

# List of All Chemicals

## **P** Zanthoxylum americanum (Rutaceae)

### Common name(s)

Northern Prickly Ash

### 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
(+)-LAURIFOLINE	Stem Bark	--	--		*
(+)-LAURIFOLINE	Root Bark	--	--		*
8-(3,3-DIMETHYLALLYL)ALLOXANTHOXYLETIN	Plant	--	--		*
8-(3,3-DIMETHYLALLYL)ALLOXANTHOXYLETIN	Root Bark	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
ALLOXANTHOXYLETIN	Root Bark	--	--		*
ALLOXANTHOXYLETIN	Stem Bark	--	--		*
ALLOXANTHOXYLETIN	Bark	--	--		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.
BERBERINE	Plant	--	--		*

#### Activities (130)

(+)-Inotropic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Abortifacient	
Adrenolytic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Amebicide 200 ug/ml	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Amebicide EC83=100 ug/ml orl rat	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Analgesic	
Anesthetic	
Antiacetylcholinesterase	
Antiacne	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Antiadrenergic	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
Antiaggregant	
Antialzheimeran	
Antiamnesic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Antiangiogenic	
Antiarrhythmic	
Antiarthritic	
Antibacillus MIC=200 ug/ml	
Antibacterial 100 mg/4x/day	
Antibacterial 12.5-2,500 ug/ml	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antibacterial MIC=6-630 ug/ml	
Antibiotic	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Anticancer	
Anticariogenic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Antichlamydial	
Anticholecystitic 5-20 mg/3x/day/orl	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Anticholera 150 mg/man/day	Martindale's 28th
Anticirrhotic	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).

Anticonjunctivitic 0.20%	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Anticonvulsant	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.
Antidiarrheic 100 mg/4x/day	
Antidysenteric 100 mg/4x/day	
Antiedemic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Antientotoxic	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Antienterotoxic	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antiesherichic	
Antigiardial 10 mg/kg/day	
Antiglaucomic	
Antigonorrhoea	
Antihepatomic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Antihepatotic	
Antiherpetic	
Antihistaminic	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Antiinflammatory	
Antischemic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Antileishmanic 10 ug/ml	
Antilipogenic IC63=10 uM	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Antimalarial 0.14-0.36 ug/ml	
Antimalarial 50 uM	
Antimitotic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Antimuscarinic	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Antimyalgic	
Antimycotic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Antineoplastic	
Antinephritic	
Antiperistaltic	Bruneton, J. 1999. Pharmacognosy, Phytochemistry, Medicinal Plants. 2nd Ed. Lavoisier Publishing, Paris. 1119 pp.
Antipharyngitic	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antiphotooxidative	
Antiplasmodial IC50=0.14-0.36 ug/ml	
Antipneumonic	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antipyretic 3 x aspirin	
Antisalmonella	
Antisecretory	
Antiseptic 25 ug/ml	
Antishigellcic 12.5 ug/ml	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antispasmodic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antispermigenic	
Antistaphylococcic	
Antistrep	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antisyphilitic	
Antitrichomonic 0.20%	
Antitypanosomic	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.
Antitubercular MIC=25 ug/ml	
Antitumor (brain) IC91=150 ug/ml	Werbach & Murray, 1994.
Antiulcer	
Antivaginitic	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
Antiviral	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
Astringent	
Bilirubinolytic	
COX-2-Inhibitor 100 ug/ml	
Calcium-Antagonist	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livinston, Edinburgh.
Candidicide	
Cardiodepressant	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
Cardiotonic	
Carminative	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Cholagogue	
Cholekinetic	
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.
Collyrium	

Cyclooxygenase-inhibitor	
Cytotoxic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
Digestive	
Diuretic	
Emetic	
Fungicide 12.5-150 ug/ml	Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine.</i> John Bastyr College Publications, Seattle, Washington (Looseleaf).
Glaucomagenic	
Hemostat	
Hypocholesterolemic	Ivorra, M.D., Paya, M., and Villar, A. 1989. A Review of Natural Products and Plants as Potential Antidiabetic Drugs. <i>Journal of Ethnopharmacology</i> , 27: 243-275, 1989.
Hypoglycemic	
Hypotensive	
Immunostimulant	
Lachrymatory	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy.</i> Churchill Livinston, Edinburgh.
Larvicide 9 ppm	
Leucocytogenic	
Lipase-Inhibitor	Medline (post 1990 searches filed in my computer)
Lipoxygenase-Inhibitor IC50=118 uM	
Mutagenic	
Mycobactericide MIC=25-50 ug/ml	
Mydriatic	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy.</i> Churchill Livinston, Edinburgh.
Myocardiodepressant	
Myorelaxant	
Pesticide	
Phototoxic 9 ppm	
Plasmodicide IC50=0.14-0.36 ug/ml	
Prostaglandin-Synthesis- Inhibitor 25 mg/kg ivn rbt	Huang, C. G., Chu, Z. L., Yang, Z. M. 1991. Effect of Berberine on Synthesis of Platelet TXA2 and Plasma PGI2 in Rabbits. <i>Chung-Kuo Yao Li Hsueh Pao</i> , 12(6): 526-528.
Protisticide IC50=0.14-0.36 ug/ml	
RNA-Depressant	
RT-Inhibitor	
Respiradepressant	Martindale's 28th
Sedative	
Stomachic	
Topoisomerase-II-Inhibitor 2.5 uM	Kobayashi, Y, Yamashita, Y., Fujii, N., Takaboshi, K., Kawakami, T., Kawamura, M., Mizukami, T., Nakano, H. 1995. Inhibitors of DNA Topoisomerase I and II Isolated From the <i>Coptis</i> Rhizomes. <i>Planta Medica</i> , 61: 414-418.
Trichomonicide	Martindale's 29th
Trypanocide	
Uterocontractant	
Uterotonic	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Vagostimulant man	
Vasoconstrictor	
Vasodilator 2 mg/kg cat	
Vermifuge	
Vibriofuge	

BETA-FAGARINE	Bark	--	--	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
BETA-SITOSTEROL	Root Bark	--	--	*



**Activities (4)**

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

CANDICINE	Bark	--	--	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
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**Activities (4)**

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

CANDICINE	Plant	--	--	*
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**Activities (4)**

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

CHELERYTHRINE	Root	--	--	*
	Bark			

**Activities (33)**

12-Lipoxygenase-Inhibitor	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingstone, Edinburgh.
5-Lipoxygenase-Inhibitor	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingstone, Edinburgh.
Analgesic	
Antiacetylcholinesterase	
Antiaggregant	
Antibacterial	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.
Antiinflammatory	
Antiinflammatory 10 mg/kg orl rat (=5 mg indomethacin)	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Antimitotic	Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Antineoplastic	
Antiseptic	
Antitumor	Lewis and Elvin-Lewis, Medical Botany, ca 1977
Antitussive	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.
Antiviral	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.
Candidicidal	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	
DNA-Intercalator	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.
Fungicide 1-5 mg/ml	
Gram(+)-icidal	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Gram(-)-icidal	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Hypertensive 3-5 mg/kg ivn	
Hypotensive	
Immunostimulant	
Irritant	Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Lipase-Inhibitor	Medline (post 1990 searches filed in my computer)
Molluscicide	
Nematicide 50-100 ug/ml	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Occlusotensive	
Paralytic	
Pesticide	
Respirainhibitor	
Tetanic	
Topoisomerase-I-Inhibitor	Fang, S. D., Wang, L. K., Hect, S. M. 1993. Inhibitors of DNA Topoisomerase I Isolated From the Roots of Zanthoxylum nitidum. J Org Chem, 58: 5025-5027.

**Activities (33)**

12-Lipoxygenase-Inhibitor	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy</i> . Churchill Livingstone, Edinburgh.
5-Lipoxygenase-Inhibitor	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy</i> . Churchill Livingstone, Edinburgh.
Analgesic	
Antiacetylcholinesterase	
Antiaggregant	
Antibacterial	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Antiinflammatory	
Antiinflammatory 10 mg/kg orl rat (=5 mg indomethacin)	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
Antimitotic	Wichtl, M. 1984. <i>Teedrogen. Ein Handbuch für Apotheker und Ärzte</i> . Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Antineoplastic	
Antiseptic	
Antitumor	Lewis and Elvin-Lewis, <i>Medical Botany</i> , ca 1977
Antitussive	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Antiviral	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Candidicide	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
Cytotoxic	
DNA-Intercalator	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Fungicide 1-5 mg/ml	
Gram(+)-icide	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
Gram(-)-icide	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
Hypertensive 3-5 mg/kg ivn	
Hypotensive	
Immunostimulant	
Irritant	Wichtl, M. 1984. <i>Teedrogen. Ein Handbuch für Apotheker und Ärzte</i> . Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Lipase-Inhibitor	Medline (post 1990 searches filed in my computer)
Molluscicide	
Nematicide 50-100 ug/ml	Nigg, H.N. and Seigler, D.S., eds. 1992. <i>Phytochemical Resources for Medicine and Agriculture</i> . Plenum Press, New York. 445 pp.
Occulotensive	
Paralytic	
Pesticide	
Respirainhibitor	
Tetanic	
Topoisomerase-I-Inhibitor	Fang, S. D., Wang, L. K., Hect, S. M. 1993. <i>Inhibitors of DNA Topoisomerase I Isolated From the Roots of Zanthoxylum nitidum</i> . J Org Chem, 58: 5025-5027.

CNIDILIN	Fruit	3.0	12.5	*	
GAMMA-FAGARINE	Plant	--	--	*	
GAMMA-FAGARINE	Leaf	--	--	*	
HERCLAVINE	Plant	--	--	*	
IMPERATORIN	Fruit	5.0	19.0	-0.1	*

**Activities (25)**

Antiaflatoxin IC50=2.66 uM	
Antiaflatoxin 0.7 ppm	
Antiaggregant	
Antialopecic	Martindale's 28th
Anticonvulsant	
Antiinflammatory	
Antileukodermic	
Antimitotic 5-25 ug/ml	Gawron, A. and Glowniak, K. 1987. Cytostatic Activity of Coumarins in vitro. <i>Planta Medica</i> 1987: 526.
Antimutagenic	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of <i>Zanthoxylum americanum</i> . <i>Phytotherapy Research</i> 4(6): 216-219.
Antiplatelet	
Antitumor-Promoter IC86=50 ug/ml	
Antivittilicic	
Bufocide	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
Calcium-Antagonist IC50=4 ug/ml	
Calcium-Antagonist 31.6 ug/ml gpg	
Cancer-Preventive 5- 25 ug/ml	Gawron, A. and Glowniak, K. 1987. Cytostatic Activity of Coumarins in vitro. <i>Planta Medica</i> 1987: 526.
Cytochrome-P450- Inhibitor 2 nM	
DME-Inhibitor IC50=116 uM	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 134.
Hepatoprotective IC50=2.66 uM	
Hepatoprotective 0.7 ppm	
Hepatotoxic	
Lipolytic	
Molluscicide	
Piscicide	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
Sedative	Buchbauer, G., Jirovetz*, L., Nikiforov, A., Remberg, G., Raverdino, V. 1989. Headspace-Analysis and Aroma Compounds of Austrian Hay-Blossoms ( <i>Flores Graminis</i> , <i>Graminis Flos</i> ) used in Aromatherapy. <i>J. Ess. Oil Res.</i> , 2: 185-191, 1990.

**ISOIMPERATORIN**

Fruit 3.0 12.5 1.38 \*

**Activities (8)**

Antitumor-Promoter IC94=50 ug/ml	
Artemicide ED50=6->100 ug/ml	
Calcium-Antagonist	
Cytochrome-P450-Inhibitor 2 nM	
Cytotoxic (Breast) ED50=6.56 ug/ml	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of <i>Zanthoxylum americanum</i> . <i>Phytotherapy Research</i> 4(6): 216-219.
Cytotoxic (Colon) ED50=>10 ug/ml	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of <i>Zanthoxylum americanum</i> . <i>Phytotherapy Research</i> 4(6): 216-219.
DME-Inhibitor IC50=46 uM	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 134.
Pesticide	

LAURIFOLINE	Root	--	--	*
LAURIFOLINE	Bark	--	--	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
LAURIFOLINE	Stem Bark	--	--	*
LAURIFOLINE	Root Bark	--	--	*
MAGNOFLORINE	Stem Bark	--	--	*

**Activities (11)**

## Antibacterial

Antineuromuscular ED50=10 mg/kg

## Antispasmodic

Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.

## CNS-Depressant

Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.

## Curaroid &lt;1% tubocurarine

Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman &amp; Hall, New York. 941 pp.

## Hypotensive

## PAF-Inhibitor

## Paralytic

Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman &amp; Hall, New York. 941 pp.

## Pesticide

## Toxic

Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman &amp; Hall, New York. 941 pp.

## Vasodilator

Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.

MAGNOFLORINE

Root  
Bark

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\*

**Activities (11)**

## Antibacterial

Antineuromuscular ED50=10 mg/kg

## Antispasmodic

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## CNS-Depressant

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## Hypotensive

## PAF-Inhibitor

## Paralytic

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## Pesticide

## Toxic

Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman &amp; Hall, New York. 941 pp.

## Vasodilator

Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.

MAGNOFLORINE

Bark

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--

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.

**Activities (11)**

## Antibacterial

Antineuromuscular ED50=10 mg/kg

## Antispasmodic

Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.

## CNS-Depressant

Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.

## Curaroid &lt;1% tubocurarine

Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman &amp; Hall, New York. 941 pp.

## Hypotensive

## PAF-Inhibitor

## Paralytic

Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman &amp; Hall, New York. 941 pp.

## Pesticide

## Toxic

Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman &amp; Hall, New York. 941 pp.

## Vasodilator

Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.

NITIDINE

Plant

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\*

**Activities (5)**

Antileukemic 30-50 ppm

Antitumor

Reverse-Transcriptase-Inhibitor

Topoisomerase-I-Inhibitor 0.15 uM

Topoisomerase-II-Inhibitor 40 uM

Wang, L. K., Johnson, R. K., Hecht, S. M. 1993. Inhibition of Topoisomerase I Function by Nitidine and Fagaronine. Chem Res Toxicol, 6: 813-818.

NITIDINE

Bark

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\*

**Activities (5)**

Antileukemic 30-50 ppm

Antitumor

Reverse-Transcriptase-Inhibitor

Topoisomerase-I-Inhibitor 0.15 uM

Topoisomerase-II-Inhibitor 40 uM

Wang, L. K., Johnson, R. K., Hecht, S. M. 1993. Inhibition of Topoisomerase I Function by Nitidine and Fagaronine. Chem Res Toxicol, 6: 813-818.



NITIDINE	Root Bark	--	--		*
<b>Activities (5)</b>					
Antileukemic 30-50 ppm					
Antitumor					
Reverse-Transcriptase-Inhibitor					
Topoisomerase-I-Inhibitor 0.15 uM					
Topoisomerase-II-Inhibitor 40 uM	Wang, L. K., Johnson, R. K., Hecht, S. M. 1993. Inhibition of Topoisomerase I Function by Nitidine and Fagaronine. <i>Chem Res Toxicol</i> , 6: 813-818.				
O-METHYLTYRAMINE-N-METHYL-CINNAMIDE	Plant	--	--		*
PSORALEN	Fruit	4.0	15.0	-0.46	*
<b>Activities (31)</b>					
Antidepressant IC50=15-62 uM					
Antileukodermic	Merck 11th Edition				
Antimitotic	Pandeya, S.N. 1970. Biological Activity of Adamantyl Derivatives. <i>The Indian Journal of Pharmacy</i> , 33: 7.				
Antimutagenic	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of <i>Zanthoxylum americanum</i> . <i>Phytotherapy Research</i> 4(6): 216-219.				
Antipsoriac	Merck 11th Edition				
Antispasmodic	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. <i>Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D)</i> , 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.				
Antitubercular	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					
Antitumor-Promoter IC13=50 ug/ml					
Antiviral	<i>Economic &amp; Medicinal Plant Research</i> , 5: 199.				
Artemicide LC50=5.93 ug/ml	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of <i>Zanthoxylum americanum</i> . <i>Phytotherapy Research</i> 4(6): 216-219.				
Bacteriophagicide	de Vries, D. J. and Blumberg, P. M., Thermoregulatory effects of resiniferatoxin in the mouse: comparison with capsaicin, <i>Life Sciences</i> , 44, 1989, 711-715.				
Calcium-Antagonist					
Cancer-Preventive	Stitt, P. A. <i>Why George Should Eat Broccoli</i> . Dougherty Co, Milwaukee, WI, 1990, 399 pp.				
Contraceptive					
Cytotoxic ED50=2-30 ug/ml					
Cytotoxic (Breast) ED50=2.21 ug/ml	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of <i>Zanthoxylum americanum</i> . <i>Phytotherapy Research</i> 4(6): 216-219.				
Cytotoxic (Colon) ED50=26.84 ug/ml	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of <i>Zanthoxylum americanum</i> . <i>Phytotherapy Research</i> 4(6): 216-219.				
Cytotoxic (Lung) ED50=30.38 ug/ml	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of <i>Zanthoxylum americanum</i> . <i>Phytotherapy Research</i> 4(6): 216-219.				
Fungicide	Merck 11th Edition				
Genotoxic	Merck 11th Edition				
Hypotensive					
Insecticide	Grenand, P., Moretti, C., and Jacquemin, H. 1987. <i>Pharmacopees Traditionnelles en Guyane. l'ORSTROM</i> , Paris. 569 pp.				
MAO-A-Inhibitor IC50=15 uM					
MAO-B-Inhibitor IC50=62 uM					
Mutagenic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.				
Pesticide					
Photocarcinogenic					
Phototoxic					
Phytoalexin	Merck 11th Edition				
Topoisomerase-II-Inhibitor ID50=10 mM	Hu, C. Q., Lee, K. S. 1992. Coumarins From the Roots of <i>Seseli mairei</i> and Inhibition of DNA Topoisomerase II Activity. <i>Tianran Chanwu Yanjiu Yu Kaifa</i> , 4: 6-10.				
RESIN	Plant	--	--		*
RESINS	Bark	--	--		Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp.
SKIMMIANINE	Bl	--	--		*

**Activities (21)**

Abortifacient

Adrenostimulant

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

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

Antidiuretic

Antimalarial IC50=48.2 ug/ml Khalid, S.A., Farouk, A., Geary\*\*, T.G., and Jensen, J.B. 1985. Potential Antimalarial Candidates From African Plants: An In Vitro Approach Using Plasmodium falciparum\*. Journal of Ethnopharmacology, 15: 201-209, 1986.

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

Antispasmodic

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

CNS-Stimulant

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

Ecbolic

Hypertensive

Hypothermic Wagner &amp; Wolff, eds. 1977. New Natural Products (RS164. I56. 176)

Myorelaxant

Myotonic

Pesticide

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

Sedative Wagner &amp; Wolff, eds. 1977. New Natural Products (RS164. I56. 176)

Uterocontractant

Vasodilator

SKIMMIANINE	Bark	--	--	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.
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**Activities (21)**

Abortifacient

Adrenostimulant

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

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

Antidiuretic

Antimalarial IC50=48.2 ug/ml Khalid, S.A., Farouk, A., Geary\*\*, T.G., and Jensen, J.B. 1985. Potential Antimalarial Candidates From African Plants: An In Vitro Approach Using Plasmodium falciparum\*. Journal of Ethnopharmacology, 15: 201-209, 1986.

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

Antispasmodic

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

CNS-Stimulant

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

Ecbolic

Hypertensive

Hypothermic Wagner &amp; Wolff, eds. 1977. New Natural Products (RS164. I56. 176)

Myorelaxant

Myotonic

Pesticide

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

Sedative Wagner &amp; Wolff, eds. 1977. New Natural Products (RS164. I56. 176)

Uterocontractant

Vasodilator

SKIMMIANINE	Leaf	--	--	*
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**Activities (21)**

Abortifacient

Adrenostimulant

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

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

Antidiuretic

Antimalarial IC50=48.2 ug/ml Khalid, S.A., Farouk, A., Geary\*\*, T.G., and Jensen, J.B. 1985. Potential Antimalarial Candidates From African Plants: An In Vitro Approach Using Plasmodium falciparum\*. Journal of Ethnopharmacology, 15: 201-209, 1986.

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

Antispasmodic

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

CNS-Stimulant

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

Ecbolic

Hypertensive

Hypothermic Wagner &amp; Wolff, eds. 1977. New Natural Products (RS164. I56. 176)

Myorelaxant

Myotonic

Pesticide

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

Sedative Wagner &amp; Wolff, eds. 1977. New Natural Products (RS164. I56. 176)

Uterocontractant

Vasodilator

TAMBETARINE	Bark	--	--	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.
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TANNIN	Plant	--	--	*
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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	

TANNINS	Bark	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
TEMBETARINE	Stem Bark	--	--		*
TEMBETARINE	Bark	--	--		*
TEMBETARINE	Root Bark	--	--		*
TEMBETARINE	Plant	--	--		*
XAMTHOXYLETIN	Bark	--	--		*
XANTHOTOXIN	Fruit	7.0	25.0	-1.0	*

**Activities (43)**

Antiaflatoxin IC50=2.5 uM	
Antiaflatoxin 0.54 ppm	
Antibacterial	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antidermatitic	Martindale's 29th
Antifeedant	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Antihistaminic	
Antiinflammatory 20 mg/man/day	
Antikeratotic	Martindale's 29th
Antileucodermic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antilymphomic 600 ug/kg +PUVA (extracorporeal)	
Antimitotic 5-25 ug/ml	
Antimutagenic	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of Zanthoxylum americanum. Phytotherapy Research 4(6): 216-219.
Antimycotic	Martindale's 29th
Antipyriasic	Martindale's 29th
Antipruritic	Martindale's 29th
Antipsoriac	Martindale's 29th
Antiscleromyxoedemic	Martindale's 29th
Antispasmodic	
Antitumor-Promoter IC24=50 ug/ml	
Antivittilic 20 mg/man/day	
Artemicide LC50=5.93 ug/ml	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of Zanthoxylum americanum. Phytotherapy Research 4(6): 216-219.
Bufoicide	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Calcium-Antagonist IC50=551 uM gpg	
Cancer-Preventive 5-25 ug/ml	Gawron, A. and Glowinski, K. 1987. Cytostatic Activity of Coumarins in vitro. Planta Medica 1987: 526.
Cytotoxic ED50=7-29 ug/ml	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of Zanthoxylum americanum. Phytotherapy Research 4(6): 216-219.
Cytotoxic (Breast) ED50=7.21 ug/ml	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of Zanthoxylum americanum. Phytotherapy Research 4(6): 216-219.
Cytotoxic (Colon) ED50=29.46 ug/ml	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of Zanthoxylum americanum. Phytotherapy Research 4(6): 216-219.
Cytotoxic (Lung) ED50=28.99 ug/ml	Saqib, Q. N., Hui, Y. H., Anderson, J. E. and McLaughlin, J. L. 1990. Bioactive Furanocoumarins from the Berries of Zanthoxylum americanum. Phytotherapy Research 4(6): 216-219.
Dermatitigenic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Emetic	
Fungicide IC85=1,000 ppm	
Fungicide IC100=2,000 ppm	
Fungistat EC50=21.6 ug/ml	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Hepatoprotective IC50=2.5 uM	
Hepatoprotective 0.5 ppm	
Herbicide	Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp.
Hypertrichotic	Martindale's 29th
Insecticide	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Lipolytic	
Molluscicide	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Pesticide	
Phytoalexin	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Piscicide	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

XANTHOXYLETIN	Stem	--	--	*
	Bark			

**Activities (1)**

Anticonvulsant

XANTHOXYLETIN	Root	--	--	*
	Bark			

Activities (1)					
Anticonvulsant					
XANTHOXYLETIN	Plant	--	--	*	

  

Activities (1)					
Anticonvulsant					
XANTHOXYLETIN	Bark	--	--		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.

  

Activities (1)					
Anticonvulsant					
XANTHOXYLIN	Plant	--	--	*	

  

Activities (4)					
Antifeedant					
Antiprostaglandin	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Antitumor	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Lipoxygenase-Inhibitor	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
XANTHYLETIN	Bark	--	--	*	

  

Activities (1)					
DME-Inhibitor IC50=57.5 uM	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 134.				
XANTHYLETIN	Root Bark	--	--	*	

  

Activities (1)					
DME-Inhibitor IC50=57.5 uM	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 134.				
XANTHYLETIN	Stem Bark	--	--	*	

  

Activities (1)					
DME-Inhibitor IC50=57.5 uM	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 134.				