase-Inhibitor	1
Edemagenic	1
Ecbolic	1
Dye	1
Diuretic	6
Differentiator	1
Diaphoretic?	2
Detoxicant	1
Dermatitigenic	1
Deodorant	1
Dentifrice	1
Deliriant	1
Deiodinase-Inhibitor	1
Degranulant	1
Decongestant	2
Cytotoxic	3
Cytochrome-P450-Inducer	1
Cytochrome-P450-1A2-Inhibitor	1

Activity	Chemical Count
Cyclooxygenase-Inhibitor	3
Culicide	1
COX-2-Inhibitor	5
COX-1-Inhibitor	2
Counterirritant	3
Cosmetic	2
Copper-Chelator	2
Convulsant	3
Contraceptive	1
COMT-Inhibitor	1
COMP-Inhibitor	1
Comedolytic	1
Colorant	6
Coleoptophile	1
CNS-Toxic	1
CNS-Stimulant	4
CNS-Depressant	1
Cholesterolytic	1
Choleretic	6
Chemopreventive	2
Cataractagenic	1
Catabolic	1
Carminative	2
Cardiotonic	1
Cardioprotective	3
Carcinogenic	4
Capillariprotective	1



Activity	Chemical Count
Candidistat	2
Candidicide	7
Cancer-Preventive	22
cAMP-Phosphodiesterase-Inhibitor	2
Calmodulin-Antagonist	1
Bruchifuge	1
Bronchorelaxant	1
Bronchoprotectant	1
Bradycardiac	1
Beta-Glucuronidase-Inhibitor	1
Beta-Blocker	2
Barbituate-Synergist	1
Bacteristat	1
Bacteriostatic	1
ATPase-Inhibitor	1
Ascaricide	1
Aromatase-Inhibitor	2
Apoptotic	4
Aphrodisiac	1
Anxiolytic	1
Antiyeast	1
Antixerophthalmic	1
Antivertiginic	1
Antiviral	9
Antivaricose	1
Antiuricosuric	1
Antiuremic	1

Activity	Chemical Count
Antiulcer	12
Antitussive	2
Antitumor-Promoter	3
Antitumor (Stomach)	2
Antitumor (Skin)	1
Antitumor (Prostate)	3
Antitumor (Pancreas)	3
Antitumor (Ovary)	1
Antitumor (Lung)	3
Antitumor (Kidney)	1
Antitumor (Colon)	4
Antitumor (CNS)	1
Antitumor (Cervix)	1
Antitumor (Breast)	6
Antitumor (Bladder)	2
Antitumor	8
Antitubercular	1
Antitrypanosomic	1
Antithrombic	1
Antithiamin	1
AntiTGF-beta	1
Antisyndrome-X	1
Antistress	1
Antistreptococcic	1
Antistaphylococcic	4
Antispasmodic	13
Antisinusitic	1

Activity	Chemical Count
Antisickling	2
Antishock	1
Antiserotonin	1
Antiseptic	13
Antisarcomic	1
Antisalmonella	2
Antirhinitic	1
Antirheumatic	2
Antirheumatalgic	1
Antiretardation	1
Antiradicular	4
Antipyretic	2
Antipsoriac	2
Antipruritic	2
Antiprostatitic	5
Antiprostanoid	1
Antiproliferant	2
Antiporphyrin	1
Antipoliomyelitic	2
Antipolio	1
Antipodriac	1
Antipneumonic	1
AntiPMS	3
Antiplasmodial	2
Antiplaque	6
Antipityriasis	1
Antiphotophobic	2

Activity	Chemical Count
Antiphenylketonuric	1
Antipharyngitic	2
AntiPGE2	1
Antiperoxidant	2
Antipermeability	1
Antiperistaltic	1
Antiperiodontic	3
Antiperiodontal	2
Antipellagic	1
Antiparkinsonian	3
Antipapillomic	1
Antipancreatic	1
Antiozenic	1
Antioxidant?	2
Antioxidant	20
Antiototic	1
Antiotitic	1
Antiosteoporotic	2
Antiobesity	2
Antinociceptive	3
Antinitrosaminic	3
Antineuropathic	2
Antineuritic	2
Antineurasthenic	2
Antineuralgic	3
Antinesidioblastosic	1
Antinephritic	2

Activity	Chemical Count
Antinauseant	1
Antimyocarditic	3
Antimutagenic	7
AntiMS	1
Antimorphinic	1
Antimite	1
Antimigraine	3
Antimetastatic (Stomach)	1
Antimetastatic	1
Antimenorrhagic	1
Antimelanomic	2
Antimastitic	1
Antimange	1
Antimalarial	2
Antimaculitic	1
Antilymphomic	2
Antilymphocytic	1
AntiLyme	2
Antilupus	1
Antilithic	2
Antilipoperoxidant	2
Antileukotriene-D4	2
Antileukotriene	2
Antileukoplakic	1
Antileukemic	5
Antileishmanic	1
Antilaryngitic	1

Activity	Chemical Count
Antiketotic	2
Antikeratitic	1
Antiischemic	1
Antiinflammatory	14
Antiinfertility	1
Antiimpotence	1
Antiimplantation	1
Antiichthyotic	1
Antihypoxic	1
Antihypertensive	3
Antihyperlipidemic	1
Antihyperkeratotic	1
Antihyperammonemic	1
Antihydrophobic	1
Antihomocystinuric	1
AntiHIV	3
Antihistaminic	5
Antiherpetic	5
Antihepatotoxic	3
Antihepatotic	1
Antihepatitic	1
Antihelicobacter	1
Antiheartburn	2
Antihangover	2
Antihalitotic	1
AntiGTF	1
Antigranular	1

Activity	Chemical Count
Antigonadotropic	1
Antigonadotrophic	1
Antiglutamaergic	1
Antiglossitic	1
Antigingivitic	3
Antigastritic	3
Antigastric	2
Antiflu	4
Antifibrositic	1
Antifibrosarcomic	1
Antifibrinolytic	2
Antifertility	3
Antifeedant	8
Antifatigue	4
Antiestrogenic	1
Antiesophagitic	1
Antiescherichic	2
Antiepileptic	2
Antiencephalopathic	7
Antiencephalitic	1
Antiemetic	1
Antielastase	1
Antiedemic	3
Antieczemic	2
Antidyspeptic	1
Antidyskinetic	1
Antidysenteric	1

Activity	Chemical Count
Antidote (Paracetamol)	1
Antidote (Iodine)	1
Antidote (Hypoglycin-A)	1
Antidote (Acetaminophen)	1
Antidiscotic	1
Antidiarrheic	1
Antidiabetic?	1
Antidiabetic	5
Antidermatitic	1
Antidepressant?	1
Antidepressant	2
Antidementia	1
Antideliriant	2
Antidecubitic	3
Anticystitic	1
AntiCrohn's	1
Anticoronary	2
Anticonvulsant	1
Anticomplementary	1
Anticomplement	1
Anticolitic	3
Anticolic	1
Anticholinesterase	2
Anticheilitic	1
Anticervicaldysplasic	2
Anticephalagic	1
Anticatarrh	1



Activity	Chemical Count
Anticataract	4
Anticarpal-Tunnel	1
Anticariogenic	5
Anticardiospasmic	2
Anticarcinomic (Breast)	1
Anticarcinomic	2
Anticancer	1
Anticancer (Skin)	1
Anticancer (Prostate)	1
Anticancer (Pancreas)	1
Anticancer (Cervix)	1
Anticancer (Breast)	2
Anticancer (Bladder)	1
Anticancer	3
Antibronchitic	2
Antiberiberi	2
Antibacterial	16
Antibackache	2
Antibacillary	1
Antiatherosclerotic	2
Antiasthmatic	4
Antiarthritic	5
Antiarteriosclerotic	2
Antiarrhythmic	1
Antiarabiflavinotic	1
Antianorectic	2
Antiangiogenic	1

Activity	Chemical Count
Antianemic	2
Antiandrogenic	3
Antianaphylactic	3
Antialzheimeran?	2
Antialzheimeran	3
Antialopepic	3
Antiallergic	6
Antiallergenic	1
Antialkalotic	1
Antialkali?	1
Antialdosteronic	1
Antialcoholic	4
Antiaging	2
Antiaggregant	3
Antiaflatoxin	2
Antiadenomic	1
AntiADD	1
Antiacne	5
Antiacid	1
Antiacetylcholinesterase	7
Antiacetylcholine	1
Anthelmintic	2
Angiotensin-Receptor-Blocker	1
Anesthetic	3
Anemiagenic	1
Androgenic?	1
Analgesic	7

Activity	Chemical Count
Alpha-Reductase-Inhibitor	1
Allergenic	11
Allelopathic	3
Allelochemic	8
Aldose-Reductase-Inhibitor	5
Aldehyde-Oxidase-Inhibitor	1
Adjuvant	1
AChE-Inhibitor	1
Acetylcholinergic	1
ACE-Inhibitor	3
Acaricide	5
Absorbent	1
Abortifacient	1
5-Lipoxygenase-Inhibitor	2
5-Alpha-Reductase-Inhibitor	4
11B-HSD-Inhibitor	2
(-)-Inotropic	2
(-)-Chronotropic	2