Biological Activities for Extracts of Cat's claw *(Uncaria tomentosa)*

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Bark Peru	Toxic Effect (general)	Lyophilized Extract	Oral Human Adult	10.0 gm	Inactive		L03092
Bark Peru	Toxicity Assessment (quantitative)	Lyophilized Extract	Intragastric Rat	0.2 gm/kg	Inactive	Extract was administered for 30 days.	L03092
Bark Peru	Toxicity Assessment (quantitative)	Lyophilized Extract	IP Rat	LD50=0.431 gm/kg			L03092
Bark Peru	Toxic Activity	H2O Ext	Cell Culture	100.0 mg/ml	Inactive	Cells -(chinese hamster ovary)	L03617
Bark Peru	Mutagenic Activity	CHCL3 Ext CHCL3-MEOH(9:1) H2O Ext MEOH Ext Pet Ether Ext	Agar Plate	100.0 mcg	Inactive	*Salmonella typhimurium* (Strains:TA100, TA1535, TA1537, TA98, TA1538)	K10349
Bark Peru	Mutagenic Activity	H2O Ext	Agar Plate	100.0 mg/ml	Inactive	vs. Ames test.	L03617
Bark Peru	Immunostimulant Activity	Lyophilized Extract	Intragastric Mouse	400.0 mg/kg	Active	Activated phagocytosis as measured by the carbon clearance test.	L03088
Bark Peru	Immunostimulant Activity	Hot H2O Ext	Oral Rat	Variable	Active	Water extracts shown to increase white blood cells and have enhanced DNA repair.	L08117
Root Peru	Immunostimulant Activity	H2O Ext	Human Adult	Not stated	Active	Increased IG levels in melanoma patients.	T04747
Root Peru	Immunstimulant Activity	Alkaloid Fraction	Cell Culture	Not stated	Active	vs .tissue macrophages. Released a lymphocyte-proliferation regulating factor enhancing the proliferation of B and T lymphocytes.	K24085

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Stembark Peru	Immunostimulant Activity	H2O Ext	Rat macrophages	0.05 mg/ml	Active	Stimulated Interleukin-1 and Interleukin-6 formation	L03706
Vine Peru	Immunostimulant Activity	H2O Ext	Intragastric Rat	Variable	Active	Stimulated lymphocyte proliferation. White blood cells were elevated compared with Controls ($p<0.05$).	L06405
Vine Peru	Immunostimulant Activity	H2O Ext	Oral Human Adult (Male)	5.0 mg/kg	Active	WBC were significantly elevated ($p<0.05$).	L06405
Vine Peru	Immunostimulant Activity	H2O Ext	Oral Human Adult (male)	700 mg	Active	vs. response to 23 valent pneumococcal vaccine. Immune enhancement observed with an elevation of lymphocyte/ neutrophil ratios and a reduced decay in the 12 serotype antibody titer responses to the vaccination at 5 months.	AL1009
Vine Peru	Immunostimulant Activity	H2O Ext	Oral Human Adult	250 mg 350 mg	Active Active	PHA-induced lymphocyte proliferation.	AL1011
Root Peru	Cytotoxic Activity	H2O Ext	Cell Culture	IC50=200.0 mcg/ml	Weak activity	vs. EBV-transformed B lymphoma cells (raji).	J18471
Root Peru	Cytotoxic Activity	H2O Ext	Cell Culture	IC50=71.0 mcg/ml	Active	vs. cell line k562.	J18471
Root Peru	Cytotoxic Activity	H2O Ext	Cell Culture	IC50=84.0 mcg/ml	Active	Human leukemia cell line HL-60-TB.	J18471
Bark Peru	Apoptosis Inhibition	H2O Ext	Cell Culture	100.0 mcg/ml	Active	Human colon cancer cell line HT29. vs. peroxynitrite- induced apoptosis.	L04246
Bark Peru	Apoptosis Inhibition	H2O Ext	Cell Culture	MLD=100.0 mcg/ml	Active	Macrophage cell line raw 264.7. vs. peroxynitrite-induced apoptosis.	L04246
Bark + Leaf Peru	Antiproliferative Activity	Ext and an isolated active fractions	Cell culture (MCF7)	IC50=10 mg/ml IC50=20 mg/ml	Active	Inhibited proliferation of the human breast cancer cell line MCF7.	AL1007

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Bark + Leaf Peru	Antiproliferative Activity	Ext and an isolated active fractions	Cell culture (MCF7)	100 mg/ml	Strong Activity	Approximately 90% inhibition of human breast cancer cell line MCF7.	AL1007
Bark Peru	Estrogen Binding Inhibition	H2O Ext	Cell Culture	10.0 mcg 20.0 mcg	Active	Human-breast cancer (UISO-BCA-1) A significant reduction of estradiol-specific binding was observed.	L06750
Bark Peru	Tumor Necrosis Factor Synthesis Inhibition	H2O Ext	Cell Culture	ED50=150.0 mcg/ml	Active	Macrophage cell line raw 264.7.	L12755
Bark Peru	Genotoxicity Activity	Not stated	Infusion Rat (Liver)	100.0 mcg/ml	Active	vs. oxidative DNA damage induced by Fe2+ salts.	K29288
Root Peru	Genotoxicity Activity	Not stated	Infusion Rat (Liver)	100.0 mcg/ml	Active	vs. oxidative DNA damage induced by Fe2+ salts.	K29288
Bark Peru	Gene Expression Inhibition	H2O Ext	Cell Culture	100.0 mcg/ml	Active	Human colon cancer cell line HT29. Inhibited lPS-induced nitric oxide synthase gene expression.	L04246
Bark Peru	DNA Repair Synthesis Stimulation	Hot H2O Ext	Oral Rat	80.0 mg/kg	Active	Increased white blood cells and enhanced DNA repair.	L08117
Bark Peru	DNA Binding Effect	ETOH(70%)Ext	Not stated	0.5 mg/ml	Weak activity	DNA-calf thymus	K27875
Root Peru	DNA Synthesis Inhibition	H2O Ext	Cell Culture	Not stated	Active	Sarcoma 180(asc). A tannin-free extract was used.	T04747
Vine Peru	DNA Repair Induction	H2O Ext	Intragastric Rat	Variable	Active	Repair of DNA single strand breaks and double strand breaks were significantly improved ($p<0.05$).	L06405
Bark Peru	DNA Repair Induction	H2O Ext	Oral Human Adult	Not stated	Active	Enhance DNA repair, mitogenic response and leukocyte recovery after chemotherapy-induced DNA damage.	AL1011
Bark Peru	DNA Repair Induction	H2O Ext	Oral Human Adult	250 mg 350 mg	Active Active	DNA damage-induced by hydrogen peroxide was significantly reduced with an increase in DNA repair.	AL1011

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Bark Peru	Antimutagenic Activity	Decoction	Oral Human Adult	6.5 gm/day	Active	*Salmonella typhimurium* TA100. Two healthy donors, one a smoker and one not, were given extract for 15 days. Treatment decreased smokers urine's mutagenicity.	K10349
Bark Peru	Antimutagenic Activity	H2O Ext MEOH Ext	Agar Plate	100.0 mcg/ml	Active	*Salmonella typhimurium* TA102. vs. 8-methoxypsoralen + UVA-induced mutagenesis.	K10349
Bark Peru	Antimutagenic Activity	CHCL3-MEOH(9:1) Pet Ether Ext CHCL3 Ext	Agar Plate	100.0 mcg/ml	Weak activity	*Salmonella typhimurium* TA102. vs. 8-methoxypsoralen + UVA-induced mutagenesis.	K10349
Bark Peru	Analgesic Activity	Lyophilized Extract	Intragastric Mouse	10.0 mg/kg	Active		L03092
Bark Peru	Analgesic Activity	Lyophilized Extract	IV Infusion Mouse	10.0 mg/kg	Active		L03092
Bark Peru	Anti-inflammatory Activity	H2O Ext	Cell Culture	100.0 mcg/ml	Active	Macrophage cell line raw 264.7. Inhibited NF-kappa-B activation induced by LPS.	L04246
Bark Peru	Anti-inflammatory Activity	H2O Ext	Oral Rat	5.0 mg/ml	Active	vs. rats with chronic intestinal inflammation induced by indomethacin (7.5 mg/kg).	L04246
Bark Peru	Anti-inflammatory Activity	Lyophilized Extract	IP Mouse	10.0 gm/kg	Active	Inhibited inflammation by 70%.	L03092
Bark Peru	Anti-inflammatory Activity	Pet Ether Ext	IP Rat	Not stated	Active		M25334
Bark Peru	Anti-inflammatory Activity	Ext	Not stated	Not stated	Active		AL1007
Bark Peru	Anti-inflammatory Activity	Freeze-dried Ext	Human Adult (osteoarthritis)	Not stated	Active	Pain associated with activity, medical and patient assessment scores were reduced within 1 week of therapy.	AL1008
Bark Peru	Anti-inflammatory Activity	Freeze-dried Ext	Human Adult (osteoarthritis)	Not stated	Inactive	No effect on knee pain or swelling.	AL1008

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Bark Peru	Anti-inflammatory Activity	Freeze-dried Ext	Cell Culture	Not stated	Active Active Inactive	Inhibited TNF-alpha production. Reduced LPS-induced PGE2 release. Basal PGE2 production.	AL1008
Root Peru	Anti-inflammatory Activity	H2O Ext	Gastric Intubation Mouse	Not stated	Active	vs. carrageenan-induced pedal edema. A tannin-free extract was used.	T04747
Root Peru	Anti-inflammatory Activity	H2O Ext	IP Mouse	Not stated	Active	vs. carrageenan-induced pedal edema. A tannin-free extract was used.	T04747
Rootbark Peru	Anti-inflammatory Activity	CHCL3 Ext	Intragastric Rat	Not stated	Inactive		M27076
Rootbark Peru	Anti-inflammatory Activity	CHCL3-MEOH (9:1)	Intragastric Rat	50.0 mg/kg	Active	vs. carrageenan-induced pedal edema. Edema was inhibited by 69.2%.	M27076
Rootbark Peru	Anti-inflammatory Activity	H2O Ext	Intragastric Rat	84.0 mg/kg	Active	vs. carrageenan-induced pedal edema. Edema was inhibited by 41.2%.	M27076
Rootbark Peru	Anti-inflammatory Activity	MEOH Ext	Intragastric * Rat	Not stated	Inactive		M27076
Bark Peru	Anti-inflammatory Activity	Not stated	Cell Culture	IC50=14.1 ng/ml	Active	Decreased TNF-alpha and nitrite production in LPS exposed cells.	AL1003
Bark Peru	Anti-inflammatory Activity	Not stated	Oral	Not stated	Active	Protected against indomethacin-induced gastritis model.	AL1003
Bark Peru	Anti-inflammatory Activity	Not stated	Oral	Not stated	Active	Prevented TNF-alpha mRNA expression.	AL1003
Bark Peru	Anti-inflammatory Activity	Hydroalcoholic Ext H2O-freeze dried Ext	Mouse	Not stated	Active Weak Activity	vs. carrageenan-induced paw edema.	AL1004
Bark Peru	Cyclooxygenase-1 and -2 Inhibition	Hydroalcoholic Ext H2O-freeze dried Ext	Mouse	Not stated	Inactive Inactive		AL1004

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Bark Russia	Antioxidant Activity	Lyophilized Extract	Not stated	Not stated	Active		L02933
Bark Peru	Antioxidant Activity	Infusion	Rat (Liver)	IC50=56.0 mcg/ml	Active	vs. tert-butyl-hydroperoxide initatied chemiluminesence.	K29288
Root Peru	Antioxidant Activity	Infusion	Rat (Liver)	IC50=259.0 mcg/ml	Equivocal	vs. tert-butyl-hydroperoxide initatied chemiluminesence.	K29288
Bark Peru	Antioxidant Activity	H2O Ext	Not stated	IC50=202.9 mg/ml	Active		L03868
Bark Peru	Antioxidant Activity	MEOH Ext	Not stated	IC50=48.8 mg/ml	Active		L03868
Bark Peru	Antioxidant Activity	Not stated	Oral	Not stated	Active	Prevented apoptosis induced by indomethacin.	AL1003
Bark Peru	Antioxidant Activity	Decoction	Cell culture	Not stated	Active	Protective against peroxynitrite- and H2O2-induced oxidative stress.	AL1006
Bark Peru	Antioxidant Activity	Decoction	Cell culture	Not stated	Weak Activity	Decreased DPPH-induced apoptosis. Attenuated peroxynitrite- and H202-induced necrotic cell death.	AL1006
Bark Peru	Antioxidant Activity	H2O Ext	Cell Culture	ED50=28.0 ng/ml	Active	Macrophage cell. Line raw 264.7.	L12755
Bark Peru	Antialzheimer's Activity	Not stated	Human Adult	Not stated	Active	Possibly due to an antioxidant effect.	E01043
Bark Peru	Beta-glucuronidase Inhibition	ETOH(70%)Ext	Not stated	IC50=>10.0 mcg/ml	Active		K27875
Bark Peru	Prothrombin Time Increased	Not stated	Human Adult (Plasma)	10.0 mcl	Active		L13554
Bark Peru	Xanthine Oxidase Inhibition	ETOH(70%)Ext	Not stated	>50.0 mcg/ml	Inactive		K27875
Root Peru	Antifertility Effect	H2O Ext	Intragastric Mouse (female)	25.0 mg/kg	Active	A tannin-free extract was used.	T04747
Bark Peru	Antifertility Effect	H2O Ext	Intragastric Mouse (female)	6.25 mg/kg	Active	A tannin-free extract was used.	T04747

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Bark Peru	Antibacterial Activity	H2O Ext	Agar Plate	100.0 mg/ml	Inactive	*Photobacterium phosphoreum*	L03617
Dried Stem Peru	Cytochrome P450 Inhibition	ETOH(100%)Ext	Cell Culture	IC50=0.79 mM	Active		L09661

Biological Activities for Compounds in Cat's claw *(Uncaria tomentosa)*

Compound Tested	Activity Tested For	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Pteropodine	Muscarinic (M1) Receptor Modulation	Rat Xenopus oocytes	EC50=9.52 mM	Active	Produced a 2.7-fold increase in current response evoked by acetylcholine.	AL1002
Pteropodine	Serotonin Receptor Modulation	Rat Xenopus oocytes	EC50=13.5 mM	Active	Produced a 2.4-fold increase in current response evoked by serotonin.	AL1002
Pteropodine	Glutamate Receptor Modulation	Rat Xenopus oocytes	Not stated	Inactive		AL1002
Pteropodine Isopteropodine	Current Response Inhibition	Rat Xenopus oocytes	10 mM 10 mM	Active	Reduced EC(50) values of acetylcholine and serotonin that elicited current responses.	AL1002
Isopteropodine	Glutamate Receptor Modulation	Rat Xenopus oocytes	Not stated	Inactive		AL1002
Isopteropodine	Muscarinic (M1) Receptor Modulation	Rat Xenopus oocytes	EC50=9.92 mM	Active	Produced a 3.3-fold increase in current response evoked by acetylcholine.	AL1002
Isopteropodine	Serotonin Receptor Modulation	Rat Xenopus oocytes	EC50=14.5 mM	Active	Produced a 2.5-fold increase in current response evoked by serotonin.	AL1002
Alkaloid Fraction	Phagocytosis Stimulation	IP Mouse	10.0 mg/kg	Active	vs. clearance of colloidal carbon.	M12822
Alkaloid Fraction	CNS Effect	IP Mouse	10-20 mg/kg	Active	Attenuated the deficit in retention performance induced by the muscarinic receptor antagonist scopolamine (amnesic drug).	AL1010
Pentacylic Alkaloid Fraction	Anti-inflammatory Activity	Oral Human Adult			Rheumatoid arthritis patients taking sulfasalazine or hydroxychloroquine treatment. 24 weeks of treatment resulted in a reduction in the number of painful joints by 53.2%.	AL1005

Compound Tested	Activity Tested For	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Pentacylic Alkaloid Fraction	Anti-inflammatory Activity	Oral Human Adult	Not stated	Active	Rheumatoid arthritis patients taking sulfasalazine or hydrochloroquine treatment. 28 weeks of treatment resulted in a reduction in the number of painful and swollen joints.	AL1005
Pentacylic Alkaloid Fraction	Immunostimulant Effect	In vitro	Not stated	Active	Stimulate endothelial cells to produce a lymphocyte-proliferation-regulating factor.	AL1012
Tetracyclic Alkaloid Fraction	Immunosuppressive Effect	In vitro	Not stated	Active	Inhibit endothelial cells to produce a lymphocyte-proliferation-regulating factor.	AL1012
Pentacyclic and Tetracyclic Fractions	Immunomodulating Effect	In vivo	Not stated	Active	Normalization of lymphocyte percentage observed through total leukocyte numbers did not change.	AL1012
Oxindole Alkaloids: uncarine E, uncarine C, mitraphylline, rhynchophylline	CNS Effect	IP Mouse	10-40 mg/kg	Active	Attenuated the deficit in retention performance induced by the muscarinic receptor antagonist scopolamine (amnesic drug).	AL1010
Oxindole Alkaloids: hirsutine, hirsuteine, rhynchophylline, isorhynchophyllinen dihydrocorynantheine	CNS Effect	Mice	Not stated	Active	Mild CNS depressive effect.	AL1022
Oxindole Alkaloids: hirsutine, hirsuteine, rhynchophylline, isorhynchophylline, dihydrocorynantheine	Antispasmodic Activity	Mouse (intestine)	Not stated	Weak Activity		AL1022
Oxindole Alkaloids: hirsutine, hirsuteine, rhynchophylline, isorhynchophylline, dihydrocorynantheine	Hypotensive Activity	Rat	Not stated	Active		AL1022
Dihydrocorynantheine	Antiarrhythmic Effect	Rabbit	10 mM	Active	Increased chronotropic cycle length, decreased slope of the pacemaker depolarization, decreased maximum rate of rise and prolonged action potential duration.	AL1016

Compound Tested	Activity Tested For	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Dihydrocorynantheine Hirsutine	Antiarrhythmic Effect	Guinea pig (heart)	0.1 mM - 30 mM	Active Active	Decreased maximum rate of rise and prolonged action potential duration.	AL1016
Hirsuteine	Anticonvulsant Activity	Oral Mice	50 mg/kg 100 mg/kg 200 mg/kg	Weak Activity Active Strong Activity	Inhibited glutamate-induced convulsions.	AL1017
Hursutine	Anticonvulsant Activity	Oral Mice	Not stated	Weak Activity	Inhibited glutamate-induced convulsions.	AL1017
Hirsutine	Vasorelaxant Effect	Rat (aorta)	EC50=10.6 mM	Active	via calcium channel blocking activity.	AL1015
Hirsutine	Antiarrhythmic Effect	Rabbit	0.1 mM	Active	Increased chronotropic cycle length, decreased slope of the pacemaker depolarization, decreased maximum rate of rise and prolonged action potential duration.	AL1016
Hirsutine	Calcium Channel Blocker	Rat (aorta)	Not stated	Active	Decreased cytosol calcium release induced by noradrenaline and high potassium.	AL1018
Hirsutine	Intracellular Calcium Modulator	Not stated	30 mM	Active Active	Before caffeine treatment reduced caffeine-induced contraction. During calcium loading augmented contractile response to caffeine. Net effect - reduction of intracellular calcium level.	AL1018
Hirsutine	Nicotinic Receptor-Channel Blocker	Rat	10 mM	Active	Suppressed dopamine-release evoked by 100 mM of nicotine.	AL1019
Hirsutine	Nicotinic Receptor-Channel Blocker	Rat	1-10 mM	Active	Inhibited inward current activated by 100 mM nicotine.	AL1019
Hirsutine	Ion Channel Blocker	Rat	10 mM	Active	Inhibited Ba currents passing through calcium and potassium channels.	AL1019
Hirsutine	Vasodilator Effect	Rat (aorta)	10(-6) to 3 x 10(-5) M	Active	Inhibited contractions induced by norepinephrine, high potassium, serotonin and calcium channel activator YC-170.	AL1020
Hirsutine	Calcium Channel Blocker	Rat (aorta)	10(-6) to 3 x 10(-5) M	Active	Inhibited voltage-depended calcium influx.	AL1020

Compound Tested	Activity Tested For	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Hirsutine Hirsuteine	Vasodilator Effect	IA Dog		Active		AL1021
Hirsutine	Antiulcer Activity	Mice	Not stated	Active	Preventative effect on the development of gastric erosions.	AL1022
Hirsutine	Antiarrhythmic Effect	Mice Guinea pig	Not stated	Active	Prevented aconitine-induced and ouabain-induced arrhythmias.	AL1022
Hirsutine	Antispasmodic Effect	Dog (urinary bladder)	Not stated	Weak Activity	Inhibited DMPP-induced contraction via inhibiting ganglionic transmission through blocking of the nicotinic receptor.	AL1023
Hirsutine	Anesthetic Activity	Dog (urinary bladder)	Not stated	Weak Activity	Local action.	AL1023
Isocorynoxeine	Anticonvulsant Activity	Oral Mice	100 mg/kg	Inactive	Glutamate-induced convulsions.	AL1017
rhynchophylline isorhynchophylline isocorynoxeine hirsuteine hirsutine	CNS Effect	Cell Culture	10(-3) M 10(-4)-10(-3) M 10(-4)-10(-3) M 10(-4)-3x10(-4)M 10(-4)-3x10(-4)M	Active Active Active Active Active	Increased cell viability of cells exposed to glutamate.	AL1013
rhynchophylline isorhynchophylline isocorynoxeine hirsuteine hirsutine	Calcium Channel Blocking Effect	Cell Culture	10(-3) M 3x10(-4)-10(-3)M 3x10(-4)-10(-3)M 3x10(-4)-10(-3)M 3x10(-4)-10(-3)M	Active Active Active Active Active	Inhibited calcium influx into cells induced by glutamate.	AL1013
Oxindole Alkaloids: rhychophylline, corynoxeine, isorhynchophylline isocorynoxeine	Calcium Channel Blocking Effect	Rat and Rabbit		Active	Inhibitory effect similar to verapamil on contractile response to high potassium, CaCl2, norepinephrine in normal and calcium free medium and 45Ca2+-uptake in thoracic aorta.	AL1014
Rhynchophylline	CNS Effect	Cell culture (NT2)	5 mol/L 50 mol/L	Active Active	Reduced NT2 neuron apoptosis induced by dopamine.	AL1026
Rhynchophylline	Cytotoxic Activity	Cell culture	5 mcg/ml	Active	Reversed multidrug resistance to vincristine on KBv200 cell line.	AL1027

Compound Tested	Activity Tested For	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Rhynchophylline	Calcium Channel Blocker	Rat	10 mumol/L 50 mumol/L	Active Active	Reduced verapamil-sensitive calcium inward current by 60 % (10 mumol/L) an d 80% (50 mumol/L).	AL1029
Rhynchophylline	Antiarrhythmic Activity	Rat Guinea pig	30 mumoil/L	Active	Partially due to potassium channel blocking effects.	AL1030
Rhynchophylline	Motor Activity	Mice	Not stated	Active	Reduced spontaneous motor activity.	AL1032
Rhynchophylline	CNS Effect	Mice	Not stated	Active	Enhanced the sedative and hypnotic effects of sodium pentobarbital.	AL1032
Rhynchoophylline	CNS Effect	Rat (brain)	Not stated	Active	Increased serotonin content in the hypothalamus and cortex. Reduced dopamine concentrations in the cortex, amygdala and spinal cord but promoted release of endogenous dopamine.	AL1032
Rhynchophylline	Antithrombotic Activity	Rabbit	IC50=0.72, 0.74, 0.67 mmol/L	Active	Inhibited platelet aggregation induced by arachidonic acid, collagen and ADP. Reduced thromboxane B2 induced by collagen but not arachidonic acid. Suppressed malondialdehyde formation and inhibited platelet factor 4 release.	AL1033
Rhynchophylline	Antithrombotic Activity	IV Rat	10-20 mg/kg	Active	Inhibition of venous and cerebral thrombosis.	AL1033
Rhynchophylline	Hypotensive Activity	IV Dog	5 mg/kg	Active	Reduced mean arterial pressure, heart rate and coronary blood flow.	AL1034
Rhynchophylline	Hypotensive Activity	IV Dog	10 mg/kg	Inactive	Decreased renal blood flow but no effect on blood pressure.	AL1034
Rhynchophylline	Antithrombotic Activity	Rat	Not stated	Active	Inhibited platelet aggregation.	AL1035
Rhynchophylline	CNS Effect	IP Mouse	Not stated	Active Inactive	Reduced the mecamylamine-induced deficit in passive avoidance behaviour. Did not attenuate the effects of a N-methyl-D-aspartate receptor antagonist and diazepam.	AL1010
Isorhynchophylline	Hypotensive Activity	IV Dog	5 mg/kg	Active	Reduced mean arterial pressure but had no effect on renal blood flow.	AL1034

Compound Tested	Activity Tested For	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Isorhynchophylline	Cardiac Effect	Guinea pig (atrium)	30 mumol/L 10 mumol/L 10 mumol/L 0.3 mmol/L	Active Active Active Active	Depressed adrenaline-induced automaticity. Prolonged functional refractory period and decreased excitability. Reduced the effect of ouabain on contractile force in left atrium. Inhibited the response to paired stimulation.	AL1028
Isorhynchophylline	Hypotensive Activity	IV Dog	1 mg/kg	Active	Reduced mean arterial pressure, heart rate and coronary blood flow.	AL1034
Isorhynchophylline	Negative Chronotropic Effect	IV Rat	2-4 mg/kg	Active	Negative chronotropic effect may be related to the block of calcium. Does not influence blood pressure.	AL1031
Uncarine E	CNS Effect	IP Mouse	20 mg/kg	Active	Blocked the impairment of passive avoidance performance caused by nicotinic receptor antagonist mecamylamine and an N-methyl-D-aspartate receptor antagonist.	AL1010
Uncarine E	CNS Effect	IP Mouse	20 mg/kg	Inactive	vs. benzodiazepine receptor agonist diazepam.	AL1010

Return to the Cat's Claw Plant Database File