

# List of All Chemicals

## **P** Lythrum salicaria (Lythraceae)

### Common name(s)

Purple Loosestrife

### 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 <input type="button" value="All"/>	Low PPM	High PPM	StdDev	*Reference
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ANTHOCYANINS	Flower	--	10000.0	-1.0	*
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#### Activities (30)

Antiapoptotic  
Antiarthritic 120 mg/man orl  
Anticancer 120 mg/man orl  
Anticarcinogenic  
Anticollegenase  
Antidiabetic  
Antielastase  
Antihyperglycemic  
Antihyperinsulinemic  
Antihyperleptinemic  
Antiinflammatory  
Antimutagenic  
Antimyopic 600 mg/man orl  
Antinyctalopic 600 mg/man orl  
Antiobesity  
Antioxidant  
Antiproliferant  
Antitumor 120 mg/man orl  
Antivaricose  
Antiviral  
COX-1-Inhibitor IC45=125 ug/ml  
COX-2-Inhibitor IC47=125 ug/ml  
Chemopreventive  
Goitrogenic  
Hemostat  
NO-Scavenger  
Pesticide  
Vasoactive  
Vasodilator  
Vasoprotective

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	

BUTYL-PHTHALATE

Plant

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CHLOROGENIC-ACID

Leaf

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**Activities (77)**

Aldose-Reductase-Inhibitor IC50=1.8 uM rat (strong activity)	Yoshikawa, M., et al. 1999. Medicinal Flowers. I. Aldose Reductase Inhibitors and Three New Eudesmane-Type Sesquiterpenes, Kikkanols A, B, and C, From the Flowers of Chrysanthemum indicum L. Chem Pharm Bull, 47(3): 340-345.
Allelochemic	
Allergenic	
Analgesic	
AntiEBV	Economic & Medicinal Plant Research, 6: 189.

AntiHIV	Economic & Medicinal Plant Research, 6: 189.
AntiLegionella	
Antiatherosclerotic	
Antibacterial	
Anticancer (Colon)	
Anticancer (Forestomach)	
Anticancer (Liver)	
Anticancer (Skin)	
Anticarcinogenic	
Antidiabetic	
Antifeedant	
Antigenotoxic	
Antigonadotropic	Jim Duke's personal files.
Antihemolytic 10 uM	Ohnishi, M., Morishita, H., Iwashashi, 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.
Antihepatotoxic	
Antiherpetic	Economic & Medicinal Plant Research, 5: 194.
Antihistaminic	
Antihypercholesterolemic	Economic & Medicinal Plant Research, 6: 189.
Antihyperthyroid	
Antiinflammatory	Hagerman, A.E. Tannin-Protein Interactions. <i>Phenolic Compounds in Food and Their Effects on Health</i> , Ch.19.
Antileukotriene	
Antimelanogenic	
Antimutagenic	
Antinitrosaminic	
Antioxidant IC53=200 ppm	Huang, M-T., and Ferraro, T. <i>Phenolic Compounds in Food and Cancer Prevention</i> . <i>Phenolic Compounds in Food and Their Effects on Health</i> , Ch.2 p.21.
Antioxidant IC80=12 uM	
Antioxidant IC50=54.2 uM	
Antiperoxidant IC50=36 uM	<i>Planta Medica</i> , 57: A54, 1991.
Antipolio	Jim Duke's personal files.
Antiradicular 10 uM	Ohnishi, M., Morishita, H., Iwashashi, 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 9 x quercetin	
Antiseptic	
Antisunburn	
Antithyroid	Jim Duke's personal files.
Antitumor	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Antitumor (Colon)	
Antitumor (Forestomach)	
Antitumor (Liver)	
Antitumor (Skin)	
Antitumor-Promoter IC25=10 uM	
Antiulcer	Economic & Medicinal Plant Research, 6: 189.
Antiviral	Vlietinck, A.J. and Dommissie, R.A. eds. 1985. <i>Advances in Medicinal Plant Research</i> . Wiss. Verlag. Stuttgart.
Autotoxic	
CNS-Active	Wichtl, M. 1984. <i>Teedrogen. Ein Handbuch fur Apotheker und Arzte</i> . Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
CNS-Stimulant 1/6 Caffeine	
Cancer-Preventive	Stitt, P. A. <i>Why George Should Eat Broccoli</i> . Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Cardioprotective	
Chemopreventive	
Cholagogue	Wichtl, M. 1984. <i>Teedrogen. Ein Handbuch fur Apotheker und Arzte</i> . Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Choleretic	Huang, K. C. 1993. <i>The Pharmacology of Chinese Herbs</i> . CRC Press, Boca Raton, FL 388 pp.
Clastogenic	Friedman, M. and Dao, L. 1990. Effect of Autoclaving and Conventional and Microwave Baking on the Ergot Alkaloid and Chlorogenic Acid Contents of Morning Glory ( <i>Ipomoea tricolor Cav. cv.</i> ) Heavenly Blue Seeds. <i>J. Agric. Food Chem.</i> 38: 805-808.
Collagen-Sparing	
Diuretic	
Fungicide	Nigg, H.N. and Seigler, D.S., eds. 1992. <i>Phytochemical Resources for Medicine and Agriculture</i> . Plenum Press, New York. 445 pp.
Hepatoprotective	Huang, K. C. 1993. <i>The Pharmacology of Chinese Herbs</i> . CRC Press, Boca Raton, FL 388 pp.
Histamine-Inhibitor	
Hypoglycemic	
Immunostimulant	
Insectifuge	Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium L.</i> (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
Interferonogenic	Economic & Medicinal Plant Research, 1: 124.
Juvabional	Jacobson, M., <i>Glossary of Plant-Derived Insect Deterrents</i> , CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Larvostat	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.

Leukotriene-Inhibitor

Lipoxygenase-Inhibitor IC23=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.

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.

NO-Genic

Ornithine-Decarboxylase-Inhibitor

Hagerman, A.E. Tannin-Protein Interactions. *Phenolic Compounds in Food and Their Effects on Health*, Ch.19.

Oviposition-Stimulant

Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.* Taylor & Frost, London. 791 pp.

Pesticide

Sunscreen

Sweetener

Leung, A. Y. and Foster, S. 1995. *Encyclopedia of Common Natural Ingredients* 2nd Ed. John Wiley & Sons, New York. 649 pp.

Vulnerary

CYANIDIN-3-MONOGALACTOSIDE	Flower	--	--	*
DIBUTYL-PHTHALATE	Plant	--	--	*
DIISOBUTYL-PHTHALATE	Plant	--	--	*
ELLAGIC-ACID	Leaf	--	--	*

**Activities (51)**

ACE-Inhibitor IC50=5 mM/l	
Abortifacient 1.2 mg/kg ivn mus	
Aldose-Reductase-Inhibitor IC50=0.2 uM	
Aldose-Reductase-Inhibitor IC50=0.2 ug/ml (strong activity)	
AntiGTF ID50=20 ug/ml	
AntiHIV IC90=200 ug/ml	Tan, G.T., Pezzuto, J.M., Kinghorn,* A.D., Hughes, S.H. Evaluation Of Natural Products As Inhibitors Of Human Immunodeficiency Virus Type 1 (HIV-1) Reverse Transcriptase. <i>Journal of Natural Products</i> , 54(1): 143-154, 1991.
Antiaflatoxin	
Antianaphylactic	
Antibacterial 1,250 ug/ml	
Antibacterial ID50=20 ug/ml	
Anticancer (Cervix)	Joseph, J., Nadeau, D. and Underwood, A. 2001. <i>The Color Code</i> . Hyperion, NY.
Anticancer (Colon)	Joseph, J., Nadeau, D. and Underwood, A. 2001. <i>The Color Code</i> . Hyperion, NY.
Anticancer (Esophagus)	Joseph, J., Nadeau, D. and Underwood, A. 2001. <i>The Color Code</i> . Hyperion, NY.
Anticancer (Mouth)	Joseph, J., Nadeau, D. and Underwood, A. 2001. <i>The Color Code</i> . Hyperion, NY.
Anticariogenic ID50=20 ug/ml	
Anticataract	Shimizu, M., Horie, S., Terashima, S., Ueno, H., et al. 1989. Studies on Aldose Reductase Inhibitors from Natural Products.II. Active Components of a Paraguayan Crude Drug 'Para-parai mi,' <i>Phyllanthus niruri</i> . <i>Chem. Pharm. Bull.</i> 37(9): 2531-2532, 1989.
Antigingivitic 1,250 ug/ml	
Antihyperthyroid	
Antiinflammatory	
Antimalarial IC50=0.5 uM	Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. <i>Africa Herbal Antimalaria Meeting</i> . PlantaPhile Publications, Berlin. 72 pp.
Antimutagenic	
Antioxidant >50 x tocopherol	Osawa, T. Phenolic Antioxidants in Dietary Plants as Antimutagens.Phenolic Compounds in Food and Their Effects on Health, Ch.11 p.142.
Antioxidant IC98=30 ppm	
Antioxidant 2/3 quercetin	
Antiperiodontic 1,250 ug/ml	
Antiperoxidant IC50=29 uM	<i>Planta Medica</i> , 57: A54, 1991.
Antiplatelet 1,250 ug/ml	
Antiplasmodial IC50=0.5 uM	Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. <i>Africa Herbal Antimalaria Meeting</i> . PlantaPhile Publications, Berlin. 72 pp.
Antiseptic 1,250 ug/ml	
Antistreptococcic ID50=20 ug/ml	
Antithyroid	Jim Duke's personal files.
Antitumor	
Antiviral	<i>Economic &amp; Medicinal Plant Research</i> , 5: 224.
Antiyeast IC50=10.5 uM	
Apoptotic	Joseph, J., Nadeau, D. and Underwood, A. 2001. <i>The Color Code</i> . Hyperion, NY.
Astringent	Martindale's 29th
Cancer-Preventive 3 ppm	
Candida-SAP-Inhibitor IC50=8.4 uM	
Cytotoxic 4.6 ug/ml	<i>Advance in Chinese Medicinal Materials Research</i> . 1985. Eds. H. M. Chang, H. W. Yeung, W. -W. Tso and A. Koo. World Scientific Publishing Co., Philadelphia Pa., page 359.
Deiodinase-Inhibitor	Jim Duke's personal files.
Detoxicant	
Glucosyl-Transferase-Inhibitor ID50=20 ug/ml	
HIV-RT-Inhibitor	<i>Economic &amp; Medicinal Plant Research</i> , 5: 224.
Hemostatic	Merck 11th Edition
Hepatoprotective IC55=30 ug/ml	Mayumi Ito (nee Someya), et al. 1990. Hepatoprotective Compounds from <i>Canarium album</i> and <i>Euphorbia nematocypa</i> . <i>Chem. Pharm. Bull.</i> 38(8): 2201-2203, 1990.
Juvabional	Jacobson, M., <i>Glossary of Plant-Derived Insect Deterrents</i> , CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Pesticide	
Quinone-Reductase-Inducer 0.4 g/kg rat	Ahn, D., Putt, D., Kresty, L., Stoner, G. D., Fromm, D., Hollenberg, P. F. 1996. The Effects of Dietary Ellagic Acid on Rat Hepatic and Esophageal Mucosal Cytochromes P450 and Phase II Enzymes. <i>Carcinogenesis</i> , 17(4): 821-828.
Sunscreen 0.50%	Jim Duke's personal files.
Topoisomerase-I-Antagonist	<i>Journal of Medicinal Food</i> 2: 167.1999.
Xanthine-Oxidase-Inhibitor IC50=3.1 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. <i>Chem. Pharm. Bull.</i> 38(5): 1224-1229

GALLOTANNINS	Leaf	--	--	*
ISOBUTYL-PHTHALATE	Plant	--	--	*
LOLIOLIDE	Plant	--	--	*

Activities (2)					
Ant-Repellent					
Pesticide					
MALVIDIN-3,5-DIGLUCOSIDE	Flower	--	--		*
NARCISSIN	Plant	--	--		*
ORIENTIN	Leaf	--	--		*
Activities (4)					
Antiinflammatory	Fitoterapia No.61: 263, 1990.				
Antioxidant					
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.				
cAMP-Phosphodiesterase-Inhibitor	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).				
P-COUMARIC-ACID	Leaf	--	--		*
Activities (25)					
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. Sankyo Kenkyusho Nempo, 43: 99-110.				
Allelopathic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Antibacterial	Pharmazie, 46: 156, 1991.				
Anticlastogen					
Antifertility					
Antihepatotoxic	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.				
Antinitrosaminic	Joseph, J., Nadeau, D. and Underwood, A. 2001. The Color Code. Hyperion, NY.				
Antioxidant IC24=30 ppm					
Antioxidant 1/3 BHA					
Antiperoxidant IC50=>100 uM	Planta Medica, 57: A54, 1991.				
Antiseptic					
Antispasmodic	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.				
Antitumor					
Cancer-Preventive					
Chemopreventive					
Choleretic					
Cytotoxic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Diaphoretic?	Lawrence Review of Natural Products, Dec-90.				
Fungicide	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.				
Lipoxygenase-Inhibitor IC11=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.				
Pesticide					
Prostaglandigenic					
Prostaglandin-Synthesis-Inhibitor					
Tyrosinase-Inhibitor ID50=3,650 uM					
PECTIN	Leaf	--	--		*

**Activities (24)**

Antiatheromic 15 g/man/day	Cerda, J.J. Pectin in Health and Disease. HortScience, 25(12): 1485, 1990.
Antibacterial	
Antidiabetic 10 g/man/day/orl	
Antidiarrheic	Merck 11th Edition
Antienteric	
Antigallstone	
Antigastritic	
Antilithic	
Antimetastatic	
Antimutagenic	
Antibesit	Joseph, J., Nadeau, D. and Underwood, A. 2001. The Color Code. Hyperion, NY.
Antitumor (Colon)	
Antitumor (Prostate)	
Antitussive	
Antiulcer	
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Chemopreventive	
Demulcent	
Fungicide	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Hemostat	
Hypocholesterolemic	
Hypoglycemic	Joseph, J., Nadeau, D. and Underwood, A. 2001. The Color Code. Hyperion, NY.
Peristaltic	
Pesticide	

SALICARIN	Plant	--	--		*
TANNIN	Leaf	--	120000.0	0.12	*







**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 &amp; Medicinal Plant Research, 5: 363.

Antioxidant  
IC50=1.44 ug/mlAntioxidant 1/3  
quercetinAntiradicular 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-  
InhibitorGlucosyl-  
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

VITEXIN

Leaf

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**Activities (18)**

ACE-Inhibitor 5 ug/ml

ACE-Inhibitor IC50=0.3 mM/l

Aldose-Reductase-Inhibitor  
IC15=10 uM Shimizu, M., Ito, T., Terashima, S., Hayashi, T., Arisawa, M., Morita, N., Kurokawa, S., Ito, K., and Hashimoto, Y. 1984. Inhibition of Lens Aldose Reductase by Flavonoids. *Phytochemistry*, 23: 1885-1888.Aldose-Reductase-Inhibitor 5  
ug/ml Okamoto, Y., Yoshizawa, T. 1994. Angiotensin-Converting Enzyme Inhibitors and Aldose Reductase Inhibitors Containing *Passiflora quadrangularis* Extracts or Vitexin. Patent, Japan Kokai Tokyo Koho-06,293,657. 4pp.

Antiarrhythmic Jim Duke's personal files.

Antibradycardic *Fitoterapia* No.61: 277, 1990.

Antidermatitic

Antihistaminic

Antiinflammatory *Fitoterapia* No.61: 263, 1990.

Antioxidant

Antiserotoninic

Antithyroid Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.* Taylor & Frost, London. 791 pp.

Aphidifuge

Cancer-Preventive Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.

Goitrogenic Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.* Taylor & Frost, London. 791 pp.

Hypotensive

Thyroid-Peroxidase-Inhibitor Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.* Taylor & Frost, London. 791 pp.cAMP-Phosphodiesterase-  
Inhibitor IC50=1.6 mg/ml Schussler, M., Fricke, U., Nikolov, N., and Holz, J. 1991. Comparison of the Flavonoids Occurring in *Crataegus* species and Inhibition of 3',5'-Cyclic Adenosine Monophosphate Phosphodiesterase. *Plant Medica* 57: Suppl Issue 2. p.A-133.