## Biological Activities for Extracts of Jurubeba (Solanum paniculatum)

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Root Brazil	Toxicity (general)	ETOH Ext	Mouse Fish	Not Stated Not Stated	Active Active		BH1009 BH1010
Flower + Fruit + Leaf + Stem + Root Brazil	Toxicity (general)	H2O Ext	Oral Mice	2 g/kg	Inactive		BH1003
Not Stated Brazil	Toxicity (general)	Not Stated	Not Stated	Not Stated	Active	Toxicity signs include diarrhea, nausea, vomiting, gastritis, gastrointestinal mucosa erosion, elevation of liver enzymes and neurological symptoms.	BH1002
Not Stated	Antifertility Activity	Solasodine Conc	Monkey Male	Not Stated	Active	Interfered with spermiogenesis at stage XII of late spermatids (spermatids decreased by 69%). Reduced production in sperm count and Leydig cells. Antiandrogen activity seen.	BH1013
Not Stated	Antifertility Activity	Solasodine Conc	Dog Male	20 mg/kg	Active	Reduction of sperm and androgen production seen.	BH1014
Root Brazil	Anti-ulcer Activity	H2O Ext	ID Mice	ED50=418 mg/kg	Active	Inhibited gastric acid secretion in pylorus- ligated mice.	BH1003
Root Brazil	Anti-ulcer Activity	H2O Ext	Oral Mice	ED50=1.2 g/kg	Active	Prevented production of gastric lesions due to hypersecretion induced by stress following cold restraint.	BH1003
Stem Brazil	Anti-ulcer Activity	H2O Ext	ID Mice	ED50=777 mg/kg	Active	Inhibited gastric acid secretion in pylorus- ligated mice.	BH1003
Flower Brazil	Anti-ulcer Activity	H2O Ext	ID Mice	ED50=820 mg/kg	Active	Inhibited gastric acid secretion in pylorus- ligated mice.	BH1003
Leaf Brazil	Anti-ulcer Activity	H2O Ext	ID Mice	0.5-2 g/kg	Inactive	No effect on gastric secretion.	BH1003
Not Stated Brazil	Anti-ulcer Activity	H2O Ext	Rat	250-500 mg/kg	Active	In chronic gastric ulcers induced by 50 ml of acetic acid (10%) and 50 ml of saline, Jurubeba accelerated the healing of the chronic gastric lesions.	BH1002

Plant Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Brazil	Gastric Secretion Stimulation	H2O Ext	ID Mice	0.5-2 g/kg	Active	Activates the muscarinic pathway of gastric acid secretion.	BH1003
Root Brazil	Gastric Secretion Inhibition	H2O Ext	Injection Mice Duodenum	Not Stated	Active	Inhibited histamine- and bethanechol- induced gastric secretion in pylorus-ligated mice.	BH1003
Not Stated Brazil	Digestive Activity	Bitter Principles	Not Stated	Not Stated	Active	Stimulated secretion of digestive juices.	BH1002
Root Brazil	Hypotensive Activity	ETOH Ext H2O Ext	Cat	Not Stated	Active Active	Reduced arterial blood pressure.	BH1009 BH1010
Root Brazil	Cardiovascular Effect	ETOH Ext H2O Ext	Frog Heart	Not Stated	Active Active	Stimulant action on the heart - positive inotropic effect.	BH1009 BH1010
Not Stated	Cardiovascular Effect	Solanidine Conc	Frog Heart	Not Stated	Active	Cardiotonic and positive inotropic activity seen.	BH1011
Root Brazil	Respiratory Stimulant Effect	H2O Ext ETOH Ext	Cat	Not Stated	Active Inactive	Stimulated respiration.	BH1009 BH1010
Not Stated Brazil	Analgesic Activity	Solanin Conc	Oral Not Stated	>1 mg/kg	Active	Blocks the pain impulses of the nervous system.	BH1002
Not Stated Brazil	Antipruritic Activity	Solanin Conc	Oral Not Stated	>1 mg/kg	Active		BH1002
Not Stated Australia	Cytotoxic Activity	Solasodine Conc	External Human Adult	0.005%	Active	Regressed malignant and benign human skin tumors, keratoses, basal cell carcinomas and squamous cell carcinomas.	BH1012

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