

**Dr. Duke's Phytochemical and Ethnobotanical Databases**  
**Biological Activities found in Zea mays**

Activity	Chemical Count
(-)-Chronotropic	1
(-)-Inotropic	1
11B-HSD-Inhibitor	1
5-Alpha-Reductase-Inhibitor	6
5-Lipoxygenase-Inhibitor	1
Abortifacient	3
Absorbent	1
Acaricide	6
Acarifuge	1
ACE-Inhibitor	9
Acetylcholinergic	1
AChE-Inhibitor	1
Acidifier	1
Acidulant	2
Acnegenic	1
Additive	2
Adjuvant	1
Aggregant	1
Aldehyde-Oxidase-Inhibitor	1
Aldose-Reductase-Inhibitor	17
Allelochemic	9
Allelopathic	6
Allergenic	25
Alpha-Glucosidase-Inhibitor	1
Alpha-Reductase-Inhibitor	1
Amphiglycemic?	1
Anabolic	1

Activity	Chemical Count
Analgesic	22
Anaphrodisiac	1
Ancylostomicide	1
Androgenic	2
Androgenic?	1
Anemiagenic	1
Anesthetic	10
Angiogenic	1
Angiotensin-Receptor-Blocker	3
Anhydrotic	1
Ankylostomacide	1
Anorexic	3
Anthelmintic	6
Antiacetylcholinesterase	4
Antiacid	1
Antiacne	15
Antiacrodermatitic	1
Antiacrodynic	1
AntiADD	1
Antiadenomic	2
Antiadenoviral	1
Antiadenovirus	1
Antiadhesive	1
Antiadrenalinic	1
Antiaflatoxin	3
AntiAGE	2
Antiaggregant	16

Activity	Chemical Count
Antiaging	5
Antiakathisic	1
Antialcoholic	5
Antialdosteronic	1
Antialkali?	1
Antialkalotic	1
Antiallergenic	1
Antiallergic	10
Antialopepic	6
Antialzheimeran	8
Antialzheimeran?	3
Antiamblyopic	1
Antiamebic	1
Antianaphylactic	4
Antiandrogenic	5
Antianemic	8
Antianginal	3
Antiangiogenic	5
Antianorectic	2
Antianorexic	1
Antianxiety	3
Antiarabiflavinoctic	1
Antiarachidonate	1
Antiarrhythmic	8
Antiartherosclerotic	3
Antiarthritic	16
Antiasthmatic	13

Activity	Chemical Count
Antiatherogenic	1
Antiatheromic	1
Antiatherosclerotic	17
Antiautistic	1
Antibacillus	1
Antibackache	1
Antibacterial	45
Antiberiberi	1
AntiBPH	1
Antibradiquinic	1
Antibronchitic	4
Antibrucellosic	1
Anticancer	15
Anticancer (Breast)	3
Anticancer (Cervix)	2
Anticancer (Colon)	2
Anticancer (Esophagus)?	1
Anticancer (Forestomach)	2
Anticancer (Kidney)	1
Anticancer (Liver)	4
Anticancer (Lung)	2
Anticancer (Pancreas)	1
Anticancer (Prostate)	1
Anticancer (Skin)	4
Anticanker	3
Anticarcinogenic	3
Anticarcinomic	3

Activity	Chemical Count
Anticarcinomic (Breast)	1
Anticardiospasmic	1
Anticariogenic	12
Anticarpal-Tunnel	2
Anticataract	10
Anticatarrh	1
Anticephalagic	3
Anticervicaldysplasic	5
AntiCFS	3
Anticheilitic	5
Antichilblain	1
Anticholinesterase	2
Anticholinesterase?	1
Antichoreic	1
Anticirrhotic	3
Anticirrhotic?	1
Anticlastogen	2
Anticlaudificant?	1
Anticlimacteric	4
Anticoeliac	1
Anticold	2
Anticolic	1
Anticolitic	3
Anticomplement	1
Anticomplementary	1
Anticonvulsant	7
Anticorneotic	1

Activity	Chemical Count
Anticoronary	7
AntiCrohn's	3
AntiCRP	1
AntiCTS	1
Anticystinuric	1
Anticystitic	2
Anticytotoxic	1
Antidandruff	5
Antidecubitic	3
Antideliriant	1
Antidementia	8
Antidepressant	14
Antidepressant?	1
Antidermatitic	9
Antidiabetic	17
Antidiabetic?	2
Antidiarrheic	3
Antidiscotic	1
Antidiuretic	3
Antidote (Acetaminophen)	1
Antidote (Aluminum)	2
Antidote (Cadmium)	2
Antidote (Heavy Metals)	1
Antidote (Hydrazine)	1
Antidote (Hypoglycin-A)	1
Antidote (Iodine)	1
Antidote (Lead)	3

Activity	Chemical Count
Antidote (Mercury)	1
Antidote (Paracetamol)	1
Antidote (Paraquat)	1
Antidrepanocytic	1
Antidysgeuzic	1
Antidyskinetic	4
Antidysmenorrhic	2
Antidyspeptic	1
Antidysphagic	1
Antiear-wax	1
AntiEBV	2
Antieczemic	6
Antiedemic	13
Antielastase	3
Antiemetic	1
Antiencephalitic	2
Antiencephalopathic	7
Antiencephalopathic?	1
Antiendometriotic	2
Antiendotoxic	1
Antienteritic	1
Antienterotic	1
Antiepileptic	6
Antiescherichic	5
Antiesherichic	1
Antiesophagitic	2
Antiestrogenic	4

Activity	Chemical Count
Antifatigue	9
Antifeedant	14
Antifertility	4
Antifibrinolytic	3
Antifibromyalgic	2
Antifibrosarcomic	1
Antifibrotic	3
Antiflu	6
Antifuruncular	1
Antigallstone	2
Antigastric	1
Antigastritic	5
Antigastrotic	1
Antigenotoxic	2
Antigingivitic	4
Antiglaucomic	2
Antiglossitic	4
Antiglutamaergic	1
Antiglycosuric	1
Antigoiter	1
Antigonadotrophic	2
Antigonadotropic	3
Antigout	2
Antigranular	1
Antigranulocytopenic	1
Antigrey	1
AntiGTF	1



Activity	Chemical Count
Antihalitotic	3
Antihangover	5
Antiheartburn	1
Antihemolytic	2
Antihemorrhagic	2
Antihepatitic	3
Antihepatoadenomic	1
Antihepatotic	1
Antihepatotoxic	12
Antiherpetic	13
Antiherpetic?	1
Antihiccup	1
Antihistaminic	11
AntiHIV	8
Antihomocysteine	1
Antihomocystinuric	3
Antihydrophobic	1
Antihyperactivity	1
Antihyperammonemic	1
Antihypercholesterolemic	3
Antihyperglycemic	1
Antihyperkeratotic	1
Antihyperkinetic	3
Antihyperlipidemic	1
Antihyperlipoproteinaemic	1
Antihypertensive	10
Antihyperthyroid	3

Activity	Chemical Count
Antihyperventilation	1
Antihypoglycemic	1
Antihypoxic	1
Antiichthyotic	1
Antielus?	1
Antiimpotence	3
Antiinfarctal	1
Antiinfective	1
Antiinfertility	7
Antiinflammatory	47
Antiinsomniac	6
Antiinsomniac?	1
Antiinsomnic	1
Antiinsulinogenic	1
Antiischemic	3
Antikeratitic	1
Antikeratotic	2
Antikeshan	1
Antiketotic	3
Antilactobacillic	1
Antilaryngitic	1
AntiLegionella	3
Antileishmanic	3
Antileptic	3
Antileucodermic	1
Antileukemic	12
Antileukonychic	1

Activity	Chemical Count
Antileukoplakic	1
Antileukorrhoeic	1
Antileukotriene	5
Antileukotriene-D4	4
Antilipolytic	1
Antilipoperoxidant	2
Antilisteria	2
Antilithic	6
Antilupus	1
AntiLyme	5
Antilymphedemic	1
Antilymphomic	5
Antimaculitic	6
Antimalarial	2
Antimange	1
Antimanic	5
Antimastalgic	1
Antimastitic	1
Antimeasles	1
Antimelanogenic	3
Antimelanomic	7
AntiMeniere's	2
Antimenopausal	6
Antimenorrhagic	3
Antimetaplastic	1
Antimetastatic	6
Antimetastatic (Stomach)	1

Activity	Chemical Count
Antimigraine	6
Antimite	1
Antimitotic	4
Antimitral-valve-prolapse	1
Antimononucleotic	1
AntiMorning-Sickness	1
Antimorphinic	1
AntiMRSA	1
AntiMS	2
AntiMSG-Sensitivity	1
Antimutagenic	21
Antimyalgic	1
Antimyasthenic	1
Antimycoplasmotic	1
Antimycotic	1
Antimyelotoxic	2
Antimyotrophic	1
Antimyocarditic	2
Antinauseant	1
Antineoplastic	2
Antinephritic	3
Antinephrolytic	1
Antinesidioblastosic	1
Antineuralgic	5
Antineuramidase	1
Antineurasthenic	1
Antineuritic	3

Activity	Chemical Count
Antineuropathic	6
Antineuropathic?	1
Antineurotic	1
AntiNF-kB	1
Antinitrosaminic	8
Antinitrosating	1
Antinitrosic	1
Antinociceptive	10
Antinyctalopic	2
Antiobesity	7
Antiodontalgic	1
Antionychyotic	2
Antiophidic	4
Antiophthalmic	1
Antiorchitic	1
Antiosteoarthritic	4
Antiosteoporotic	9
Antiototic	1
Antioxaluric	1
Antioxidant	52
Antioxidant (LDL)	2
Antioxidant Synergist	3
Antioxidant?	2
Antiozenic	1
Antipancreatic	1
Antipapillomic	1
Antiparkinsonian	9

Activity	Chemical Count
Antiparotitic	1
Antipellagic	3
Antipeptic	2
Antiperiodontal	2
Antiperiodontic	2
Antiperiodontitic	5
Antiperistaltic	1
Antipermeability	1
Antiperoxidant	9
AntiPGE2	1
Antipharyngitic	2
Antiphenylketonuric	2
Antiphotophobic	2
Antipityriasic	2
Antiplateque	9
Antiplasmodial	2
AntiPMS	7
Antipneumonic	2
Antipodriac	2
Antipolio	5
Antipoliomyelitic	2
Antipolyp	1
Antiporphyric	1
Antiprogestational	1
Antiprolactin	2
Antiproliferant	8
Antiprostaglandin	7

Activity	Chemical Count
Antiprostanoid	1
Antiprostatadenomic	2
Antiprostatitic	7
Antiprostatotic	1
Antiproteolytic	1
Antipruritic	4
Antipsittacotic	1
Antipsoriac	5
Antipsychotic	4
Antipyretic	6
Antiradiation	1
Antiradicular	20
AntiRaynaud's	3
Antiretardation	1
Antiretinitic Optometry	1
Antiretinopathic	1
Antiretinotic	2
Antirheumatic	12
Antirheumatic?	1
Antirhinitic	2
Antisalmonella	5
Antisarcomic	1
Antischizophrenic	2
Antiscleromyxoedemic	1
Antiscoliotic	1
Antiscorbatic	1
Antiscotomic	1

Activity	Chemical Count
Antiseborrheic	4
Antiseptic	33
Antiserotonin	1
Antiserotoninic	1
Antishingles	1
Antishock	1
Antisickling	5
Antisilicotic	1
Antisinusitic	2
Antispare-Tire	1
Antispasmodic	27
Antispasmophilic	1
AntiSpina-Bifida	2
Antistaphylococcic	12
Antisteatotic	1
Antistomatitic	2
Antistreptococcic	9
Antistress	4
Antistroke	3
Antisunburn	2
Antisyndrome-X	7
Antitachycardic	1
Antitartar	1
AntiTGF-beta	1
Antithiamin	2
Antithrombic	2
Antithromboxane	1



Activity	Chemical Count
Antithyretropic	1
Antithyroid	3
Antithyrototoxic	1
Antititic	1
Antitinnitic	1
AntiTMJ	1
AntiTNF	1
Antitoxoplasmotic	1
Antitrichinosic	1
Antitriglyceride	2
Antitrypanosomic	1
Antitubercular	2
Antituberculic	1
Antitumor	29
Antitumor (Bladder)	2
Antitumor (brain)	1
Antitumor (Breast)	8
Antitumor (Cervix)	2
Antitumor (CNS)	1
Antitumor (Colon)	10
Antitumor (Esophagus)?	1
Antitumor (Forestomach)	2
Antitumor (Gastric)	1
Antitumor (GI)	1
Antitumor (Kidney)	2
Antitumor (Liver)	3
Antitumor (Lung)	6

Activity	Chemical Count
Antitumor (Mouth)	1
Antitumor (Ovary)	1
Antitumor (Pancreas)	3
Antitumor (Prostate)	6
Antitumor (Skin)	6
Antitumor (Stomach)	3
Antitumor-Promoter	11
Antitussive	5
Antiulcer	19
Antiulcerogenic	2
Antiuremic	1
Antiuricosuric	1
AntiUTI	1
Antivaccinia	1
Antivaginitic	4
Antivaricose	1
Antivertigo	2
Antiviral	25
Antiviral?	1
Antivitaligic	2
Antivulvitic	1
Antiwart	1
Antixerophthalmic	1
Antixerotic	1
Antiyeast	2
Anxiolytic	8
AP-1-Inhibitor	1

Activity	Chemical Count
Aphidifuge	1
Aphrodisiac	3
Apifuge	1
Apoptotic	7
Aromatase-Inhibitor	1
Arrhythmigenic	1
Artemicide	3
Arteriodilator	2
Ascaricide	2
Asthma-preventive	1
Astringent	3
Ataxigenic	1
Atherogenic	1
ATPase-Inhibitor	2
Autotoxic	1
Bacteristat	5
Barbituate-Synergist	1
Beta-Adrenergic Receptor Blocker	1
Beta-Blocker	3
Beta-Glucuronidase-Inhibitor	2
Bradycardiac	1
Bradycardic	1
Bronchodilator	1
Bronchomucolytic	1
Bronchomucotropic	1
Bronchoprotectant	1
Bronchorelaxant	2

Activity	Chemical Count
Bronchorrheic	1
Bruchiphobe	4
Bufocide	1
Calcium-Antagonist	6
Calcium-Channel-Blocker	1
Calmodulin-Antagonist	1
cAMP-Phosphodiesterase-Inhibitor	3
Cancer-Preventive	57
Cancer-Preventive?	1
Candidicide	17
Candidistat	2
Capillarigenic	1
Capillariprotective	2
Carcinogenic	12
Carcinogenic?	1
Cardiac	1
Cardiodepressant	3
Cardiomyopathogenic	1
Cardioprotective	15
Cardioprotective?	1
Cardiotonic	4
Cardiotoxic	1
Carminative	6
Caspase-8-Inducer	1
Catabolic	1
Cataractagenic	1
Cerebrotonic	1

Activity	Chemical Count
Chelator	1
Chemopreventive	11
Cholagogue	3
Choleretic	13
Cholesterolytic	3
Cholinergic	2
Cicatrizant	1
Ciliotoxic	1
Circulotonic	2
Clastogenic	2
CNS-Active	2
CNS-Depressant	6
CNS-Paralytic	1
CNS-Stimulant	5
Co-carcinogenic	1
Cold-preventive	1
Coleoptophile	2
Collagen-Sparing	2
Collagenic	2
Collyrium	1
Colorant	10
Comedogenic	1
Comedolytic	1
COMT-Inhibitor	1
Congestant	1
Contraceptive	2
Convulsant	3

Activity	Chemical Count
Copper-Antagonist	1
Copper-Chelator	1
Cosmetic	2
Counterirritant	3
COX-1-Inhibitor	2
COX-2-Inhibitor	6
Culicide	2
Cyclooxygenase-Inhibitor	7
Cytochrome-P450-1A2-Inhibitor	1
Cytochrome-P450-Inducer	3
Cytochrome-P450-Inhibitor	1
Cytoprotective	1
Cytotoxic	8
Cytotoxic (Breast)	1
Cytotoxic (Colon)	1
Cytotoxic (Lung)	1
Decongestant	1
Decongestant?	1
Degranulant	1
Deiodinase-Inhibitor	1
Deliriant	1
Demulcent	2
Dentifrice	2
Deodorant	2
Depressant	2
Dermal	1
Dermatitigenic	7

Activity	Chemical Count
Detoxicant	2
Detoxicant (Alcohol)	1
Diagnostic	1
Diaphoretic	2
Diaphoretic?	2
Differentiator	1
Diuretic	14
DME-Inhibitor	1
DNA-Active	1
DNA-Protective	1
Dopaminergic	1
Dye	2
Edemagenic	1
Elastase-Inhibitor	1
Embryotoxic	1
Emetic	6
Emmenagogue	2
Emollient	2
Encephalopathic	1
Energizer	1
Enterocontractant	1
Enterorelaxant	4
Enterotoxic	1
Epidermal-Stimulant	1
Ergogenic	1
Erythrocytogenic	1
Essential	8

Activity	Chemical Count
Estrogenic	8
Ethanolytic	1
Expectorant	12
Fatal	1
Febrifuge	1
Fibrinolytic	1
Fistula-Preventive	1
Flatugenic	2
FLavor	35
Floral-Inhibitor	1
Fungicide	28
Fungiphilic	1
Fungistat	2
GABA-nergic	2
Gastroirritant	1
Gastroprotective	5
Gastrosedative	1
Glucogonogenic	1
Glucosyl-Transferase-Inhibitor	1
Glutathione-Depleting	1
Glutathionigenic	2
Goitrogenic	2
Gonadotrophic	2
Gram(+)icide	3
Gram(-)icide	3
GST-Inducer	1
Hematopoietic	2



Activity	Chemical Count
Hemolytic	1
Hemopoietic	1
Hemorrhagic	1
Hemostat	4
Hemostatic	1
Hepatocarcinogenic	1
Hepatomagenic	1
Hepatoprotective	18
Hepatotonic	2
Hepatotoxic	5
Hepatotropic	2
Herbicide	10
Histamine-Inhibitor	2
Histaminic	1
HIV-RT-Inhibitor	1
Hydrocholerectic	1
Hypercholesterolemic	3
Hyperglycemic	3
Hypertensive	5
Hyperthyroid	1
Hypertrichotic	1
Hyperuricemic	1
Hypnotic	5
Hypoammonemic	1
Hypoarginanemic	1
Hypocalcemic	2
Hypocholesterolemic	26

Activity	Chemical Count
Hypoglycemic	18
Hypolipemic	1
Hypolipidemic	4
Hypotensive	20
Hypothermic	3
Hypotriglyceridemic	1
Hypouricemic	1
Ileorelaxant	1
Immunomodulator	12
Immunostimulant	18
Immunosuppressant	4
Inflammatory	1
iNOS-Inhibitor	1
Inotropic	1
Insecticide	9
Insectifuge	22
Insectifuge?	1
Insectiphile	4
Insulin-Sparing	2
Insulinase-Inhibitor	4
Insulinic	1
Insulinogenic	4
Insulinotonic	4
Interferon-Synergist	1
Interferonogenic	2
Interleukin-6-Inhibitor	2
Irritant	24

Activity	Chemical Count
Juvabional	5
Keratolytic	3
Larvicide	5
Larvostat	4
Laxative	8
Laxative?	1
Lectin	1
Leptogenic	1
Leucocytogenic	1
Leukotriene-Inhibitor	2
Lipolytic	4
Lipotropic	4
Lipoxygenase-Inhibitor	5
Lithogenic	3
Litholytic	1
Lubricant	3
Lyase-Inhibitor	1
Lymphocytogenic	2
Lymphokinetic	1
MAO-A-Inhibitor	1
Mast-Cell-Stabilizer	1
Memorigenic	2
Memory-Enhancer	1
Metal-Chelator	3
Metal-Chelator (Copper)	2
Metalloproteinase-Inhibitor	1
Metastatic	1

Activity	Chemical Count
Mitotic	1
MMP-9-Inhibitor	1
Molluscicide	2
Monoamine-Precursor	3
Mosquitocide	2
Mosquitofuge	2
Motor-Depressant	4
Mucogenic	3
Mucolytic	1
Mucotropic	1
Mutagenic	2
Mycobactericide	2
Myocardiotoxic	1
Myorelaxant	8
Myostimulant	1
NADH-Oxidase-Inhibitor	1
Narcotic	2
Natriuretic	2
Nematicide	17
Neoplastic	1
NEP-Inhibitor	1
Nephrotoxic	6
Neurodepressant	1
Neuroexcitant	1
Neuroinhibitor	1
Neurolytic	1
Neuropathogenic	1

Activity	Chemical Count
Neuroprotective	3
Neurotoxic	4
Neurotransmitter	1
NF-kB-Inhibitor	4
NO-Genic	3
NO-Inhibitor	3
NO-Synthase-Inhibitor	1
Nociceptive	1
Ornithine-Decarboxylase-Inhibitor	6
Osmoregulator	1
Osteogenic	1
Ovicide	1
Oviposition-Stimulant	1
Ovulant	1
Oxidant	2
Ozone-Scavenger	1
P450-2B1-Inhibitor	2
P450-Inducer	5
P450-Inhibitor	1
PAF-Inhibitor	1
Pancreatotoxic	1
Parasiticide	1
Parasympathomimetic	1
Pediculicide	1
Percutaneostimulant	1
Perfume	1
Perfumery	27

Activity	Chemical Count
Peristaltic	2
Pesticide	75
PGE2-Inhibitor	1
Phagocytotic	5
Phospholipase-Inhibitor	1
Photosensitizer	1
Phytoalexin	1
Phytohormonal	2
Pigment	4
Piscicide	3
Pituitary-Stimulant	1
PKC-Inhibitor	1
Plasmodicide	1
Polyamine-Synthesis-Inhibitor	1
Poultice	1
Preservative	2
Previtamin-A	2
Progesteronigenic	2
Prolactinogenic	1
Proliferant	1
Prooxidant	7
Propecic	6
Prostaglandigenic	5
Prostaglandin-Inhibitor	1
Prostaglandin-Sparer	1
Prostaglandin-Synthesis-Inhibitor	8
Protein-Kinase-C-Inhibitor	2

Activity	Chemical Count
Protisticide	1
PTK-Inhibitor	1
Pyrogenic	1
Quinone-Reductase-Inducer	3
Refrigerant	1
Renotoxic	1
Respirastimulant	1
Respirodepressant	1
Respirotoxic	1
Retinoprotectant Optometry	1
Roborant	1
Rodenticide	1
Rubefacient	3
Scabicide	1
Schizophrenigenic	1
Sclerosant	1
Secretagogue	3
Secretomotor	1
Sedative	19
Sequestrant	1
Serotoninerbic	3
Sialogogue	1
Soap	3
Spasmogenic	3
Spasmolytic	1
Spermicide	2
Spermigenic	2

Activity	Chemical Count
Sprout-Inhibitor	1
Stimulant	1
Styptic	1
Sunscreen	5
Suppository	1
Suppurative	1
Surfactant	2
Sweetener	5
Taenicide	1
Teratogenic	2
Teratologic	1
Termiticide	4
Termitifuge	2
Testosterone-Hydroxylase-Inducer	1
Testosterone-Inducer	1
Testosteronigenic	1
Thymoprotective	1
Thyroid-Peroxidase-Inhibitor	1
Thyrotropic	2
TNF-alpha-Inhibitor	2
Topoisomerase-I-Inhibitor	2
Topoisomerase-II-Inhibitor	2
Toxic	4
Tracheorelaxant	2
Tranquilizer	4
Transdermal	8
Tremorigenic	1



Activity	Chemical Count
Tremorolytic	1
Trichomonicide	9
Trichomonistat	1
Triglycerigenic	1
Trypsin-Enhancer	1
Tumor-Promoter	2
Tumorigenic	3
Tyrosinase-Inhibitor	5
Tyrosine-Kinase-Inhibitor	1
Ubiquiot	10
Ulcerogenic	4
Uricogenic	1
Uricosuric	5
Urinary-Acidulant	1
Urinary-Antiseptic	1
Urine-Acidifier	1
Urine-Deodorant	1
Uterorelaxant	1
Uterosedative	1
Uterotonic	1
Varroacide	3
Vasoconstrictor	1
Vasodilator	12
Vasopressor	2
VEGF-Inhibitor	2
Vermicide	1
Vermifuge	2

Activity	Chemical Count
Vibriocide	1
Vitamin-A-Activity	2
Vulnerary	7
Xanthine-Oxidase-Inhibitor	5