

Biological Activities for Extracts of Coirama (*Kalanchoe pinnata*)

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Entire Plant India	Toxicity Assessment(quantitative)	ETOH-H2O(1:1) Ext	IP Mouse	LD50=>1.0 mg/kg			A04819
Leaf + Stem Jamaica	Toxicity Assessment(quantitative)	ETOH(95%)Ext H2O Ext	IP Mouse	Minimum Toxic Dose= 1.0 ml			A03360
Leaf + Stem USA(cult)	Toxic Effect(general)	Plant	IG Rat	790.0 mg/kg	Inactive		T14978
Leaf India	Toxic Effect(general)	MeOH Ext	IP Mouse Male	2400 mg/kg	Inactive		L04172
Leaf Brazil	Toxicity(general)	Juice (leaf picked before and during blooming)	IP Rat	0.25 - 5 g/kg	Inactive		BQ1007
Plant Australia	Toxicity(general)	Plant	Oral Cattle	Not Stated	Active	Two adult cattle died within 48 hr of being fed a large amount of plant. They experienced hypersalivation, ataxia, cardiac arrhythmia and labored respiration with necropsy findings of rumenitis, reduction of bronchiolar lumens and emphysema.	BQ1010
Flowers Australia	Death	Flowers	Oral Calf	20.0 gm/kg	Active	2 calves fed test plant died 9 and 15 hrs after dosing. One collapsed with dyspnea, tachycardia and irregular heart rate. The other had diarrhea and tachycardia. Emphysema was seen in one calf and both had focal myocardial degeneration.	M18526
Entire Plant India	Abortifacient Effect	ETOH(100%)Ext	IG Rat(pregnant)	200.0 mg/kg	Inactive		L11141
Entire Plant India	Antiimplantation Effect	ETOH(100%)Ext	IG Rat Female	200.0 mg/kg	Inactive	vs. early pregnancy.	L11141

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Aerial Parts Nigeria	Antibacterial Activity	ETOAC Ext	Agar Plate	Not Stated	Active	<i>Bacillus subtilis</i> <i>Escherichia coli</i> <i>Pseudomonas aeruginosa</i> <i>Staphylococcus aureus</i>	H22659
Flowers Not Stated	Antibacterial Activity	H2O Ext	Broth Culture	Not Stated	Active	<i>Staphylococcus aureus</i>	A15566
Leaf Guatemala	Antibacterial Activity	ETOH-H2O(50%) Ext	Agar Plate	50.0 microliters	Inactive	<i>Shigella flexneri</i> <i>Escherichia coli</i> <i>Salmonella typhosa</i>	K24899
Leaf India	Antibacterial Activity	ETOH(95%)Ext ETOH(95%)Ext ETOH(95%)Ext ETOH(95%)Ext ETOH(95%)Ext H2O Ext H2O Ext H2O Ext H2O Ext H2O Ext	Agar Plate	10.0 mg/ml 10.0 mg/ml 10.0 mg/ml 10.0 mg/ml 10.0 mg/ml 10.0 mg/ml 10.0 mg/ml 10.0 mg/ml 10.0 mg/ml 10.0 mg/ml	Inactive Inactive Weak Activity Weak Activity Weak Activity Inactive Inactive Weak Activity Weak Activity Weak Activity	<i>Corynebacterium diphtheriae</i> <i>Diplococcus pneumoniae</i> <i>Staphylococcus aureus</i> <i>Streptococcus pyogenes</i> <i>Streptococcus viridans</i> <i>Corynebacterium diphtheriae</i> <i>Diplococcus pneumoniae</i> <i>Staphylococcus aureus</i> <i>Streptococcus pyogenes</i> <i>Streptococcus viridans</i>	M29966
Leaf Nigeria	Antibacterial Activity	MeOH Ext	Agar Plate Agar Plate Agar Plate Agar Plate Agar Plate Agar Plate	2.19 mg/ml 2.19 mg/ml 2.19 mg/ml 25.0 mg/ml 25.0 mg/ml 4.38 mg/ml 4.38 mg/ml	Active Active Active Inactive Inactive Active Active	<i>Escherichia coli</i> <i>Proteus vulgaris</i> <i>Shigella dysenteriae</i> <i>Klebsiella pneumoniae</i> <i>Pseudomonas aeruginosa</i> <i>Bacillus subtilis</i> <i>Staphylococcus aureus</i>	L07710
Root Nigeria	Antibacterial Activity	ETOH(100%)Ext ETOH(100%)Ext	Agar Plate Agar Plate	1.25 Mg/ml 25.0 Mg/ml	Inactive Inactive	<i>Bacillus subtilis</i> <i>Pseudomonas aeruginosa</i>	L16218
Stem Not Stated	Antibacterial Activity	H2O Ext	Broth Culture	Not Stated	Active	<i>Staphylococcus aureus</i>	A15566
Leaf Nigeria	Antibacterial Activity	MeOH(60%) Ext	Agar Plate	25 mg/ml	Active		L07710

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Not Stated	Antibacterial Activity	Juice	Agar Plate	5% v/v	Active	<i>Bacillus subtilis</i> <i>Staphylococcus aureus</i> <i>Streptococcus pyogenes</i> <i>Streptococcus faecalis</i> <i>Escherichia coli</i> <i>Proteus spp</i> <i>Klebsiella spp</i> <i>Shigella spp</i> <i>Salmonella spp</i> <i>Serratia marcescens</i> <i>Pseudomonas aeruginosa</i> MDR bacteria.	BQ1013
Root Not Stated	Antimycobacterial Activity	H2O Ext	Broth Culture	Not Stated	Inactive	<i>Mycobacterium tuberculosis</i>	A15566
Stem Not Stated	Antimycobacterial Activity	H2O Ext	Broth Culture	Not Stated	Inactive	<i>Mycobacterium tuberculosis</i>	A15566
Flowers Not Stated	Antimycobacterial Activity	H2O Ext	Broth Culture	Not Stated	Inactive	<i>Mycobacterium tuberculosis</i>	A15566
Aerial Parts USA-MN(cult)	Antiviral Activity	ETOH(95%)Ext ETOH(95%)Ext Saline Ext Saline Ext	Cell Culture	Not Stated	Inactive	<i>Herpes simplex 1</i> <i>Vesicular stomatitis</i> <i>Herpes simplex 1</i> <i>Vesicular stomatitis</i>	M25939
Not Stated Russia	Antiviral Activity	Juice Ether Ext ETOH Ext K+ periodate	Not Stated	1-8000 dilutions	Active Active Active Active	Viricidal activity is not destroyed by ether, alcohol or potassium periodate.	BQ1005
Leaf India	Antifungal Activity	Hot H2O Ext	Broth Culture	Not Stated	Active	<i>Trichophyton mentagrophytes</i>	M21411
Leaf India	Antifungal Activity	H2O Ext H2O Ext	Agar Plate Agar Plate	Not Stated Not Stated	Active Active	Plant pathogen <i>Ustilago maydis</i> Plant pathogen <i>Ustilago nuda</i>	T08889
Root Nigeria	Antifungal Activity	ETOH(100%)Ext	Agar Plate	625.0 mcg/ml	Inactive	<i>Periconia species</i>	L16218
Root Nigeria	Antiyeast Activity	ETOH(100%)Ext	Agar Plate	1.25 mg/ml	Inactive	<i>Candida albicans</i>	L16218
Leaf Nigeria	Antiyeast Activity	MeOH Ext	Agar Plate	25.0 mg/ml	Inactive	<i>Candida albicans</i>	L07710
Leaf India	Antimalarial Activity	ETOH-H2O(50%) Ext	IG Mouse	100.0 mcg/ml 1.0 gm/kg	Inactive Inactive	<i>Plasmodium berghei</i> <i>Plasmodium berghei</i>	M27524

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Entire Plant India	Insecticide Activity	ETOH-H2O(1:1) Ext	1.0%	Not Stated	Inactive	<i>Musca domestica</i> <i>Tribolium castaneum</i>	T07438
Entire Plant Puerto Rico	Molluscicidal Activity	Aqueous Slurry (homogenate)	Not Stated	LD100=>1 ppm	Inactive	<i>Lymnaea columella</i> <i>Lymnaea cubensis</i>	T04621
Leaf Brazil	Antileishmaniasis Activity	H2O Ext	IG Mouse Oral Mouse IV Mouse Topical Mouse	4.0 mg 8.0 mg Not Stated Not Stated	Active Active Active Active	<i>Leishmania amazonensis</i> . Comparable to antileishmanial drug glucantime.	K28346
Leaf Brazil	Antileishmaniasis Activity	H2O Ext	IP Mouse Oral Mouse	IC50=500.0 mcg/ml	Active	<i>Leishmania amazonensis</i> . A 58% reduction in amastigote growth seen. Effect due to stimulation of NO production by macrophages.	L06602
Leaf Brazil	Antileishmaniasis Activity	H2O Ext	IV Mouse Male	2.0 mg	Active	<i>Leishmania amazonensis</i>	K28346
Leaf Brazil	Antileishmaniasis Activity	Leaves	Oral Human Male	Not Stated	Active		E00374
Leaf Brazil	Antianaphylactic Activity	Not Stated Not Stated	IG Mouse IP Mouse	8.0 mg 4.0 mg	Active Active		L14474
Leaf Brazil	Antianaphylactic Activity	Juice	Guinea pig	4 ml/kg	Active	Protected guinea pigs from death by asphyxia induced by 5 mg histamine. Protection lasted 1 hour.	BQ1011
Leaf Brazil	Antihistamine Activity	Not Stated	Not Stated	Not Stated	Active		BQ1009
Leaf Brazil	Antihistamine Activity	Juice	Guinea pig ileum	50 mg/ml	Active	Antagonism specific for histamine. It did not modify the response to Ach, KCl and BaCl2.	BQ1011
Leaf Brazil	Antihistamine Activity	Juice	Rat	4 ml/kg	Active	Vascular permeability responses to histamine decreased by about 20-25%.	BQ1011
Leaf Brazil	Antihistamine Activity	Juice	Guinea pig	4 ml/kg	Active Inactive	H1 receptor blocking. H2 receptor blocking.	BQ1011

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Brazil	Immunomodulatory Activity	H2O Ext	Mouse	480 mg/kg	Active Active	vs. zymosan-induced footpad thickness, leukocyte infiltration and blood flow increase. vs. zymosan-induced popliteal lymph node increase.	A11969
Leaf Brazil	Immunomodulatory Activity	H2O Ext	SC Mouse	Not Stated	Active	vs. zymosan-induced footpad thickness, leukocyte infiltration and blood flow increase.	A11969
Leaf Brazil	Immunosuppressive Activity	H2O Ext	Mouse	480 mg/kg	Active	Reduced B cell number in zymosan-induced leukocyte infiltration of footpad.	A11969
Leaf Brazil	Immunosuppressant Activity	H2O Ext	External Mouse Male IG Mouse Male IP Mouse Male IV Mouse Male	0.1 mg 4.0 mg 2.0 mg 1.0 mg	Active Active Active Strong Activity	Suppression of DTH induced by ova.	K17960
Leaf Brazil	Immunosuppressant Activity	H2O Ext	Oral Mouse	8 mg	Active	Diminished the capacity of animals to develop delayed-type hypersensitivity and to produce specific antibodies.	K28346
Leaf Brazil	Lymphocyte Proliferation Inhibition	H2O Ext H2O Ext	Not Stated IP Mouse Male	1.7 mcg/ml 1.0 mcg	Active Active	vs. con-a induced T-cell proliferation. 28% inhibition of the maximal response to con-a.	K17960 K17960
Leaf Brazil	Lymphocyte Proliferation Inhibition	H2O Ext	IP Mouse Male	4.0 mg	Active	vs. ova-induced proliferation.	K17960
Leaf Brazil	Lymphocyte Proliferation Inhibition	Ch2CL2 Ext Ch2CL2 Ext ETOH(100%)Ext ETOH(100%)Ext	Cell Culture Cell Culture Cell Culture Cell Culture	IC50=12.5 mcg/ml IC50=17.0 mcg/ml IC50=17.5 mcg/ml IC50=500.0 mcg/ml	Active Active Active Inactive	Lymphocytes-human ep12sa extract. Lymphocytes-rat. Lymphocytes-human. Lymphocytes-rat.	L08268
Leaf Brazil	Cell Proliferation Inhibition	Not Stated	Human Adult lymphocytes	20.0 mcg/ml	Active	vs. phytohemagglutinin-induced proliferation. Effect reversible.	K19547

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Brazil	Antibody Formation Suppression	H2O Ext	IP Mouse	4.0 mg	Active	vs. immunization with ova. Detected by lower levels of IgG.	K17960
Leaf India	Delayed Type Cutaneous Hypersensitivity Inhibition	MeOH Ext	IP Rat	100.0 mg/kg	Active	vs. picryl chloride induced delayed hypersensitivity. vs. oxasolone induced delayed hypersensitivity.	K09804
Leaf India	Analgesic Activity	MeOH Ext	IP Mouse	100.0 mg/kg 300.0 mg/kg	Active Inactive	vs. acetic acid-induced writhing. vs. tail clip method.	L04172
Leaf Nigeria	Analgesic Activity	MeOH Ext	IP Mouse	100.0 mg/kg	Active	vs. acetic acid-induced writhing.	J19060
Leaf India	Anti-inflammatory Activity	MeOH Ext	IP Rat	100.0 mg/kg 100.0 mg/kg 300.0 mg/kg 300.0 mg/kg	Active Active Active Active	vs. picryl chloride induced ear edema. vs. sodium urate induced gout. vs. arachidonic acid-induced pedal edema. vs. glucose-oxidase induced inflammation.	K09804
Leaf Nigeria	Anti-inflammatory Activity	MeOH Ext	IP Mouse	50.0 mg/kg	Active	vs. carrageenan-induced pedal edema.	J19060
Leaf Senegal	Anti-inflammatory Activity	H2O Ext	IG Rat	1.6 gm/kg	Active	vs. carrageenan-induced pedal edema.	M17092
Leaf India	Anti-inflammatory Activity	MeOH Ext	IM Rat IP Rat IP Rat IP Rat IP Rat IP Rat IP Rat IP Rat IP Rat IP Rat IP Rat IP Rat IP Rat	300.0 mg/kg 100.0 mg/kg 300.0 mg/kg 300.0 mg/kg 300.0 mg/kg 300.0 mg/kg 300.0 mg/kg 300.0 mg/kg 300.0 mg/kg 300.0 mg/kg 300.0 mg/kg 300.0 mg/kg 300.0 mg/kg	Active Active Active Active Active Active Active Active Active Active Active Active Inactive	vs. acetic acid injection-induced peritoneal exudation. vs. carrageenan-induced pedal edema. vs. carrageenan-induced pedal edema. vs. histamine-induced edema. vs. 5HT-induced pedal edema. vs. bradykinin-induced pedal edema. vs. hyaluronidase-induced edema. vs. cotton pellet granuloma. vs. phenylbutazone-induced arthritis. vs. adjuvant-induced arthritis. vs. turpentine-induced joint edema. vs. PGE-2-induced edema.	M27174
Leaf Brazil	Anti-inflammatory Activity	H2O Ext	Mouse	480 mg/kg	Active	vs. zymosan-induced inflammation.	A11969

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Brazil	Anti-inflammatory Activity	Juice (leaf picked before blooming) Juice (leaf picked during blooming)	Oral Rat Oral Rat	0.25 g/kg 0.5 g/kg 1 g/kg 0.5 g/kg 1 g/kg 2 g/kg	Active Active Active Inactive Inactive Inactive	vs. carrageenin-induced paw edema. vs. carrageenin-induced paw edema. vs. carrageenin-induced paw edema. vs. carrageenin-induced paw edema. vs. carrageenin-induced paw edema. vs. carrageenin-induced paw edema.	BQ1007
Leaf India	Capillary Permeability Decreased	MeOH Ext	IP Mouse	300.0 mg/kg	Active	vs. peritoneal capillary permeability.	M27174
Leaf India	Leukocyte Migration Inhibition	MeOH Ext	IP Rat	100.0 mg/kg	Active	vs. carrageenin-induced pleurisy.	M27174
Leaf India	Skeletal Muscle Relaxant Activity(unspecified)	MeOH Ext	IP Mouse	300.0 mg/kg	Active	vs. the chimney test.	L04172
Leaf + Stem Jamaica	Spasmogenic Activity	ETOH(95%)Ext H2O Ext	Guinea Pig IP Guinea Pig	0.33 ml/liter 0.033 ml/liter	Active Active	Ileum. Ileum.	A03360
Leaf Nigeria	Antipyretic Activity	MeOH Ext	IP Mouse	100.0 mg/kg	Active	vs. yeast-induced pyrexia.	J19060
Leaf India	Antipyretic Activity	MeOH Ext	IP Mouse	300.0 mg/kg	Inactive		L04172
Leaf India	Antipyretic Activity	MeOH Ext	IP Rat	100.0 mg/kg	Active	vs. yeast-induced pyrexia.	K09804
Leaf Brazil	Nitric Oxide Synthesis Stimulation	H2O Ext	IP Mouse	IC50=500.0 mcg/ml	Active		L06602
Not Stated Brazil	Antithyroid Activity	H2O Ext	In vitro	Not Stated	Active Active Active	Inhibited thyroid peroxidase. Inhibited thyroid peroxidase iodide-oxidation. Scavenged H2O2, a thyroid peroxidase cofactor.	BQ1006
Not Stated USSR	Antitussive Activity	Hot H2O Ext	Oral Guinea Pig	Not Stated	Inactive		W02509
Leaf India	Granuloma Formation Inhibition	MeOH Ext	SC Rat	300.0 mg/kg	Active	vs. carrageenin induced granuloma. Activity was inhibited 67%.	K09804
Leaf Congo	Vasoconstrictor Activity	H2O Ext	IP Rat	Not Stated	Active	Blanching of the ears.	T06580

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf India	Antidiarrheal Activity	ETOH Insoluble Fract	Guinea Pig	300.0 mg	Inactive	Ileum vs. <i>E. coli</i> - interotoxin-induced diarrhea. Ileum vs. <i>E. coli</i> - interotoxin-induced diarrhea. Ileum vs. <i>E. coli</i> - interotoxin-induced diarrhea. Ileum vs. <i>E. coli</i> - interotoxin-induced diarrhea.	K17122
		ETOH-H2O(1:1) Ext	Rabbit	300.0 mg	Inactive		
		Hexane Ext	Guinea Pig	300.0 mg	Active		
		Hexane Ext	Rabbit	300.0 mg	Active		
Entire Plant Taiwan	Cytotoxic Activity	H2O Ext	Cell Culture	Not Stated	Active	Ca-9kb	H05528
Leaf + Stem USA-FL	Cytotoxic Activity	Alkaloid Fract	Cell Culture	ED50=<20.0 mcg/ml	Active	Ca-9kb.	X00001
Root Nigeria	Anticrustacean Activity	ETOH(100%)Ext	Not Stated	LD50=>1000 ppm	Inactive	<i>Artemia salina</i> assay system is intended to predict for antitumor activity.	L16218
Leaf Brazil	Antitumor Activity	ETOH-H2O(50%) Ext	IP Rat Male	122.0 mg/kg	Inactive	Ca-walker-256.	L13474
Leaf Brazil	Antiulcer Activity	Juice	Guinea pig	4 ml/kg	Inactive	Did not protect gastric mucosa from histamine-induced ulceration.	BQ1011
Leaf India	Antiulcer Activity	MeOH Ext	IP Guinea Pig IP Rat IP Rat IP Rat IP Rat IP Rat IP Rat IP Rat	100.0 mg/kg 100.0 mg/kg 100.0 mg/kg 100.0 mg/kg 100.0 mg/kg 100.0 mg/kg 100.0 mg/kg 100.0 mg/kg	Active Active Active Active Active Active Active Active	vs. histamine-induced ulcers. vs. aspirin-induced ulcers. vs. serotonin-induced gastric ulceration vs. stress-induced(restraint) ulcers. vs. reserpine-induced ulcers. vs. aspirin-induced ulcers. vs. ethanol-induced gastric ulceration. vs. indomethacin-induced ulcers.	M29677
Leaf India	Exploratory Behavior Decreased	MeOH Ext	IP Mouse Male	100.0 mg/kg	Active	vs. head-dip, y-maze and evasion tests.	L04172
Leaf India	GABA Level Increase	MeOH Ext	IP Mouse Male	300.0 mg/kg	Active		L04172
Leaf India	Anticonvulsant Activity	MeOH Ext	IP Mouse	500.0 mg/kg	Inactive	vs. pentylenetetrazole-induced convulsions. vs. strychnine-induced convulsions.	L04172
				500.0 mg/kg	Inactive		
Leaf India	Sleep Time Increased	MeOH Ext	IP Mouse	100.0 mg/kg	Active	vs. barbiturate-induced narcosis.	L04172

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Nigeria	Antimutagenic Activity	Acid-ETOH Ext	Agar Plate	100.0 mcg/ml	Active	<i>Salmonella typhimurium</i> ta100 vs.ethyl methanesulfonate-induced mutagenesis.	K11426
		Acidic Ext		100.0 mcg/ml	Active		
		Pet Ether Ext		400.0 mcg/ml	Active		
		Acidic Ext		100.0 mcg/ml	Weak Activity		
		Acidic Ext		100.0 mcg/ml	Weak Activity		
		Acidic Ext		100.0 mcg/ml	Weak Activity		
		Alkaloid Fract		100.0 mcg/ml	Weak Activity		
		Alkaloid Fract		100.0 mcg/ml	Weak Activity		
		Alkaloid Fract		100.0 mcg/ml	Weak Activity		
		ETOAC Ext		400.0 mcg/ml	Weak Activity		
		Lipid Fraction		100.0 mcg/ml	Weak Activity		
		Lipid Fraction		50.0 mcg/ml	Weak Activity		
		MeOH Ext		400.0 mcg/ml	Weak Activity		
Pet Ether Ext	100.0 mcg/ml	Weak Activity					
Pet Ether Ext	100.0 mcg/ml	Weak Activity					
Leaf India	Antiaggression Effect	MeOH Ext	IP Mouse Male	500.0 mg/kg	Inactive	vs. foot shock.	L04172

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf India	CNS Depressant Activity	MeOH Ext	IP Mouse Male	100.0 mg/kg	Active		L04172
Leaf India	ATP-ase Stimulation	MeOH Ext	IP Rat	300.0 mg/kg	Active		K09804
Leaf India	Glutamate-oxaloacetate-transaminase Inhibition	MeOH Ext	IP Rat	300.0 mg/kg	Active		K09804
Leaf India	Glutamate-pyruvate-transaminase Inhibition	MeOH Ext	IP Rat	300.0 mg/kg	Active		K09804
Leaf + Stem USA(cult)	Conditioned Taste Aversion	Plant	IG Rat	790.0 mg/kg	Inactive		T14978
Root Indonesia	Plant Shoot Growth Inhibitor	Root	Not Stated	Not Stated	Active	Intra- and interspecific allelopathic activity.	J15757

Biological Activities for Compounds of Coirama (*Kalanchoe pinnata*)

Compound Tested	Activity Tested For	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Bufadienolides	Toxicity(cardiac)	Oral Calf	Not Stated	Active	Caused cardiac glycoside poisoning.	BQ1012
Bufadienolides	Death	Oral Calf	20 gm/kg	Active	2 calves fed test plant died 9 and 15 hrs after dosing with dyspnea, tachycardia, irregular heart rate and diarrhea. Emphysema was seen in one calf and both had focal myocardial degeneration.	M18526
Flavonoid fraction	Antihistamine Activity	Guinea pig ileum	0.15 mg/ml	Active		BQ1011
Flavonoid fraction	Antihistamine Activity	Rat	12 mg/kg	Active	Vascular permeability responses to histamine were decreased by about 20-25%.	BQ1011
Flavonoid fraction	Antihistamine Activity	Guinea pig	Not Stated	Active Inactive	H1 receptor blocking. H2 receptor blocking.	BQ1011
Patuletin acetylramnosides	Immunosuppressive Activity	Not Stated	Not Stated	Active	Inhibited human lymphocyte proliferative activity.	BQ1008

Compound Tested	Activity Tested For	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Bryophyllin A	Antitumor Promoting Activity	Cell Culture	IC50=0.4 microM	Active	Inhibited EBV early antigen activation in Raji cells induced by tumor promoter, 12-O-tetradecanoylphorbol-12-acetate.	L18804
Bryophyllin B	Cytotoxic Activity	Not Stated	Not Stated	Active		H05528
Patuletin	Neuroprotective Activity	Rat cortical cells	Not Stated	Active	vs. glutamate-induced oxidative stress & neuronal damage.	BQ1014
Patuletin	Antioxidant Activity	Rat cortical cells	Not Stated	Active Active	vs. glutamate-induced oxidative stress. Maintained activity of catalase, GSH-Px, GSH-R and GSH affected by glutamate.	BQ1014
Patuletin	Aldose reductase Inhibition	Rat lens	10(-1) M 10(-5) M 10(-6) M	Active Active Weak Activity	100% inhibition. 80% inhibition. 22.7% inhibition.	BQ1015
Bryophyllin A Bryophyllin C	Insecticidal Activity	Insect larvae	LD50=3 mcg/g LD50=5 mcg/g	Active Active	vs. third instar larvae of the silkworm (<i>Bombyx mori</i>).	H27510
Bufadienolides	Na,K-ATPase Inhibitor	Animals	Not Stated	Active	Beneficial in demyelinating diseases.	BQ1016

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