Biological Activities for Extracts of Anamu (*Petiveria alliacea*)

IN VIVO RESEARCH

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Guatemala	Toxicity Assessment (quantitative)	CH2CL2 Ext	Intragastric Mouse	LD50 > 5.0 gm/kg	Inactive		L11987
Leaf Guatemala	Toxicity Assessment (quantitative)	CH2CL2 Ext	IP Mouse	LD50 > 500 mg/kg	Inactive		L11987
Root Brazil	Toxicity Assessment (quantitative)	Hydro-alcoholic Ext	Intragastric Rat	LD50 >1.27 kg/kg	Inactive		K22724
Root Brazil	Irritant Activity	ETOH (70%) Ext	External Rat	10%	Inactive	Following 15 days of application	K18484
Entire Plant Brazil	Analgesic Activity	Hot H2O Ext	Human Adult	15 gm/liter	Equiv.	A one-week cross-over double blind trial of the analgesic effects of given extract in 22 patients with hip and knee osteoarthritis. Significant reductions in pain in both the experimental and placebo treatment, and no significant difference between these two regimes.	M27460
Entire Plant Colombia	Cell proliferation inhibition	ETOH(95%)Ext	Intragastric Mice	1.0 mg/kg	Active	Bone Marrow	K07464
Entire Plant	Lymphokine-activated killer cells enhancement	Decoction	IP MIce	Not Stated	Active	Lymphokinine activated killer (LAK) cells	K10677
Entire Plant	Natural killer cell enhancement	Decoction	IP Mice	Not Stated	Active	Natural killer cell activity was increased 100%.	K10677
Leaf + Stem Jamaica	Phagocytosis Stimulation	Hexane Ext	Human Adult	1 mg/ml	Active	Cells-granulocyte-human	K29710
Rootbark	Phagocytosis Stimulation	ETOH(95%)Ext	IP Mice	0.5 ml / animal	Weak Activity		T07238

GI = Gastric Intubation IG = Intragastric NG = Nasogastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously IM = Intramuscular

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Rootbark	Phagocytosis Stimulation	Unsaponifiable Fraction	IP Mice	0.5 ml / animal	Active		T07238
Leaf + Stem Jamaica	Immunomodulator Activity	Hexane Ext	IP Mice	23 mg/kg	Active	Increased thymic and Peyer's patches weights.	K29710
Leaf + Stem Jamaica	Immunomodulator Activity	Hexane Ext	IP Mice	23 mg/kg	Active	Increased % Granulocytes	K29710
Leaf Brazil	Immunomodulator Activity	Not Stated	Mice	Not Stated	Active	Increased hematopoiesis, the number of granulocyte/ macrophage colonies and serum colony stimulating activity in mice infected with Listeria monocytogenes.	AB1006
Root Brazil	Interferon-gamma production stimulation	ETOH (70%) Ext	Intragastric Mice	1000 mg/kg	Active	Cells-mouse-spleen	L18407
Root Brazil	Interleukin-2 formation stimulation	ETOH (70%) Ext	Intragastric Mice	1000 mg/kg	Active	Cells-mouse-spleen	L18407
Root Brazil	Interleukin 10 secretion stimulation	ETOH (70%) Ext	Intragastric Mice	1000 mg/kg	Inactive	Cells-mouse-spleen	L18407
Root Brazil	Interleukin-4 formation stimulation	ETOH (70%) Ext	Intragastric Mice	1000 mg/kg	Inactive	Cells-mouse-spleen	L18407
Root Brazil	Natural killer cell enhancement	ETOH (70%) Ext	Intragastric Mice	1000 mg/kg	Active	Cells-mouse-spleen	L18407
Fresh Leaf Brazil	Analgesic Activity	ETOH-H2O(1:1) Ext	Intragastric Mice	1.0 gm/kg	Active	vs. writhing test.	M18488
Fresh Leaf Brazil	Analgesic Activity	ETOH-H2O(1:1) Ext	Intragastric Mice	1.0 gm/kg	Inactive	vs. tail flick test	M18488
Root Brazil	Analgesic Activity	Lyophilized Ext	Oral Rat	43.9 mg/kg	Active		AB1001
Root Brazil	Anti-inflammatory Activity	Lyophilized Ext	Oral Rat	43.9 mg/kg	Active	Significant reduction in the number of migrating neutrophils, mononuclear cells and eosinophils.	AB1001

GI = Gastric Intubation IG = Intragastric NG = Nasogastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously IM = Intramuscular

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Root Brazil	Anti-inflammatory Activity	ETOH(70%) Ext	External Rat	.94 mg/ear	Active	vs. croton oil-induced irritation. Results significant at P < 0.05 Level.	K18484
Root Brazil	Anti-inflammatory Activity	ETOH(70%) Ext	External Rat	31.4 mg/kg	Active	vs. cotton pellet granuloma. 25.7% inhibitory effects after 7 days of treatment. Results significant at P < 0.05 Level.	K18484
Root Brazil	Anti-inflammatory Activity	Hydro-alcoholic Ext	Intragastric Rat	31.4 mg/kg	Active	vs. carrageenan-induced pedal edema. Results significant at P < 0.05 Level	K22724
Root Brazil	Anti-inflammatory Activity	Hydro-alcoholic Ext	Intragastric Rat	31.4 mg/kg	Weak Activity	17.0% inhibition vs. cotton pellet granuloma.	K22724
Root Brazil	Anti-inflammatory Activity	Hydro-alcoholic Ext	Intragastric Rat	31.4 mg/kg	Active	vs. nystatin induced edema.	K22724
Entire Plant Peru	Anti-inflammatory Activity	ETOH(100%)Ext	External Rat	0.8 mg/ear	Inactive	vs. EPP-induced rat ear edema	L14626
Root Brazil	Ulcerogenic Activity	Hydro-alcoholic Ext	Intragastric Rat	31.4 mg/kg	Inactive		K22724
Leaf + Stem Jamaica	Uterine Stimulant Effect	Hot H2O Ext	Rat female	33 ml/liter	Weak Activity	Uterus (unspec.cond)	A03361
Seed Nigeria	Uterine Stimulant Effect	MEOH Ext	Rat Female	1 mg/ml	Active	Uterus (unspec.cond)	J19979
Root Cuba	Hypoglycemic Activity	Aqueous-alcoholic Ext	Intragastric mice	0.1 gm/animal	Inactive		K07661
Stem Cuba	Hypoglycemic Activity	Aqueous-alcoholic Ext	Intragastric Mice	0.1 gm/animal	Active		K07661
Leaf Cuba	Hypoglycemic Activity	Aqueous-alcoholic Ext	Intragastric Mouse	0.1 gm/animal	Active		K07661
Entire Plant Brazil	Antistress Activity	Hydro-alcoholic Ext	Intragastric Rat	600.0 mg/kg	Active	Mucosa (gastric)	L18434
Entire Plant Brazil	Anxiolytic Effect	Hydro-alcoholic Ext	Intragastric Rat	600.0 mg/kg	Active		L18434
Leaf Guatemala and Root Guatemala	CNS depressant activity	H2O Ext Hexane Ext MEOH Ext	IP Mice	1.25 gm/kg	Equiv.		L15527

GI = Gastric Intubation IG = Intragastric NG = Nasogastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously IM = Intramuscular

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Root Not Specified	Antiimplantation Effect	ETOH (95%) Ext	SC Rat	Not stated	Inactive		X01111
Not Stated Brazil	Antirheumatic Effect	Hot H2O Ext	Human Adult	Not stated	Equiv.	Osteoarthritis Treatment lasted 14 days.	AB1008
Root Brazil and Leaf Brazil	Antinociceptive Activity	Hot H2O Ext	Mice36. 6 kg	Not Stated	Active	Antinociceptive effect in acetic acid–acetylcholine and hypertonic saline– induced abdominal pain	AB1009

IN VITRO RESEARCH

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Brazil	Antiproliferation Activity	ETOH(95%)Ext	Cell Culture	Not stated	Active Active Active Active Active	CA-IMA CA-MAMMARY-MCF-7 Cells-DAUDI CELLS-MOLT 4 LEUK-K562	M24758
Leaf Brazil	Antiproliferation Activity	H2O Ext	Cell Culture	Not stated	Active Active Active Active Active	CA-IMA CA-MAMMARY-MCF-7 Cells-DAUDI CELLS-MOLT 4 LEUK-K562	M24758
Leaf Brazil	Antiproliferation Activity	Powder	Cell Culture	Not stated	Active Active Active Inactive	Cells-DAUDI CELLS-MOLT 4 LEUK-K562 CA-MAMMARY-MCF-7	M24758
Entire Plant	Cytotoxic Activity	Alcohol Ext	Cell Culture	1 mcg/ml	Active	Cells-DAUDI Lymphocytes-human-leukemic-IM9	K10386
Entire Plant	Cytotoxic Activity	Decoction	Cell Culture	1 mcg/ml	Active	Cells - DAUDI Cells - MOLT-4 Lymphocytes-human-leukemic-IM9	K10386

GI = Gastric Intubation IG = Intragastric NG = Nasogastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously IM = Intramuscular

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Entire Plant	Cytotoxic Activity	Infusion	Cell Culture	1 mcg/ml	Active	Cells - DAUDI Cells - MOLT-4 Lymphocytes-human-leukemic-IM9	K10386
Entire Plant	Cytotoxic Activity	Infusion	Cell Culture	1 mcg/ml	Inactive	CA-MAMMARY-MCF-7	K10386
Entire Plant	Cytotoxic Activity	Decoction	Cell Culture	1 mcg/ml	Inactive	CA-MAMMARY-MCF-7	K10386
Entire Plant	Cytotoxic Activity	Alcohol Ext	Cell Culture	1 mcg/ml	Inactive	CA-MAMMARY-MCF-7 Cells - MOLT-4	K10386
Entire Plant Argentina	Cytotoxic Activity	MEOH Ext	Cell Culture	Not stated	Active	Human hepatocellular carcinoma cell line.	AB1020
Not Stated Germany	Cytostatic Activity	Decoction + fractions	Cell and Tissue Culture	Not stated	Active	SH-SY5Yd neuroblastoma cells	AB1004
Not Stated USA	Anticarcinogenesis Activity	Not Stated	Cell Culture	ED50 <8 mg/ml	Active	HL-60 promyelocytic cells	AB1005
Entire Plant	Immunostimulant Activity	Decoction	Cell Culture	100 mcg/ml	Active	Splenocytes(mouse)	K10676
Entire Plant	Interferon induction stimulation	Decoction	Cell Culture	Not Stated	Active	Cells - CTLL-2	K10677
Entire Plant	Interleukin II receptor gene stimulation	Decoction	Cell Culture	Not Stated	Active	Splenocytes(mouse)	K10676
Entire Plant	Interleukin-4 formation stimulation	Decoction	Cell Culture	Not Stated	Active	Cells - CTLL-2	K10676
Entire Plant	Interleukin-II formation stimulation	Decoction	Cell Culture	Not Stated	Active	Cells - CTLL-2	K10676
Entire Plant	Lymphocyte stimulation	Decoction	Cell Culture	100 mcg/ml	Active	Splenocytes(mouse)	K10676
Entire Plant Colombia	Cell proliferation inhibition	ETOH(95%)Ext	Cell Culture	100 mcg/ml	Active	Lymphocytes-human	K07464
Entire Plant Colombia	Sister chromatid exchange stimulation	ETOH(95%)Ext	Cell Culture	1.0 mcg/ml	Active	Lymphocytes-human	K07464
Entire Plant Peru	Prostaglandin synthesis inhibition	ETOH(100%)Ext	Not Stated	100 mcg/ml	Active	vs. COX-1 Catalysed Prostaglandin Biosynthesis.	L14626

GI = Gastric Intubation IG = Intragastric NG = Nasogastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously IM = Intramuscular

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Root + Stem Mexico	Antibacterial Activity	ETOH-H2O(1:1) Ext	Agar Plate	Not stated	Active	vs. several Gram + and - bacteria	A04680
Leaf Cuba	Antibacterial Activity	Acetone Ext	Agar Plate	Not Stated	Active	*Pseudomonas aeruginosa* *Salmonella newport* *Sarcina lutea* *Serratia marcescens* *Shigella flexneri 3a*	K09163
Leaf Cuba	Antibacterial Activity	Acetone Ext	Agar Plate	Not Stated	Inactive	*Escherichia coli* *Propionibacterium acnes* *Salmonella typhosa* *Shigella flexneri* *Staphylococcus albus* *Staphylococcus aureus*	K09163
Leaf Cuba	Antibacterial Activity	H2O Ext	Agar Plate	Not Stated	Active	*Escherichia coli* *Propionibacterium acnes* *Pseudomonas aeruginosa* *Sarcina lutea* *Shigella flexneri*	K09163
Leaf Cuba	Antibacterial Activity	ETOH(95%)Ext	Agar Plate	Not Stated	Active	*Pseudomonas aeruginosa*	K09163
Leaf Cuba	Antibacterial Activity	ETOH(95%)Ext	Agar Plate	Not Stated	Inactive	*Escherichia coli* *Propionibacterium acnes* *Salmonella newport* *Salmonella typhosa* *Sarcina lutea* *Serratia marcescens* *Shigella flexneri* *Shigella flexneri 3a* *Staphylococcus albus* *Staphylococcus aureus*	K09163
Leaf Cuba	Antibacterial Activity	H2O Ext	Agar Plate	Not Stated	Inactive	*Salmonella newport* *Salmonella typhosa* *Serratia marcescens* *Shigella flexneri 3A* *Staphylococcus albus* *Staphylococcus aureus*	K09163

GI = Gastric Intubation IG = Intragastric NG = Nasogastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously IM = Intramuscular

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Guatemala	Antibacterial Activity	CH2CL2 Ext ETOH(100%) Ext H2O Ext	Agar Plate	MIC >10.0 mg/ml	Inactive	*Pseudomonas aeruginosa* *Salmonella typhi* *Staphylococcus aureus*	L11987
Leaf Guatemala	Antibacterial Activity	ETOH-H2O Ext 50%	Agar Plate	50.0 ml	Inactive	*Escherichia coli* *Salmonella typhosa* *Shigella flexneri*	K24899
Leaf Guatemala	Antibacterial Activity	ETOH(100%) Ext	Agar Plate	30.0 ml / disc	Inactive	*Escherichia coli* *Pseudomonas aeruginosa* *Staphylococcus aureus*	T15445
Leaf Argentina	Antibacterial Activity	Decoction	Agar Plate	Not stated	Inactive	*Pseudomonas aeruginosa*	K17523
Leaf Argentina	Antibacterial Activity	H2O Ext	Agar Plate	1.0 mg/ml	Inactive	*Salmonella typhi*	J11153
Leaf Argentina	Antibacterial Activity	H2O Ext	Agar Plate	62.5 mg/ml	Inactive	*Escherichia coli* *Staphylococcus aureus*	K14683
Stem Cuba	Antibacterial Activity	H2O Ext	Agar Plate	Not stated	Active	*Escherichia coli* *Pseudomonas aeruginosa* *Serratia marcescens* *Shigella flexneri* *Staphylococcus aureus*	K09163
Stem Cuba	Antibacterial Activity	Acetone Ext	Agar Plate	Not stated	Active	*Propionibacterium acnes* *Pseudomonas aeruginosa* *Salmonella typhosa* *Shigella flexneri 3a*	K09163
Stem Cuba	Antibacterial Activity	Acetone Ext	Agar Plate	Not stated	Inactive	*Escherichia coli* *Salmonella newport* *Sarcina lutea* *Serratia marcescens* *Shigella flexneri* *Staphylococcus albus* *Staphylococcus aureus*	K09163

GI = Gastric Intubation IG = Intragastric NG = Nasogastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously IM = Intramuscular

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Stem Cuba	Antibacterial Activity	ETOH(95%)Ext	Agar Plate	Not stated	Active	*Escherichia coli* *Propionibacterium acnes* *Salmonella newport* *Salmonella typhosa* *Sarcina lutea* *Serratia marcescens* *Shigella flexneri* *Shigella flexneri 3a*	K09163
Stem Cuba	Antibacterial Activity	H2O Ext	Agar Plate	Not stated	Inactive	*Propionibacterium acnes* *Salmonella newport* *Salmonella typhosa* *Sarcina lutea* *Shigella flexneri 3a* *Staphylococcus albus*	K09163
Leaf Puerto Rico	Antimycobacterial Activity	ETOH (95%) Ext	Agar Plate	Not Stated	Inactive	*Mycobacterium tuberculosis*	L12432
Root + Stem Mexico	Antimycobacterial Activity	ETOH-H2O(1:1) Ext	Agar Plate	Not stated	Active	*Mycobacterium tuberculosis*	A04680
Root Brazil	Antiyeast Activity	CH2CL2/MEOH (2:1) Ext	Agar Plate	Not stated	Active	*Saccharomyces cerevisiae*	
Leaf Guatemala	Antiyeast Activity	CH2CL2 Ext CH2CL2 Ext ETOH(100%) Ext ETOH(100%) Ext H2O Ext H2O Ext	Agar Plate Agar Plate Agar Plate Agar Plate Agar Plate Agar Plate	MIC 5.0 mg/ml MIC>10.0 mg/ml MIC>10.0 mg/ml MIC>10.0 mg/ml MIC>10.0 mg/ml MIC>10.0 mg/ml	Active Inactive Inactive Inactive Inactive Inactive	*Cryptococcus neoformans* *Candida albicans* *Candida albicans* *Cryptococcus neoformans* *Candida albicans* *Cryptococcus neoformans*	L11987
Root + Stem Mexico	Antiyeast Activity	ETOH-H2O(1:1) Ext	Agar Plate	Not stated	Active	*Candida albicans*	A04680
Root Brazil	Antifungal Activity	CH2CL2/MEOH (2:1) Ext	Agar Plate	Not stated	Active	*Cladosporium cladosporioides,* *C. sphaerospermum*	H28091
Root + Stem Mexico	Antifungal Activity	ETOH-H2O(1:1) Ext	Agar Plate	Not stated	Active	vs. several plant pathogenic fungi	A04680
Leaf Guatemala	Antifungal Activity	CH2CL2 Ext ETOH(100%) Ext H2O Ext	Agar Plate	MIC >10.0 mg/ml	Inactive	*Aspergillus flavus* *Microsporum gypseum*	L11987

GI = Gastric Intubation IG = Intragastric NG = Nasogastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously IM = Intramuscular

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Guatemala	Antifungal Activity	Hot H2O Ext	Broth Culture	1 ml / disc	Active	*Epidermophyton floccosum*	M27151
Leaf Cuba	Antifungal Activity	Acetone Ext ETOH(95%)Ext H2O Ext	Agar Plate	Conc Used 50%	Inactive	*Neurospora crassa*	T08589
Leaf Guatemala	Antifungal Activity	Hot H2O Ext	Broth Culture	1 ml / disc	Inactive	*Microsporum canis* *Microsporum gypseum* *Trichophyton mentagrophytes* *Trichophyton rubrum*	M27151
Leaf Argentina	Antifungal Activity	H2O Ext	Agar Plate	62.5 mg/ml	Inactive	*Aspergillus niger*	K14683
Stem Cuba	Antifungal Activity	H2O Ext Acetone Ext ETOH(95%) Ext	Agar Plate	50%	Inactive	*Neurospora crassa*	T08589
Leaf + Stem Argentina	Antiviral Activity	Ethyl acetate Dichloromethane	Agar Plate	EC(50) 25 mcg/ml EC(50) 43 mcg/ml	Active	vs. bovine viral diarrhea virus (viral model of the *Hepatitis C* virus)	X00001
Leaf + Stem Argentina	Antiviral Activity	Ethyl acetate CH2CL2 Ext	Plaque Assay	EC(50) 25 mcg/ml EC(50) 43 mcg/ml	Inactive	*Herpes simplex 1*, *Poliovirus type 1, Adenovirus serotype 7 and Vesicular stomatitis virus type 1*	X00001
Aerial Parts Bolivia	Antioxidant Activity	CH2CL2 Ext	Not stated	IC50 >1000 mg/ml	Inactive	Measured by quenching of luminol-enhanced chemiluminescence	L03868
Aerial Parts Bolivia	Antioxidant Activity	H2O Ext	In vitro	IC50 >1000 mg/ml	Inactive	Measured by quenching of luminol-enhanced chemiluminescence	L03868
Aerial Parts Bolivia	Antioxidant Activity	MEOH Ext	In vitro	IC50 126 mg/ml	Active	Measured by quenching of luminol-enhanced chemiluminescence	L03868
Leaf Guatemala	Antitrypanosomal Activity	CH2CL2 Ext ETOH Ext	In vitro In vitro	MIC 1.0 mg/ml MIC 1.0 mg/ml	Active Inactive	vs. Trypanosoma cruzi	L11987

GI = Gastric Intubation IG = Intragastric NG = Nasogastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously IM = Intramuscular

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Guatemala Root Guatemala	Antitrypanosomal Activity	ETOH (95%) Ext H2O Ext Hexane Ext	In vitro In vitro In vitro	IC90 1000 mcg/ml IC90 1000 mcg/ml IC 90 285 mcg.ml	Inactive Inactive Active	vs. Trypanosoma cruzi	L08927
Fresh Entire Plant Puerto Rico	Molluscicidal Activity	Aqueous Slurry (homogenate)	In vitro	LD100 >1m ppm	Inactive	Fruits, roots and leaves were tested against Lymnaea columella and L cubensis	T04621
Leaf Peru	Anticrustacean Activity	CH2CL2 Ext	In vitro	ED50 = 499.0 mcg/ml	Weak Activity	Against Artemia salina (assay system is intended to predict for antitumor activity)	K28202
Leaf Peru	Anticrustacean Activity	MEOH Ext	In vitro	ED50 > 1000 mcg/ml	Inactive	Against Artemia salina (assay system is intended to predict for antitumor activity)	K28202
Leaf Guatemala	Anticrustacean Activity	CH2CL2 Ext ETOH(100%) Ext H2O Ext Hexane Ext	In vitro	LC50 >1000 ppm	Inactive	Artemia salina larvae	L11987 L08927
Branch + Leaf Colombia	Antivenin Effect	ETOH(100%) Ext	Not stated	Not Stated	Inactive	vs. bothrops Atrox Venom	L15991
Not Stated Puerto Rico	Antimalarial Activity	ETOH (95%) Ext	Not Stated	IC50>65 mcg/ml	Inactive	Plasmodium falciparum	K16971
Not Stated Brazil	Insecticide Activity	ETOH (95%) Ext Pet ether Ext	Not Stated	50 mcg	Inactive	Rhodnius neglectus	K18765
Root Brazil	Antimitotic Effect	Hydroethanol Ext Ether	Cell Culture	ED50 = 45.02 mcg/ml ED50 = 12.40mcg/ml	Weak Activity	Sea urchin egg development	AB1007

GI = Gastric Intubation IG = Intragastric NG = Nasogastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously IM = Intramuscular

Biological Activities of Chemicals found in Anamu (Petiveria alliacea)

Chemical Tested	Activity Tested For	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Dipropyl disulfide	Hypocholesterolemic	Cell Culture	EC < or = 0.5 mmol/L IC > or = 1.0 mmol/L	Active	Rat hepatocytes. Concentration dependent reduction in cholesterol synthesis.	AB1015
Astilbin	Cytotoxic Activity	Cell Culture	Not Stated	Active	Exposure of phytohemaggluctinin-activated Jurkat cells to astilbin induced dose-dependent apoptosis.	AB1019
Astilbin	Antioxidant Activity	Tissue	Not Stated	Active	Maintained clarity of rat lens in hyperglycemia. Inhibited recombinant human aldose reductase. Inhibited sorbitol accumulation in human red blood cells.	AB1013
Astilbin	Insecticide Activity	Larval and pupal masses	Not Stated	Active	Anticarsia gemmatalis Spodoptera frugiperda	AB1010
Astilbin	Hypocholesterolemic Effect	Rat	Not Stated	Active	Reduced total liver cholesterol and liver phospholipid concentration. Lowered serum and liver TBAR concentration. Did not influence liver or serum antioxidant enzymes.	AB1014
Astilbin	Hepatoprotective	Rat	40 mg/kg	Active	Astilbine restored lipoperoxides and tissue prostanoids to basal values.	AB1012

Return to the Anamu Plant Database File

GI = Gastric Intubation IG = Intragastric NG = Nasogastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously IM = Intramuscular