

Dr. Duke's Phytochemical and Ethnobotanical Database**Biological Activities Found in *Artemisia annua***

| Activity | Chemical Count |
|----------------------------|-----------------------|
| (-)-Chronotropic | 4 |
| (-)-Inotropic | 4 |
| 11B-HSD-Inhibitor | 3 |
| 5-Lipoxygenase-Inhibitor | 2 |
| Abortifacient | 1 |
| Acaricide | 8 |
| ACE-Inhibitor | 6 |
| AChE-Inhibitor | 1 |
| Aedifuge | 1 |
| Aldehyde-Oxidase-Inhibitor | 1 |
| Aldose-Reductase-Inhibitor | 20 |
| Allelochemic | 7 |
| Allelopathic | 6 |
| Allergenic | 15 |
| Analgesic | 15 |
| Ancylostomicide | 2 |
| Androgenic | 2 |
| Anesthetic | 9 |

| Activity | Chemical Count |
|--------------------------|-----------------------|
| Angiogenic | 1 |
| Ankylostomacide | 1 |
| Anorexic | 1 |
| Anthelmintic | 7 |
| Antiacetylcholine | 1 |
| Antiacetylcholinesterase | 10 |
| Antiacne | 6 |
| AntiADD | 1 |
| Antiadenomic | 2 |
| Antiadrenergic | 1 |
| Antiaflatoxin | 5 |
| Antiaggregant | 7 |
| Antiaging | 2 |
| Antiallergic | 10 |
| Antialzheimeran | 1 |
| Antialzheimeran? | 3 |
| Antianaphylactic | 2 |
| Antiandrogenic | 2 |
| Antiangiogenic | 3 |
| Antiarrhythmic | 3 |

| Activity | Chemical Count |
|------------------------|-----------------------|
| Antiarthritic | 3 |
| Antiasthmatic | 5 |
| Antiatherogenic | 2 |
| Antiatherosclerotic | 4 |
| Antibacillary | 1 |
| Antibacillus | 1 |
| Antibacterial | 32 |
| Antibronchitic | 5 |
| Antibronchoconstrictor | 1 |
| Antibrucellosic | 1 |
| Antiburn | 1 |
| Anticancer | 5 |
| Anticancer (Breast) | 1 |
| Anticancer (Cervix) | 2 |
| Anticancer (Kidney) | 1 |
| Anticancer (Lung) | 2 |
| Anticancer (Pancreas) | 1 |
| Anticancer (Prostate) | 1 |
| Anticarcinogenic | 1 |
| Anticarcinomic | 3 |

| Activity | Chemical Count |
|-------------------------|-----------------------|
| Anticarcinomic (Breast) | 1 |
| Anticariogenic | 9 |
| Anticataract | 2 |
| Anticatarrh | 2 |
| Anticholinergic | 2 |
| Anticholinesterase | 3 |
| Anticholinesterase? | 1 |
| Anticolic | 1 |
| Anticolitic | 1 |
| Anticomplement | 1 |
| Anticomplementary | 5 |
| Anticonvulsant | 3 |
| AntiCrohn's | 1 |
| Anticystitic | 1 |
| Antidandruff | 1 |
| Antidepressant | 1 |
| Antidermatic | 1 |
| Antidermatitic | 2 |
| Antidiabetic | 1 |
| Antidiarrheic | 1 |

| Activity | Chemical Count |
|-------------------|-----------------------|
| Antidiuretic | 2 |
| Antidysenteric | 1 |
| Antiedemic | 10 |
| Antielastase | 2 |
| Antiemetic | 1 |
| Antiencephalitic | 1 |
| Antiescherichic | 3 |
| Antiesherichic | 1 |
| Antiesophagitic | 1 |
| Antiestrogenic | 4 |
| Antifatigue | 2 |
| Antifeedant | 12 |
| Antifertility | 3 |
| Antifibrosarcomic | 1 |
| Antifibrositic | 1 |
| Antiflatulent | 1 |
| Antiflu | 5 |
| Antigastric | 1 |
| Antigingivitic | 3 |
| Antigliomic | 1 |

| Activity | Chemical Count |
|---------------------------|-----------------------|
| Antiglutamaergic | 1 |
| Antigonadotrophic | 1 |
| Antigonadotropic | 1 |
| AntiGTF | 1 |
| Antihalitosis | 4 |
| Antihelicobacter | 1 |
| Antihepatotoxic | 5 |
| Antiherpetic | 6 |
| Antihistaminic | 7 |
| AntiHIV | 5 |
| Antihydrophobic | 1 |
| Antihyperlipidemic | 1 |
| Antihyperlipoproteinaemic | 1 |
| Antihypertensive | 1 |
| Antihyperthyroid | 1 |
| Antiimplantation | 2 |
| Antiinflammatory | 34 |
| Antiischemic | 2 |
| Antilaryngitic | 2 |
| Antileishmanic | 1 |

| Activity | Chemical Count |
|--------------------------|-----------------------|
| Antileptic | 1 |
| Antileukemic | 8 |
| Antileukotriene | 3 |
| Antileukotrienogenic | 1 |
| Antilipoperoxidant | 1 |
| Antilisteria | 1 |
| Antilithic | 1 |
| Antilithic? | 1 |
| Antilymphedemic | 1 |
| Antilymphocytic | 1 |
| Antilymphomic | 4 |
| Antimalarial | 15 |
| Antimange | 1 |
| Antimelanomic | 7 |
| Antimetastatic | 3 |
| Antimetastatic (Stomach) | 1 |
| Antimite | 2 |
| Antimitotic | 1 |
| Antimononucleotic | 1 |
| Antimutagenic | 12 |

| Activity | Chemical Count |
|-------------------|-----------------------|
| Antimycoplasmotic | 1 |
| Antimyocarditic | 1 |
| Antinephritic | 1 |
| Antineuralgic | 2 |
| Antineuritic | 1 |
| Antinitrosaminic | 3 |
| Antinociceptive | 10 |
| Antiobesity | 1 |
| Antiodontalgic | 1 |
| Antiophidic | 2 |
| Antiotitic | 1 |
| Antioxidant | 20 |
| Antioxidant (LDL) | 2 |
| Antipancreatic | 1 |
| Antiparkinsonian | 1 |
| Antipeptic | 1 |
| Antiperiodontal | 1 |
| Antiperiodontic | 4 |
| Antiperistaltic | 2 |
| Antipermeability | 1 |

| Activity | Chemical Count |
|---------------------|-----------------------|
| Antiperoxidant | 2 |
| AntiPGE2 | 1 |
| Antipharyngitic | 3 |
| Antiplatelet | 8 |
| Antiplasmodial | 9 |
| AntiPMS | 1 |
| Antipneumonic | 1 |
| Antipodriac | 1 |
| Antipolio | 3 |
| Antiprogestational | 1 |
| Antiproliferant | 7 |
| Antiproliferative | 1 |
| Antiprostaglandin | 3 |
| Antiprostanoid | 1 |
| Antiprostatadenomic | 1 |
| Antiprostatitic | 2 |
| Antipruritic | 2 |
| Antipsittacotic | 1 |
| Antipsoriac | 2 |
| Antipyretic | 4 |

| Activity | Chemical Count |
|--------------------|-----------------------|
| Antiradicular | 7 |
| Antiretinopathic | 1 |
| Antirheumatalgic | 1 |
| Antirheumatic | 4 |
| Antirhinitic | 2 |
| Antirhinoviral | 4 |
| Antisalmonella | 4 |
| Antisarcotic | 1 |
| Antiseptic | 21 |
| Antiserotonin | 1 |
| Antishock | 1 |
| Antisinusitic | 3 |
| Antispasmodic | 26 |
| Antistaphylococcic | 8 |
| Antistreptococcic | 5 |
| Antistress | 1 |
| Antitartar | 1 |
| AntiTGF-beta | 1 |
| Antithiamin | 1 |
| Antithrombic | 1 |

| Activity | Chemical Count |
|----------------------|-----------------------|
| Antithyroid | 1 |
| AntiTNF | 1 |
| Antitoxoplasmotic | 1 |
| Antitrichinosic | 1 |
| Antitrypanosomic | 1 |
| Antitubercular | 1 |
| Antituberculic | 1 |
| Antitumor | 22 |
| Antitumor (Bladder) | 1 |
| Antitumor (brain) | 1 |
| Antitumor (Breast) | 5 |
| Antitumor (Cervix) | 2 |
| Antitumor (Colon) | 4 |
| Antitumor (GI) | 1 |
| Antitumor (Kidney) | 3 |
| Antitumor (Lung) | 5 |
| Antitumor (Ovary) | 2 |
| Antitumor (Pancreas) | 4 |
| Antitumor (Prostate) | 2 |
| Antitumor (Skin) | 3 |

| Activity | Chemical Count |
|----------------------|-----------------------|
| Antitumor (Stomach) | 2 |
| Antitumor (Thyroid) | 1 |
| Antitumor-Promoter | 4 |
| Antitussive | 6 |
| Antiulcer | 10 |
| Antivaginitic | 1 |
| Antiviral | 23 |
| Antivulvitic | 1 |
| Antiyeast | 1 |
| Anxiolytic | 1 |
| Aphidifuge | 1 |
| Apoptotic | 8 |
| Aromatase-Inhibitor | 4 |
| Artemicide | 2 |
| Ascaricide | 1 |
| Ataxigenic | 1 |
| ATPase-Inhibitor | 1 |
| Bacteriostatic | 1 |
| Bacteristat | 3 |
| Barbituate-Synergist | 1 |

| Activity | Chemical Count |
|----------------------------------|-----------------------|
| Beta-Blocker | 1 |
| Beta-Glucuronidase-Inhibitor | 3 |
| Bradycardiac | 1 |
| Bradycardic | 1 |
| Bronchomucolytic | 1 |
| Bronchomucotropic | 1 |
| Bronchoprotectant | 1 |
| Bronchorelaxant | 3 |
| Bronchorrhoeic | 1 |
| Bruchiphobe | 1 |
| Calcium-Antagonist | 4 |
| Calcium-Antagonist? | 1 |
| Calmodulin-Antagonist | 1 |
| cAMP-Phosphodiesterase-Inhibitor | 2 |
| Cancer-Preventive | 23 |
| Candidicide | 12 |
| Candidistat | 4 |
| Capillarigenic | 1 |
| Capillariprotective | 1 |
| Carcinogenic | 6 |

| Activity | Chemical Count |
|-------------------|-----------------------|
| Cardiac | 1 |
| Cardiodepressant | 1 |
| Cardioprotective | 1 |
| Cardiotonic | 2 |
| Carminative | 7 |
| Caspase-8-Inducer | 1 |
| Catabolic | 1 |
| Chemopreventive | 4 |
| Cholagogue | 3 |
| Choleretic | 10 |
| Cholesterolytic | 1 |
| Cicatrizant | 2 |
| Ciliotoxic | 1 |
| CNS-Depressant | 6 |
| CNS-Stimulant | 8 |
| CNS-Toxic | 1 |
| Coleopterifuge | 1 |
| Coleoptophile | 1 |
| COMT-Inhibitor | 1 |
| Congestant | 1 |

| Activity | Chemical Count |
|-------------------------------|-----------------------|
| Convulsant | 5 |
| Copper-Chelator | 2 |
| Cosmetic | 2 |
| Counterirritant | 5 |
| COX-1-Inhibitor | 2 |
| COX-2-Inhibitor | 5 |
| Culicide | 2 |
| Cyclooxygenase-Inhibitor | 6 |
| Cytochrome-P450-1A1-Inhibitor | 1 |
| Cytochrome-P450-1A2-Inhibitor | 1 |
| Cytochrome-P450-Inducer | 3 |
| Cytotoxic | 15 |
| Decongestant | 3 |
| Decongestant? | 1 |
| Degranulant | 2 |
| Deiodinase-Inhibitor | 3 |
| Deliriant | 1 |
| Dentifrice | 3 |
| Deodorant | 1 |
| Dermatitigenic | 2 |

| Activity | Chemical Count |
|--------------------|-----------------------|
| Detoxicant | 1 |
| Diaphoretic | 2 |
| Diaphoretic? | 2 |
| Differentiator | 3 |
| Diuretic | 7 |
| DME-Inhibitor | 1 |
| DNA-Protective | 1 |
| Dye | 1 |
| Ecbolic | 1 |
| Edemagenic | 2 |
| Elastase-Inhibitor | 1 |
| Embryotoxic | 1 |
| Emetic | 4 |
| Emmenagogue | 1 |
| Enterocontractant | 1 |
| Enterorelaxant | 3 |
| Enterotoxic | 1 |
| Epileptigenic | 2 |
| Estrogenic | 7 |
| Expectorant | 13 |

| Activity | Chemical Count |
|--------------------------------|-----------------------|
| Febrifuge | 1 |
| FLavor | 21 |
| Fungicide | 20 |
| Fungiphilic | 1 |
| Fungistat | 3 |
| GABA-nergic | 1 |
| Gastroirritant | 1 |
| Gastroprotective | 4 |
| Gastrosedative | 1 |
| Glucosyl-Transferase-Inhibitor | 1 |
| Gonadotrophic | 1 |
| Gram(+)-icide | 3 |
| Gram(-)-icide | 3 |
| GST-Inducer | 1 |
| Hemorrhagic | 1 |
| Hemostat | 1 |
| Hepatomagenic | 1 |
| Hepatoprotective | 12 |
| Hepatotonic | 2 |
| Hepatotoxic | 1 |

| Activity | Chemical Count |
|-------------------------|-----------------------|
| Herbicide | 13 |
| HIF-1alpha-Inhibitor | 1 |
| Histaminic | 1 |
| HIV-RT-Inhibitor | 2 |
| Hyaluronidase-Inhibitor | 2 |
| Hypnotic | 2 |
| Hypocholesterolemic | 5 |
| Hypocholesterolemic? | 1 |
| Hypoglycemic | 4 |
| Hypolipemic | 1 |
| Hypolipidemic | 2 |
| Hypotensive | 9 |
| Hypothermic | 2 |
| ICAM-1-Inhibitor | 3 |
| IKK-Inhibitor | 2 |
| Immunomodulator | 3 |
| Immunostimulant | 3 |
| Immunosuppressant | 1 |
| Inflammatory | 2 |
| Inhalant | 1 |

| Activity | Chemical Count |
|------------------------------------|-----------------------|
| iNOS-Inhibitor | 4 |
| Inotropic | 3 |
| Insect-Repellent | 2 |
| Insecticide | 10 |
| Insectifuge | 22 |
| Insectiphile | 4 |
| Insulinogenic | 1 |
| Interleukin-6-Inhibitor | 3 |
| Iodothyronine-Deiodinase-Inhibitor | 2 |
| Irritant | 16 |
| JNK-Inhibitor | 1 |
| Juvabional | 2 |
| Larvicide | 4 |
| Larvostat | 2 |
| Laxative | 1 |
| Leucocytogenic | 1 |
| Lipolytic | 1 |
| Lipoxygenase-Inhibitor | 4 |
| Lymphocytogenic | 1 |
| Lymphokinetic | 1 |

| Activity | Chemical Count |
|-----------------------------|-----------------------|
| MAO-A-Inhibitor | 1 |
| MAO-Inhibitor | 4 |
| MAPK-Inhibitor | 2 |
| Mast-Cell-Stabilizer | 1 |
| MDR-Inhibitor | 1 |
| Metal-Chelator (Copper) | 1 |
| Metalloproteinase-Inhibitor | 2 |
| MMP-9-Inhibitor | 2 |
| Molluscicide | 1 |
| Mosquitocide | 1 |
| Mosquitofuge | 2 |
| Motor-Depressant | 4 |
| Motor-Stimulant | 1 |
| Musculotropic | 3 |
| Mutagenic | 4 |
| Mycobactericide | 1 |
| Myorelaxant | 12 |
| NADH-Oxidase-Inhibitor | 2 |
| Narcotic | 1 |
| Natriuretic | 1 |

| Activity | Chemical Count |
|-----------------------------------|-----------------------|
| Nematicide | 14 |
| NEP-Inhibitor | 2 |
| Neurodepressant | 1 |
| Neuropathogenic | 1 |
| Neuroprotective | 2 |
| Neurotoxic | 4 |
| NF-kB-Inhibitor | 4 |
| NO-Genic | 1 |
| NO-Inhibitor | 3 |
| NO-Synthase-Inhibitor | 2 |
| Nociceptive | 1 |
| Nodulation-Signal | 1 |
| Occuloirritant | 1 |
| Ornithine-Decarboxylase-Inhibitor | 3 |
| Ovicide | 1 |
| Ovulant | 1 |
| Ozone-Scavenger | 1 |
| P21-Inducer | 1 |
| P450-2B1-Inhibitor | 4 |
| P450-Inducer | 5 |

| Activity | Chemical Count |
|-------------------------------|-----------------------|
| P450-Inhibitor | 1 |
| PAF-Inhibitor | 1 |
| Parasiticide | 6 |
| Pediculicide | 2 |
| Perfume | 2 |
| Perfumery | 24 |
| Peristaltic | 1 |
| Pesticide | 59 |
| PGE2-Inhibitor | 1 |
| Phagocytotic | 2 |
| Pheromone | 1 |
| Phospholipase-Inhibitor | 1 |
| Photosensitizer | 1 |
| Phytoalexin | 1 |
| Phytohormonal | 1 |
| Piscicide | 2 |
| PKC-Inhibitor | 1 |
| Plasmodicide | 9 |
| Polyamine-Synthesis-Inhibitor | 1 |
| Progestational | 1 |

| Activity | Chemical Count |
|------------------------------------|-----------------------|
| Proliferant | 2 |
| Prooxidant | 1 |
| Prostaglandin-Inhibitor | 1 |
| Prostaglandin-Synthesis-Inhibitor | 2 |
| Prostaglandin-Synthetase-Inhibitor | 1 |
| Protein-Kinase-C-Inhibitor | 3 |
| Protisticide | 5 |
| PTK-Inhibitor | 3 |
| Quinone-Reductase-Inducer | 5 |
| Radioprotective | 1 |
| Refrigerant | 1 |
| Renoirritant | 1 |
| Respirainhibitor | 1 |
| Respirastimulant | 1 |
| Respirodepressant | 1 |
| Rodenticide | 1 |
| Rubefacient | 4 |
| Schizonticide | 1 |
| Secretogogue | 2 |
| Sedative | 19 |

| Activity | Chemical Count |
|----------------------------------|-----------------------|
| Spasmogenic | 6 |
| Spermicide | 2 |
| Sprout-Inhibitor | 1 |
| Stimulant | 2 |
| Succinoxidase-Inhibitor | 1 |
| Sunscreen | 1 |
| Surfactant | 2 |
| Teratogenic | 1 |
| Teratologic | 2 |
| Termiticide | 2 |
| Termitifuge | 1 |
| Testosterone-Hydroxylase-Inducer | 2 |
| Testosterone-Inducer | 1 |
| TNF-alpha-Inhibitor | 5 |
| Topoisomerase-I-Inhibitor | 4 |
| Topoisomerase-II-Inhibitor | 4 |
| Toxic | 1 |
| Tracheorelaxant | 2 |
| Tranquilizer | 3 |
| Transdermal | 9 |

| Activity | Chemical Count |
|---------------------------|-----------------------|
| Trichomonicide | 8 |
| Trichomonistat | 1 |
| Trypanocide | 1 |
| Trypsin-Enhancer | 1 |
| Tumor-Promoter | 1 |
| Tumorigenic | 1 |
| Tyrosinase-Inhibitor | 3 |
| Tyrosine-Kinase-Inhibitor | 1 |
| Ubiquiot | 1 |
| Ulcerogenic | 2 |
| Urinary-Antiseptic | 1 |
| Uterosedative | 1 |
| Uterotonic | 1 |
| Uterotrophic | 2 |
| Varroacide | 1 |
| Vasodilator | 6 |
| Vasopressor | 1 |
| VEGF-Inhibitor | 3 |
| Vermicide | 2 |
| Vermifuge | 2 |

| Activity | Chemical Count |
|----------------------------|-----------------------|
| Verrucolytic | 1 |
| Vibriocide | 2 |
| Vulnerary | 3 |
| Xanthine-Oxidase-Inhibitor | 3 |