

List of All Chemicals

P Conyza canadensis (Asteraceae)

Common name(s)

Butterweed; Horseweed; Hogweed

How used

Medicinal

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Chemical	Part	All	Low PPM	High PPM	StdDev	*Reference
ALPHA-SPINOSTEROL	Plant		--	--		*
APIGENIN	Plant		--	--		*

Activities (101)

11B-HSD-Inhibitor

AntiADD

AntiHIV IC72=200 ug/ml

AntiHIV IC50=143 ug/ml

Antiaflatoxin IC50=9.52 uM

Antiaflatoxin IC50=2.57 ppm

Antiaggregant

Antiaging

Antiallergic Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).

Antiangiogenic 4 uM

Antiarrhythmic

Antibacterial Recio, M. C., Rios, J. L., and Villar, A., A review of some antimicrobial compounds isolated from medicinal plants reported in the literature 1978-1988, Phytotherapy Research, 3(4), 1989, 117-125.

Anticancer (Lung)

Anticomplementary

Antidermatitic Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.

Antiestrogenic Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).

Antiherpetic 20-54 ug/ml

Antihistaminic IC50=10-35 uM

Antiinflammatory #NAME?

Antiinflammatory IC~65=1,000 uM

Antileukemic 20-50 uM

Antimelanomic 1-50 uM

Antimetastatic 1-50 uM

Antimutagenic ID50=10-40 nM Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.

Antimutagenic ID50=0.55 ug/ml

Antioxidant 1.5 x Vit. E

Antioxidant IC28.5=62.5 ug/ml

Antiperistaltic

Antiproliferant 1-50 uM

Antiproliferant IC50=155 uM

Antispasmodic EC50=1-5 uM

Antistress 10 mg/kg

Antithyroid Jim Duke's personal files.

Antitumor 1-50 uM

Antitumor (Breast) 1-50 uM

Antitumor (Lung)

Antitumor (Skin)

Antiviral 20-54 ug/ml

Anxiolytic 10 mg/kg

Apoptotic 12-60 uM	
Aromatase-Inhibitor IC65=1 uM/l	Journal of Medicinal Food 2: 235.1999.
Beta-Glucuronidase-Inhibitor IC50=40 uM	
CNS-Depressant	
COX-1-Inhibitor IC65=1,000 uM	
COX-2-Inhibitor IC>65=1,000 uM	
COX-2-Inhibitor <40 uM	
COX-2-Inhibitor IC50=<15 uM	
Calcium-Antagonist?	Biochimica & Biophysica Acta, 1115: 69, 1991.
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Choleretic	
Cyclooxygenase-Inhibitor	
Cytochrome-P450-1A1-Inhibitor	
Cytotoxic IC88=10 ug/ml	Planta Medica, 57: A113, 1991.
Cytotoxic 1-50 uM	
Cytotoxic IC50=9.5 uM	
DNA-Protective	
Deiodinase-Inhibitor	Jim Duke's personal files.
Differentiator MIC=30 uM	
Differentiator IC40=40 uM	
Diuretic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Estrogenic EC50=0.1-25 uM/l	Journal of Medicinal Food 2: 227.1999.
Estrogenic 16% genistein	
Estrogenic EC50=1 uM	
HIF-1alpha-Inhibitor	
Hyaluronidase-Inhibitor IC50+=50-250 uM	
Hypotensive	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
ICAM-1-Inhibitor	
IKK-Inhibitor	
Inotropic	
Interleukin-6-Inhibitor	
MAO-Inhibitor	
MAPK-Inhibitor	
Musculotropic	Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Mutagenic	
Myorelaxant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
NADH-Oxidase-Inhibitor	
NF-kB-Inhibitor	
NO-Synthase-Inhibitor 5-50 uM	
Nodulation-Signal	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Ornithine-Decarboxylase-Inhibitor	
P21-Inducer 10-70 uM	
PKC-Inhibitor IC50=10 uM	
PTK-Inhibitor 10-100 uM	
Pesticide	
Polyamine-Synthesis-Inhibitor	
Progestational	
Protein-Kinase-C-Inhibitor IC50=10-40 uM	
Quinone-Reductase-Inducer 20 uM	Uda, Y., Price, K. R., Williamson, G., Rhodes, M. J. C. 1997. Induction of the Anticarcinogenic Marker Enzyme, Quinone Reductase, in Murine Hepatoma Cells In Vitro by Flavonoids. Cancer Lett., 120 (2): 213-216.
Radioprotective	
Sedative 30-100 mg/kg	
Sunscreen	
TNF-alpha-Inhibitor IC50=3.27 uM	
Topoisomerase-I-Inhibitor	Santti, R., Makela, S., Strauss, L., Korman, J., Kostian, M. L. 1998. Phytoestrogens: Potential Endocrine Disruptors in Males. Toxicol Ind Health, 14: 223-237.
Topoisomerase-II-Inhibitor 50 ug/ml	Azuma, Y., Onishi, Y., Sato, Y., Kizaki, H. 1995. Effects of Protein Tyrosine Kinase Inhibitors With Different Modes of Action on Topoisomerase Activity and Death of IL-2-Dependent CTLL-2-Cells. J Biochemistry, 118: 312-318.
Topoisomerase-II-Inhibitor IC28=18 uM	

Topoisomerase-II-Inhibitor
IC45=180 uM

Uterotrophic EC50=0.1-25 uM/l Journal of Medicinal Food 2: 227.1999.

VEGF-Inhibitor IC50=2-7 uM

Vasodilator

Xanthine-Oxidase-Inhibitor
0.36 uM

iNOS-Inhibitor IC50=<15 uM

BETA-SITOSTEROL

Plant

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Activities (47)

Androgenic	
Angiogenic	
Anorexic	Martindale's 28th
Antiadenomic	Merck 11th Edition
Antiandrogenic	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. Journal of Ethnopharmacology, 28: 221-234, 1990.
Antibacterial	Recently became Internat. J. Crude Drug Res. 28(1,2,3,4):1990, page 155.
Anticancer (Breast)	Madhavi, D. L., Bomser, J., Smith, M., Singletary, K. 1998. Isolation of Bioactive Constituents from Vaccinium myrtillus (Bilberry) Fruits and Cell Cultures. Plant Sci., 131(1): 95-103.
Anticancer (Cervix)	
Anticancer (Lung)	
Antiedemic IC54=320 mg/kg orl	
Antiestrogenic	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. Journal of Ethnopharmacology, 28: 221-234, 1990.
Antifeedant	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Antifertility	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. Journal of Ethnopharmacology, 28: 221-234, 1990.
Antigonadotrophic	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. Journal of Ethnopharmacology, 28: 221-234, 1990.
Antihyperlipoproteinaemic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiinflammatory	
Antileukemic	
Antilymphomic	
Antimutagenic 250 ug/ml	
Antiophidic 2.3 mg mus	Economic & Medicinal Plant Research, 5: 363.
Antioxidant IC44=10 uM	
Antiprogestational	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. Journal of Ethnopharmacology, 28: 221-234, 1990.
Antiprostaglandin 30 mg/day/12 wks	
Antiprostataadenomic	Merck 11th Edition
Antiprostatic 10-20 mg 3 x/day/orl man	
Antipyretic	Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman & Hall, New York. 941 pp.
Antitumor (Breast)	Madhavi, D. L., Bomser, J., Smith, M., Singletary, K. 1998. Isolation of Bioactive Constituents from Vaccinium myrtillus (Bilberry) Fruits and Cell Cultures. Plant Sci., 131(1): 95-103.
Antitumor (Cervix)	
Antitumor (Lung)	
Antiviral	Abid Ali Khan, M.M., Jain, D.C., Bhakuni, R.S., Zaim, M., and Thakur, R.S. 1991. Occurrence of some antiviral sterols in Artemisia annua. Plant Science, 75: 161-165, 1991.
Apoptotic	
Artemicide LC50=110 ppm	Jung, J.H., Pummangura, S., Chaichantipyuth, c., Patarapanich, C., and McLaughlin, J.L. 1989. Bioactive Constituents of Melodorum fruticosum. Phytochemistry. 29(5): 1667-1670. 1990.
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Candidicide	Recently became Internat. J. Crude Drug Res. 28(1,2,3,4):1990, page 155.
Caspase-8-Inducer	
Estrogenic	
Febrifuge	Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman & Hall, New York. 941 pp.
Gonadotrophic	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. Journal of Ethnopharmacology, 28: 221-234, 1990.
Hepatoprotective	
Hypocholesterolemic 2-6 g/man/day/orl	Martindale's 30th
Hypocholesterolemic 9-3,330 mg/man/day/orl	Martindale's 28th
Hypoglycemic	Ivorra, M.D., Paya, M., and Villar, A. 1989. A Review of Natural Products and Plants as Potential Antidiabetic Drugs. Journal of Ethnopharmacology, 27: 243-275, 1989.
Hypolipidemic 2-6 g/day	
Pesticide	
Spermicide	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. Journal of Ethnopharmacology, 28: 221-234, 1990.
Ubiquiot	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Ulcerogenic 500 mg/kg ipr rat	

Activities (102)

Aldose-Reductase-Inhibitor 4 ug/ml (weak activity)	Ichikawa, K., et al. 1991. Isolation and Structure Determination of Aldose Reductase Inhibitors from Traditional Thai Medicine, and Syntheses of Their Derivatives. <i>Sankyo Kenkyusho Nempo</i> , 43: 99-110.
Allergenic	
Analgesic	
AntiHIV EC50=200 ug/ml	
AntiLegionella	
Antiadenoviral	Economic & Medicinal Plant Research, 5: 207.
Antiaaggregant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Antiaging	
Antiatherogenic	
Antibacterial	
Anticancer	
Anticarcinogenic	Economic & Medicinal Plant Research, 6: 189.
Antidepressant	
Antiedemic	Economic & Medicinal Plant Research, 6: 189.
Antielastase IC50=93 um/l	
Antielastase IC50=86 ug/ml (475 uM)	
Antiescherichic	
Antiflu	Economic & Medicinal Plant Research, 5: 207.
Antigonadotropic	Jim Duke's personal files.
Antihemolytic 25 uM	Ohnishi, M., Morishita, H., Iwahashi, H., Toda, S., Shirataki, Y., Kimura, M., and Kido, R. 1993. Inhibitory Effects of Chlorogenic Acids on Linoleic Acid Peroxidation and Haemolysis. <i>Phytochemistry</i> . 36(3): 579-583. 1994.
Antihepatoadenomic 200 ppm diet orl mus	
Antihepatotoxic	
Antiherpetic 50 ug/ml	
Antiherpetic EC50=>50 ug/ml	
Antihistaminic	
Antihypercholesterolemic	Economic & Medicinal Plant Research, 6: 189.
Antihyperthyroid	
Antiinflammatory	
Antileukemic	Chiang, L. C., Chiang, W., Chang, M. Y., Ng, L. T., Lin, C. C. 2003. Antileukemic activity of selected natural products in Taiwan. <i>Am J Chin Med</i> , 31(1):37-46.
Antileukotriene	
Antimelanogenic	
Antimutagenic	Ki Soon Rhee. <i>Oilseed Food Ingredients Used To Minimize Oxidative Flavor Deterioration in Meat Products. Phenolic Compounds in Food and Their Effects on Health</i> , Ch.18.
Antinitrosaminic	Ki Soon Rhee. <i>Oilseed Food Ingredients Used To Minimize Oxidative Flavor Deterioration in Meat Products. Phenolic Compounds in Food and Their Effects on Health</i> , Ch.18.
Antiphidic	
Antioxidant 50 uM	
Antioxidant IC57=30 ppm	
Antioxidant 1/3 quercetin	
Antioxidant 30 mM	
Antioxidant 1.3 x Vit. E	
Antioxidant 1/2 BHA	
Antiperoxidant IC50=44 uM	<i>Planta Medica</i> , 57: A54, 1991.
Antiperoxidant IC35=200 ug/ml	
Antiperoxidant IC85=100 ug/ml	
Antiproliferant	Chiang, L. C., Chiang, W., Chang, M. Y., Ng, L. T., Lin, C. C. 2003. Antileukemic activity of selected natural products in Taiwan. <i>Am J Chin Med</i> , 31(1):37-46.
Antiprostaglandin	
Antiradicular 10 uM	Ohnishi, M., Morishita, H., Iwahashi, H., Toda, S., Shirataki, Y., Kimura, M., and Kido, R. 1993. Inhibitory Effects of Chlorogenic Acids on Linoleic Acid Peroxidation and Haemolysis. <i>Phytochemistry</i> . 36(3): 579-583. 1994.
Antiradicular 1/3 quercetin	
Antiradicular 30 mM	
Antiradicular IC50=32-35 uM	
Antiseptic	
Antispasmodic EC50=3.4-15 uM	<i>Phytotherapy Research</i> , 4: 73.
Antistaphylococcic	
Antistomatitic	Economic & Medicinal Plant Research, 5: 207.
Antisunburn	
Antithiamin	<i>Phenolic Compounds in Food and Their Effects on Health</i> , 69.
Antithyroid	Jim Duke's personal files.
Antitumor 200 ppm diet orl mus	
Antitumor (Skin)	
Antitumor-Promoter IC42=10 uM	<i>Cancer Research</i> , 48: 5941.

Antiulcerogenic	
Antivaccinia	Economic & Medicinal Plant Research, 5: 207.
Antiviral IC50=62.5 ug/ml	
Anxiolytic	
CNS-Active	Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
COX-2-Inhibitor IC32=100 uM	
Calcium-Antagonist IC50=1.2 uM rbt	
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Carcinogenic 2% (diet)	
Chemopreventive	
Cholagogue	Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Choleretic	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Clastogenic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Co-carcinogenic	
Collagen-Sparing	
Cytoprotective	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Cytotoxic TC50=200 ug/ml	
DNA-Active	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
DNA-Protective	
Diuretic	Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Fungicide MIC=0.4 mg/ml	
Hepatocarcinogenic 400 ppm diet orl mus (in the absence of alcohol)	
Hepatoprotective	Advance in Chinese Medicinal Materials Research. 1985. Eds. H. M. Chang, H. W. Yeung, W. -W. Tso and A. Koo. World Scientific Publishing Co., Philadelphia Pa., page 210.
Hepatotropic	
Histamine-Inhibitor	
Immunostimulant	
Insectifuge	Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
Leukotriene-Inhibitor	
Lipoxygenase-Inhibitor IC27=5 mM	Oszmianski, J. and Lee, C.Y. 1990. Inhibitory Effect of Phenolics on Carotene Bleaching in Vegetables. J. Agric. Food Chem. 38: 688-690.
Lipoxygenase-Inhibitor IC50=62-148 uM	
Lyase-Inhibitor IC50=94-164 uM	
Metal-Chelator	McEvily, A.J., Iyengar, R., and Gross, A.T. Inhibition of Polyphenol Oxidase by Phenolic Compounds. Phenolic Compounds in Food and Their Effects on Health, Ch.25.
Ornithine-Decarboxylase-Inhibitor	Hagerman, A.E. Tannin-Protein Interactions. Phenolic Compounds in Food and Their Effects on Health, Ch.19.
Pesticide	
Prooxidant	
Prostaglandigenic	
Sedative 500 mg	
Sunscreen IC50=2.5 mg/l	Lazarova*, G., Kostova, I., Neychev, H. 1992. Photodynamic damage prevention by some hydroxycoumarins. Fitoterapia 64(2): 134-136, 1993.
Sunscreen IC91=5 mg/l	Lazarova*, G., Kostova, I., Neychev, H. 1992. Photodynamic damage prevention by some hydroxycoumarins. Fitoterapia 64(2): 134-136, 1993.
Sunscreen IC98=25 mg/l	Lazarova*, G., Kostova, I., Neychev, H. 1992. Photodynamic damage prevention by some hydroxycoumarins. Fitoterapia 64(2): 134-136, 1993.
Tumorigenic	Jim Duke's personal files.
Vulnerary	
Xanthine-Oxidase-Inhibitor IC50=39.21 uM	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.

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Activities (53)

Allergenic	
Antiallergenic	
Antiallergic	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
Antianaphylactic	
Antibacterial	
Anticancer	
Antihelicobacter	
Antiherpetic	
Antihistaminic	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
Antiinflammatory	
Antileishmanic	
Antioxidant	
Antiseptic 5.2 x phenol	
Antishock	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
Antispasmodic	
Antitumor	
Antitumor (Colon)	
Antitumor (Liver)	
Antitumor (Skin)	
Antiulcer	
Antiviral	
Apoptotic	
Barbituate-Synergist	
Bronchorelaxant	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
Calcium-Antagonist	
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Carcinogenic	
Caspase-3-Inducer	
Chemopreventive	
Cytotoxic	
Estrogenic	
Expectorant	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
FLavor FEMA 4-170	Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry
Fungicide MIC 625 ug/ml	
Glaucomagenic	
Glutathionigenic	
Herbicide IC50=115 uM	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.
Myorelaxant 200 mg/kg	
NF-kB-Inhibitor	
NO-Inhibitor	
Nematicide IC52=100 ug/ml	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Nematicide MLC=100-260 ug/ml	Shoyakugaku Zasshi, 44: 183.
P450-2B1-Inhibitor IC50=1.19 uM	
Perfumery	Merck 11th Edition
Pesticide	
Prostatitigenic 185 mg/kg/day/3 ms	
Sedative ED 1-32 mg/kg	Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)
Sedative 1 mg/kg	
Teratogenic	
Trichomonicide LD100=150 ug/ml	
Trypanocide	
Tyrosinase-Inhibitor ID50=1.5 mM	
Tyrosinase-Inhibitor ID50=1,500 uM	

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ACE-Inhibitor IC50=7.7 mM/l	
Analgesic	
AntiHIV	
AntiMRSA	
Antiadenovirus	Economic & Medicinal Plant Research, 5: 194.
Antiallergenic	Dorsch, W., Wagner, H. New Antiasthmatic Drugs from Traditional Medicine? Int Arch Allergy Appl Immunol 94: 262-265, 1991.
Antianaphylactic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiangiogenic	
Antiasthmatic	Watt, J.M., and Breyer-Brandwijk, M.G. The Medicinal and Poisonous Plants of Southern and Eastern Africa. 1962.
Antibacterial MIC=1,000 ug/ml	
Antibronchitic	Dorsch, W., Wagner, H. New Antiasthmatic Drugs from Traditional Medicine? Int Arch Allergy Appl Immunol 94: 262-265, 1991.
Anticancer	
Anticarcinomic ED50=3	
Antiescherichic	
Antifibrinolytic	Economic & Medicinal Plant Research, 1: 53.
Antiflu	Economic & Medicinal Plant Research, 5: 194.
Antihepatotoxic	Okuda, T., Yoshida, T., and Hatano, T. Antioxidant Effects of Tannins and Related Polyphenols. Phenolic Compounds in Food and Their Effects on Health, Ch.7 p.93.
Antiherpetic EC50=>10 ug/ml	
Antiinflammatory	Kroes, B.H., et al. 1991. Anti-Inflammatory Activity of Gallic Acid. Planta Medica, 58(6): 499.
Antileishmanic EC50=4.4 ug/ml	
Antimutagenic	Economic & Medicinal Plant Research, 6: 235.
Antinitrosaminic	
Antioxidant IC44=33 ppm	
Antioxidant 7 x quercetin	
Antioxidant 2/3 BHA	
Antiperiodontitic 10 ug/ml	
Antiperoxidant IC50=69 uM	
Antipolio	Economic & Medicinal Plant Research, 5: 194.
Antiproteolytic 10 ug/ml	
Antiradicular 7 x quercetin	
Antiradicular IC50=4.9 uM	
Antiseptic	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Antistaphylococcic MIC=1,000 ug/ml	
Antitumor	
Antitumor-Promoter	
Antiviral	
Apoptotic	
Astringent	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Bacteristat	Lamikanra, A., Ogundaini, A.O., and Ogungbamila*, F.O. Antibacterial Constituents of Alchornea cordifolia Leaves. Phytotherapy Research 4(5): 198.
Bronchodilator	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Candidicide	
Carcinogenic	
Choleretic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Cyclooxygenase-Inhibitor	
Cytotoxic 500 uM	
Floral-Inhibitor	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Gram(+)-icide MIC=1,000 ug/ml	
Gram(-)-icide MIC=1,000 ug/ml	
Hemostat	
Hepatoprotective	Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman & Hall, New York. 941 pp.
Immunomodulator	
Immunostimulant	McKenna, D. J., Hughes, K., and Jones, K. 2000. Green Tea Monograph. Alternative Therapies, 6(3): 61-82.
Immunosuppressant	

Insulin-Sparing	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Myorelaxant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
NO-Inhibitor IC-26=250 uM	
Nephrotoxic	Martindale's 29th
Pesticide	
Styptic	
Topoisomerase-I-Inhibitor	Hamada, S. I., Kataoka, T., Woo, J. T., Yamada, A., Yoshida, T., Nishimura, T., Otake, N., Nagai, K. 1997. Immunosuppressive Effects by Gallic Acid and Chebulagic Acid on CTL-Mediated Cytotoxicity. Biol Pharm Bull, 20: 1017-1019.
Xanthine-Oxidase-Inhibitor IC50=24 uM	Hatano, T., Yasuhara, T., Yoshihara, R., Agata, I., Noro, T., and Okuda, T. 1989. Effects of Interaction of Tannins with Co-existing Substances.VII. Inhibitory Effects of Tannins Related Polyphenols on Xanthine Oxidase. Chem. Pharm. Bull. 38(5): 1224-1229

LINALOL	Plant	--	--	*
MATRICARIA-METHYL-ESTER	Plant	520.0	1200.0	*
SUCCINIC-ACID	Plant	--	--	*

Activities (7)

Additive FEMA 200-2,000	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Antifeedant	
Bruchiphobe	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Dye	Merck 11th Edition
Perfumery	Merck 11th Edition
Pesticide	

TANNIC-ACID	Leaf	--	--	*
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Activities (35)	
Anthelmintic	
AntiHIV	
Antibacterial	
Anticancer	
Anticariogenic	
Antidiarrheic	
Antidysenteric	
Antihepatotoxic	
Antihypertensive	
Antilipolytic	
Antimutagenic	
Antinephritic	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. Chem. Pharm. Bull. 38(4): 1049-1052, 1990.
Antiphidic	Economic & Medicinal Plant Research, 5: 363.
Antioxidant IC50=1.44 ug/ml	
Antioxidant 1/3 quercetin	
Antiradicular 500 mg/kg/day orl mus	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. Chem. Pharm. Bull. 38(4): 1049-1052, 1990.
Antiradicular 1/3 quercetin	
Antirenitic	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. Chem. Pharm. Bull. 38(4): 1049-1052, 1990.
Antitumor	
Antitumor-Promoter	
Antiulcer	
Antiviral	
Cancer-Preventive	HerbalGram No. 22 - Spring 1990, page 14.
Carcinogenic	
Chelator	
Cyclooxygenase- Inhibitor	
Glucosyl- Transferase-Inhibitor	
Hepatoprotective	
Immunosuppressant	
Lipoxygenase- Inhibitor	
MAO-Inhibitor	
Ornithine- Decarboxylase- Inhibitor	
Pesticide	
Psychotropic	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. Chem. Pharm. Bull. 38(4): 1049-1052, 1990.
Xanthine-Oxidase- Inhibitor	

TERPINYL-ACETATE	Plant	154.0	238.0	0.85	*
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Activities (5)	
Antibacterial	Revista Itliana Eppos, 12: 5, 1994.
FLavor FEMA 1-260	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Insectifuge	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Pesticide	

VANILLIC-ACID	Plant	--	--		*
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Activities (24)

Aldose-Reductase-Inhibitor 100 uM/l	
Allelopathic	
Anthelmintic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antibacterial 1.5-15 mg/ml	Recio, M. C., Rios, J. L., and Villar, A., A review of some antimicrobial compounds isolated from medicinal plants reported in the literature 1978-1988, Phytotherapy Research, 3(4), 1989, 117-125.
Anticancer	
Antifatigue	
Antiinflammatory	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antileukemic IC50=25-56 ug/ml	Chiang, L. C., Chiang, W., Chang, M. Y., Ng, L. T., Lin, C. C. 2003. Antileukemic activity of selected natural products in Taiwan. Am J Chin Med, 31(1):37-46.
Antioxidant IC21=30 ppm	
Antioxidant 1/3 BHA	
Antiperoxidant IC15-65=100-200 ug/ml	
Antiradicular 7 x quercetin	
Antiseptic	
Antisickling	Planta Medica, 56(6): 681, 1990.
Antitumor	
Antitumor-Promoter	
Ascaricide	
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Choleretic	
Fungicide	
Immunosuppressant	
Laxative	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
Pesticide	
Ubiquot	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.