

Technical Data Report

for

Velvet Bean

Mucuna pruriens



Written by Leslie Taylor Published by Sage Press, Inc.

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Velvet Bean

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Family: Fabaceae

Genus: *Mucuna*

Species: *pruriens*

Synonyms: *Carpopogon pruriens*, *Dolichos pruriens*, *Mucuna aterrima*, *M. atropurpurea*, *M. cochinchinensis*, *M. cyanosperma*, *M. deeringiana*, *M. esquirolii*, *M. prurita*, *M. utilis*, *Stizolobium aterrimum*, *S. deeringianum*, *S. pruriens*, *S. pruritum*, *S. niveum*, *Negretia pruriens*

Common Names: Nescafé, mucuna, pó de mico, fava-coceira, cabeça-de-frade, cowage, cowhage, cow-itch, velvet bean, bengal bean, mauritius bean, itchy bean, krame, picapica, chiporro, buffalobean

Part Used: Seeds

Velvet bean is an annual climbing legume that grows 3–18 m in height. It is indigenous to tropical regions, especially Africa, India, and the West Indies. Its flowers are white to dark purple and hang in long clusters (or racemes). The plant also produces clusters of pods which contain seeds known as mucuna beans. The seed pods are covered with reddish-orange hairs that are readily dislodged and can cause intense irritation to the skin. The species name "*pruriens*" (from the Latin, "itching sensation") refers to the results to be had from contact with the seed pod hairs.

In Central America, mucuna beans have been roasted and ground to make a coffee substitute for decades—and is widely known as *nescafé* for this reason. It is still grown as a crop by the Ketchi indigenous people in Guatemala; the bean is cooked as a vegetable. In Brazil the seed has been used internally for Parkinson's disease, edema, impotence, intestinal gas, and worms. It is considered a diuretic, nerve tonic, and aphrodisiac. Externally it is applied to ulcers. Velvet bean has a long history of use in Indian Ayurvedic medicine, where it is used for worms, dysentery, diarrhea, snakebite, sexual debility, cough, tuberculosis, impotence, rheumatic disorders, muscular pain, gonorrhoea, sterility, gout, delirium, dysmenorrhoea, diabetes, and cancer. In India it is considered an aphrodisiac, emmenagogue, uterine stimulant, nerve tonic, diuretic, and blood purifier.

The seeds of Velvet bean are high in protein, carbohydrates, lipids, fiber, and minerals. They are also rich in novel alkaloids, saponins, and sterols. The seeds of all mucuna species contain a high concentration of L-dopa; Velvet bean seeds contain 7–10% L-dopa.^{1–3} Concentrations of serotonin also have been found in the pod, leaf and fruit.^{4–5} The stinging hairs of the seed pods contain the phytochemical mucunain, which is responsible for causing skin irritation and itch. Velvet bean has demonstrated little toxicity. It is a known teratogen (and agent that may cause fetus malformation) though, and should not be used during pregnancy.⁶

Traditionally, Velvet bean has been used as a nerve tonic for nervous system disorders. Because of the high concentration of L-dopa in the seeds, it has been studied for its possible use in Parkinson's disease. Parkinson's disease is a common age-related neurodegenerative disorder affecting more than four million people worldwide. It is associated with progressive degeneration of dopaminergic neurons in specific areas in the brain. Dopamine does not cross the blood-brain barrier and therefore cannot be used directly as a treatment. However, L-dopa (levodopa) does gain access to the brain—where it is converted to dopamine. There are two controversies surrounding side-effects of the current pharmaceutical supplementation of L-dopa. Over the long term, supplemented L-dopa appears to lose its effectiveness. A second area of controversy questions whether L-dopa is toxic to dopamine neurons; there is little evidence, though, to support this statement.⁷

Velvet bean is now being considered as an alternative to the pharmaceutical medication levodopa. In a case study it was given to a Parkinson's patient for 12 years instead of the pharmaceutical L-dopa medication. It was found to slow the progression of Parkinson's symptoms (such as tremors, rigidity, slurring, drooling, and balance), and to have none of the side-effects of the current pharmaceutical L-dopa.⁸ Numerous *in vivo* studies also have been conducted in rats and humans. In one human study, 45 mg of the bean powder was given to 60 patients (26 previously treated with L-dopa and 34 L-dopa naive). There were statistically significant reductions Parkinson's symptoms.⁹ In addition, a (2002) U.S. patent was awarded on Velvet bean citing its use "for the treatment of disorders of the nervous system, including Parkinson's disease."⁸

Several *in vivo* studies have been conducted on the blood-sugar-lowering effect of Velvet bean. These studies all validate the traditional use of the plant for diabetes. An ethanol-water extract (250 mg/kg) of the root, fruit, and seed dropped blood sugar levels in rats by more than 30%. At 200 mg an ethanol extract produced a 40.17% fall in serum blood glucose within one month, and a 51.01% reduction at four months.^{10,11} Furthermore, decoction of the leaf (5 g/kg) reduced total cholesterol in rats¹²; the seed had the same effect.¹³

The root, fruit, leaf, and seed has shown significant *in vivo* antispasmodic^{14,15}, anti-inflammatory^{16,17}, analgesic¹⁶, and antipyretic activities.¹⁶ Traditionally the seed has been used by indigenous peoples throughout the world for snakebite. Several *in vivo* studies validate this traditional use.¹⁸⁻²¹ In rats, a water extract of the seed (21 mg/kg) inhibited venom-induced blood and coagulation alterations, and reduced lethality of the *Echis carinatus* (saw-scaled viper) venom.¹⁹ The antivenin effect of Velvet bean is thought to be due to an immune mechanism, as proteins in the seed are able to raise antibodies against the venom.²¹

Velvet bean has a long history of traditional use in India as an aphrodisiac. Clinical studies in India have validated that the plant does indeed have aphrodisiac activity.^{22,23} It also has anabolic and growth hormone stimulant properties.^{24,25} The anabolic effect of the seed is due to its ability to increase testosterone.²⁶ In 2002, a U.S. patent was filed on the use of *Mucuna pruriens* to stimulate the release of growth hormone in humans.²⁵ The high levels of L-dopa in the mucuna seed are converted to dopamine which stimulates the release of growth hormone by the pituitary gland.²⁵ L-dopa and dopamine are also effective inhibitors of prolactin. Prolactin is a hormone released by the pituitary gland; increased levels are considered responsible for 70–80% of erection failure in males.²⁵ In one study, oral intake of the seeds in 56 human males was able to improve erection, duration of coitus, and post-coital satisfaction after only four weeks of treatment.²⁷ The seed also has fertility promoting and spermatogenic effects in human males, being able to improve sperm count and motility^{28,29}

Velvet bean has been gaining in popularity over the last few years in the natural products market—especially the sports nutrition industry. With its documented ability to increase testosterone (thereby increasing muscle mass), several companies have launched new products using mucuna beans, including several which are standardized to the L-dopa content. It is also showing up as an ingredient in various weight loss, libido, brain/memory, anti-aging, and body builder formulas. Consumers should be aware however, long-term impacts on healthy humans taking high levels of L-dopa are unclear and warrant further research.

Documented Properties and Actions: Anabolic, analgesic, androgenic, anthelmintic, anti-inflammatory, antioxidant, antiparkinson, antipyretic, antispasmodic, aphrodisiac, ascaricide, carminative, diuretic, hypocholesterolemic, hypotensive, hypoglycemic, nervine, spermatogenic, taenicide, teratogenic, vermifuge

Main Phytochemicals: Alkaloids, alkylamines, arachidic acid, behenic acid, betacarboline, beta-sitosterol, bufotenine, cystine, dopamine, fatty acids, flavones, galactose d, gallic acid, genistein, glutamic acid, glutathione, glycine, histidine, hydroxygenistein, 5-hydroxytryptamine, isoleucine, L-dopa, linoleic acid, linolenic acid, lysine, mannose d, methionine, 6-methoxyharman, mucunadine, mucunain, mucunine, myristic acid, niacin, nicotine, oleic acid, palmitic acid, palmitoleic acid,

phenylalanine, prurienidine, prurienine, riboflavin, saponins, serine, serotonin, stearic acid, stizolamine, threonine, trypsin, tryptamine, tyrosine, valine, vernolic acid

Traditional Remedy: ½ cup seed decoction 2 to 3 times daily. Alternatively 3-5 g daily of seed powder daily can be substituted.

Contraindications

- The seed is a known teratogen and has uterine stimulant activity and should not be used during pregnancy.
- Velvet bean is contraindicated in combination with M.A.O. inhibitors.
- Velvet bean has androgenic activity, increasing testosterone levels. Persons with excessive androgen syndromes should avoid using Velvet bean.
- Velvet bean inhibits prolactin. If you have a medical condition resulting in inadequate levels of prolactin in the body, do not use Velvet bean unless under the direction or your healthcare practitioner.
- The seed contains high quantities of L-dopa. Levodopa is the pharmaceutical medication used for Parkinson’s disease. Those with Parkinson’s should only use Velvet bean under the supervision of a qualified healthcare practitioner.

Drug Interactions

- May potentiate androgenic medications.
- Nay potentiate hypoglycemic medications.
- May potentiate levodopa.

WORLDWIDE ETHNOBOTANICAL USES

Country	Use
Brazil	Anthelmintic, aphrodisiac, diuretic, food, hydropsy, intestinal worms, nerve tonic, poison
Germany	Carminative, cholesterol, hypotensive, hypoglycemic, muscle pain, rheumatism, rubefacient, worms
India	Abortion, alterative, anthelmintic, antivenin, aphrodisiac, cancer, catarrh, cholera, cough, debility, delerium, diabetes, diarrhea, diuretic, dropsy, dysentery, dysmenorrhea, emmenagogue, fertility, gout, impotency, irritant, lithiasis, nerve tonic, nervine, night dreams, scorpion sting, snakebite, spermatorrhea, sterility, tuberculosis, uterine stimulant, worms
Nigeria	Snakebite
Pakistan	Aphrodisiac, diabetes
Elsewhere	Anasarca, anodyne, anthelmintic, antidotal, aphrodisiac, asthma, burns, cancer, cholera, cough, cuts, diarrhea, diuretic, dogbite, dropsy, emmenagogue, insanity, intestinal parasites, mumps, nervine, paralysis, pleuritis, resolvent, ringworm, rubefacient, snakebite, sores, syphilis, tumors, vermifuge, wind-burns, worms

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The information contained herein is intended for education, research, and informational purposes only. This information is not intended to be used to diagnose, prescribe or replace proper medical care. The statements contained herein have not been evaluated by the Food and Drug Administration. The plant described herein is not intended to diagnose, treat, cure, mitigate, or prevent any disease.

Ethnomedical Information on Velvet bean (*Mucuna pruriens*)

Part / Location	Documented Ethnomedical Uses	Type Extract / Route	Used For	Ref #
Fruit Haiti	Used for intestinal parasites.	Decoction Oral	Human Adult	T13846
Fruit Brazil	Used for intestinal worms.	Not Stated	Human Adult	ZZ1013
Seed Brazil	Used as an anthelmintic, aphrodisiac and poison. Used as an aphrodisiac. Used as a nerve tonic and aphrodisiac. Used as a nerve tonic and aphrodisiac. Used as a food. Used as a coffee substitute. Used for impotence, edema, Parkinson's disease and as a diuretic. Used for ulcers.	Not Stated Not Stated ETOH Ext Oral H2O Ext Oral Seeds Oral Hot H2O Ext Oral Decoction Oral Maceration External	Human Adult Human Adult Human Adult Human Adult Human Adult Human Adult Human Adult Human Adult	ZZ1099 ZZ1013 K20642 K20642 J17190 ZZ1045 BP1004 BP1004
Root Brazil	Used for hydropsy. Used as a diuretic.	Not Stated Not Stated	Human Adult Human Adult	ZZ1013 ZZ1099
Seed Germany	Used for rheumatism and worm infestations. Used as a carminative, hypotensive, hypoglycemic and to reduce cholesterol. Used as a cutaneous stimulant and rubefacient for rheumatic disorders and muscular pain.	Powder Oral Powder External	Human Adult Human Adult	BP1002 BP1002
Seed Guadeloupe	Used as a vermifuge.	Seeds Oral	Human Infant	T07660
Seed Guinea-Bissau	Used as an aphrodisiac.	Plant Oral	Human Male	A00455
Plant Juice Guinea-Bissau	Used as an emmenagogue.	Juice Oral	Human Female	A00455
Fruit India	Used for stomach worms. Used as an anthelmintic. Overdoses are fatal. Used as an irritant. Overdoses are fatal.	Hot H2O Ext Oral Not Stated Oral Not Stated External	Human Child Human Adult Human Adult	T07201 T09486 T09486
Leaf India	Used as a uterine stimulant. Used as a nerve tonic. Used in dysentery. Used as an aphrodisiac and diuretic. Used for scorpion stings.	Not Stated Oral H2O Ext Oral Not Stated Oral Infusion Oral	Human Female Human Adult Human Adult Human Adult	A03113 A03113 A03113 M27166
Pod Trichomes India	Used as an anthelmintic.	Powder Oral	Human Adult	K23365

Part / Location	Documented Ethnomedical Uses	Type Extract / Route	Used For	Ref #
Seed India	Used to cure night dreams and impotency and to promote fertility. Used as an emmenagogue. Used as an aphrodisiac to increase seminal fluid and manly vigour. Used as an aphrodisiac. Used for diarrhea. Used as an aphrodisiac. Used as an antivenin. Used for diabetes. Used for scorpion stings and snakebite. Used as a nervine. Used as an aphrodisiac. Used to treat male impotence and sterility. Used for abortion. Used as an aphrodisiac. Used for sexual debility and spermatorrhea. Used for persistent coughs. Used for pulmonary tuberculosis. Used as an aphrodisiac, and for seminal weakness and impotence. Used for rheumatic disorders and muscular pain. Used for worm infestation, gonorrhoea, sterility and general debility.	Not Stated Oral Plant Oral Plant Oral Hot H2O Ext Oral Powder Oral Powder Oral Decoction Oral Decoction Oral Decoction Oral Hot H2O Ext Oral Seeds Oral Infusion Oral Decoction Oral Hot H2O Ext Oral Seeds Oral Seeds Inhalation Decoction Oral Milk Oral Not Stated External Not Stated Oral	Human Male Human Female Human Male Human Male Human Adult Human Male Human Male Human Adult Human Adult Human Adult Human Adult Human Male Human Male Human Female Human Male Human Male Human Adult Human Adult Human Male Human Adult Human Adult	A02269 A04300 A04300 A06590 K23294 K23365 K25892 L05654 M27166 T05894 T05894 J18758 K16006 T03102 T03252 T07823 T16239 T07731 ZZ1102 ZZ1102
Seed Pods India	Used as an anthelmintic.	Hot H2O Ext Oral	Human Adult	T05894
Root India	Used as an emmenagogue. Used for rheumatism and gout. Used for delirium. Used as a blood purifier and diuretic. Used for kidney stones. Used to relieve dysmenorrhea. Used in dropsy and catarrh, and as a diuretic. Used for cholera.	Not Stated Oral Root External Hot H2O Ext Oral Root Oral Root Oral Decoction Oral Infusion Oral	Human Female Human Adult Human Adult Human Adult Human Female Human Adult Human Adult	A04132 M23826 T05894 T07731 T09302 ZZ1052 ZZ1052
Not Stated India	Used for cancer. Used as an abortifacient. Used as an antifertility agent. Used for diabetes. Used to improve male sexual function. Used to improve sexual function. Traditionally recommended for males, but the author advocates use by females as well.	Not Stated Hot H2O Ext Oral Hot H2O Ext Oral Not Stated Oral Hot H2O Ext Oral Hot H2O Ext Oral	Human Adult Human Female Human Female Human Adult Human Male Human Female	A00041 W01244 W01244 L10702 M18213 M18213

Part / Location	Documented Ethnomedical Uses	Type Extract / Route	Used For	Ref #
Entire Plant Ivory Coast	Used as an emmenagogue.	Hot H2O Ext Oral	Human Female	A01966
Seed Madagascar	Used as an aphrodisiac.	H2O Ext Oral	Human Male	A04923
Seed Mozambique	Used as an aphrodisiac.	Hot H2O Ext Oral	Human Male	L01568
Seed Nepal	Used as an aphrodisiac.	Hot H2O Ext Oral	Human Male	A00020
Root Nepal	Used as an aphrodisiac.	Root Oral	Buffalo Male	K11747
Leaf Nigeria	Used to treat snakebite.	Not Stated	Human Adult	K20898
Seed Nigeria	Used against snakebites.	Not Stated	Human Adult	BP1007
Seed Pakistan	Used for diabetes. Used as an aphrodisiac. Used as an aphrodisiac.	Seeds Oral Seeds Oral Hot H2O Ext Oral	Human Adult Human Male Human Adult	L03572 A01908 A04606
Not Stated Panama	Used medicinally as an aphrodisiac.	Not Stated Oral	Human Male	J10115
Seed Peru	Used as a coffee substitute.	Hot H2O Ext Oral	Human Adult	BP1001
Stem Philippines	Used to treat sore/wind burns-cut.	Stem External	Human Child	M29360
Leaf + Stem Thailand	Used for burns and cuts.	Leaf + Stem External	Human Adult	T11371
Seed Trinidad	Used for intestinal worms.	Seeds Oral	Human Adult	T00701
Pod Hair USA	Used as an anthelmintic.	H2O Ext Oral	Human Adult	BP1003
Not Stated Virgin Islands	Used for worms.	Hot H2O Ext Oral	Human Adult	W00903
Pod Hairs Not Stated	Used for intestinal worms. Used as a local stimulant in paralysis.	Hair Syrup Oral Ointment External	Human Adult	ZZ1052
Seed Not Stated	Used as an aphrodisiac.	Not Stated	Human Adult	ZZ1052
Not Stated	Used as an anodyne, antidotal, aphrodisiac, diuretic, nervine, resolvent, rubefacient and vermifuge for anasarca, asthma, cancer, cholera, cough, diarrhea, dogbite, dropsy, dysuria, insanity, mumps, pleuritis, ringworm, snakebite, sores, syphilis, tumors and worms.	Not Stated	Human Adult	ZZ1050

Presence of Compounds in Velvet bean (*Mucuna pruriens*)

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Alanine	Amino acid	Seed	Not Stated	5,475-11,600 ppm	ZZ1095
Alkylamine, 5-oxyindole-3		Seed	Not Stated	Not Stated	ZZ1095
Alkylamine, indole-3		Seed	Not Stated	Not Stated	ZZ1095
Amino acid analysis	Proteid	Seed	India	Not Stated	T06203
Arachidic acid		Seed	Not Stated	65-1,385 ppm	ZZ1095
Arginine	Amino acid	Seed	Not Stated	12,350-26,180 ppm	ZZ1095
Ash		Seed Seed	India India	4.3-5.1% 3.3-5.5%	BP1009 BP1010
Aspartic acid		Seed	Not Stated	19,850-42,080 ppm	ZZ1095
Behenic acid		Seed	Not Stated	140-2,265 ppm	ZZ1095
Bufotenine	Indole Alkaloid	Leaf Leaf + Stem Fruit	India Not Stated Not Stated	Not Stated Not Stated Not Stated	A03113 L00048 L00048
Calcium	Inorganic	Seed	Not Stated	1,320-1,600 ppm	ZZ1095
Carbohydrates		Seed Seed	India Not Stated	49.9-61.2% 529,000-667,000 ppm	BP1010 ZZ1095
Carboline, beta		Seed	Not Stated	Not Stated	ZZ1095
Choline	Alkaloid-misc	Leaf	India	Not Stated	A03113
Chymotrypsin Inhibitor		Seed	India	19.3-24.6 mg/g	BP1009
Cystine	Amino acid	Seed	Not Stated	1,400-2,965 ppm	ZZ1095

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Dopa, L	Proteid	Root	China	Not Stated	K15489
		Seed	India	Not Stated	M30478
		Seed	India	Not Stated	M31139
		Seed	India	Not Stated	J16263
		Suspension Culture	Not Stated	00.2-1.7%	M13521
		Seed	India	05.0-7.0%	T02368
		Suspension Culture	Netherlands	Not Stated	K15824
		Shoots	Not Stated	Not Stated	T02510
		Leaf	Not Stated	Not Stated	T02510
		Leaf	Netherlands	Not Stated	K15824
		Stem	Netherlands	Not Stated	K15824
		Root	Netherlands	Not Stated	K15824
		Seed	Indonesia	01.6-1.8%	T07452
		Seed	Indonesia	02.69%	T07452
		Seed	Indonesia	01.7-2.7%	T07452
		Seed	Indonesia	01.7-2.4%	T07452
		Suspension culture	Not Stated	02.0%	K14252
		Seed	China	05.5%	L15749
		Seed	Japan	Not Stated	K10998
		Leaf	Japan	00.5%	M27351
		Root	Japan	01.5%	M27351
Seed	China	06.2%	L15749		
Seed	India	3.6-4.2%	BP1009		
Bean	India	4.02%	BP1012		
Endocarp	India	5.28%	BP1012		
Pericarp (skin)	India	0.09%	BP1012		
Seed	England	10%	BP1015		
Dopamine		Suspension Culture	Netherlands	Not Stated	K15824
		Leaf	Netherlands	Not Stated	K15824
Fat		Seed	Not Stated	7,000-63,000 ppm	ZZ1095
		Seed	India	6.3-7.4%	BP1010
Fatty acids, unsaturated		Seed	India	51.9-55.9%	BP1009

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Fiber		Seed Seed	Not Stated India	46,000-95,000 ppm 8.7-10.5%	ZZ1095 BP1010
Flavone, 4'-5-6-trihydroxy-3'-7-8-trimethoxy 4'-o-beta-d-xylopyranosyl(1-2)-o-alpha-l- rhamnopyranoside)	Flavone	Seed	India	Not Stated	H29734
Galactose, D	Carbohydrate	Seed	India	Not Stated	L17233
Gallic acid		Seed	Not Stated	Not Stated	ZZ1095
Genistein		Leaf Diffusate	Not Stated	8 ppm	ZZ1095
Genistein, hydroxy		Leaf Diffusate	Not Stated	26 ppm	ZZ1095
Glutamic acid		Seed	Not Stated	19,075-40,440 ppm	ZZ1095
Glutathione		Seed	Not Stated	Not Stated	ZZ1095
Glycine	Amino acid	Seed	Not Stated	7,200-15,265 ppm	ZZ1095
Harman, 6-methoxy		Leaf	Not Stated	Not Stated	ZZ1095
Histidine	Amino acid	Seed	Not Stated	3,275-6,945 ppm	ZZ1095
Iron	Inorganic	Seed	Not Stated	200 ppm	ZZ1095
Lecithin	Carbohydrate	Seed	India	Not Stated	T13069
Leucine	Amino acid	Seed	Not Stated	11,875-25,175 ppm	ZZ1095
Leucine, iso		Seed	Not Stated	7,500-15,900 ppm	ZZ1095
Linoleic acid	Lipid	Seed	Not Stated	715-30,680 ppm	ZZ1095
Linolenic acid	Lipid	Seed	Not Stated	265-5,800 ppm	ZZ1095
Lysine	Amino acid	Seed Seed	Not Stated India	9,700-20,564 ppm 6-6.4%	ZZ1095 BP1009
Mannose, D	Carbohydrate	Seed	India	Not Stated	L17233
Methionine	Amino acid	Seed	Not Stated	1,875-3,975 ppm	ZZ1095

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Mucunadine		Seed	Not Stated	Not Stated	ZZ1095
Mucunain		Seed	Not Stated	Not Stated	ZZ1095
Mucunine		Seed	Not Stated	Not Stated	ZZ1095
Mucuna polysaccharide	Carbohydrate	Seed	India	Not Stated	L11392
Mucuna pruriens alkaloid P	Alkaloid-misc	Seed	India	00.0027%	W01967
Mucuna pruriens alkaloid Q	Alkaloid-misc	Seed	India	00.0002%	W01967
Mucuna pruriens alkaloid R	Alkaloid-misc	Seed	India	00.0066%	W01967
Mucuna pruriens alkaloid S	Alkaloid-misc	Seed	India	00.0033%	W01967
Mucuna pruriens alkaloid X	Alkaloid-misc	Seed	India	00.0044%	W01967
Myristic acid		Seed	Not Stated	15-125 ppm	ZZ1095
Niacin	Inorganic	Seed	Not Stated	17-34 ppm	ZZ1095
Nicotine	Alkaloid	Seed	Not Stated	Not Stated	ZZ1095
Octadec-cis-9-enoic acid, threo-12-13-dihydroxy	Lipid	Seed Oil	India	Not Stated	N14511
Octadec-trans-9-enoic acid, cis-12-13-epoxy	Lipid	Seed Oil	India	01.0%	N14511
Octadec-trans-9-enoic acid, threo-12-13-dihydroxy	Lipid	Seed Oil	India	Not Stated	N14511
Oleic acid	Lipid	Seed	Not Stated	735-11,400 ppm	ZZ1095
Palmitic acid	Lipid	Seed	Not Stated	1,365-33,830 ppm	ZZ1095
Palmitoleic acid	Lipid	Seed	Not Stated	35-630 ppm	ZZ1095
Phenylalanine	Amino acid	Seed	Not Stated	7,500-15,900 ppm	ZZ1095
Phosphorus	Inorganic	Seed	Not Stated	3,200-4,700 ppm	ZZ1095
Polysaccharide	Carbohydrate	Seed	India	Not Stated	L17233
Proline	Amino acid	Seed	Not Stated	9,225-19,555 ppm	ZZ1095

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Protein	Protein	Seed Seed Seed	India India Not Stated	25.9-27.5% 20.2-29.3% 155,000-331,000 ppm	BP1009 BP1010 ZZ1095
Prurienidine	Alkaloid-misc	Seed	India	00.011%	W01967
Prurieninine	Alkaloid-misc	Seed	India	00.0011%	W01967
Quinoline, iso: 1-2-3-4-tetrahydro 1-3-carboxy-6-7-dihydroxy	Isoquinoline Alkaloid	Seed	China	Not Stated	L15749
Riboflavin	Inorganic	Seed	Not Stated	1.1-2,7 ppm	ZZ1095
Saponins	Saponin	Seed	Not Stated	21,000 ppm	ZZ1095
Sd		Plant	Not Stated	Not Stated	ZZ1095
Serine	Amino acid	Seed	Not Stated	7,650-16,220 ppm	ZZ1095
Serotonin		Seed	Not Stated	Not Stated	ZZ1095
Sitosterol, beta	Sterol	Seed	Not Stated	Not Stated	ZZ1095
Stearic acid		Seed	Not Stated	390-12,475 ppm	ZZ1095
Stizolamine	Alkaloid	Seed	China	00.039%	L15749
Thiamin	Inorganic	Seed	Not Stated	1.4-5.7 ppm	ZZ1095
Threonine	Amino acid	Seed	Not Stated	6,250-13,250 ppm	ZZ1095
Trypsin		Seed	India	28.5-39.7 mg/g	BP1009
Tryptamine		Seed	Not Stated	Not Stated	ZZ1095
Tryptamine, 5-hydroxy	Indole Alkaloid	Pod Trichomes Leaf + Stem Fruit	India Not Stated Not Stated	Not Stated Not Stated Not Stated	A03113 L00048 L00048
Tryptamine, n-n-dimethyl	Indole Alkaloid	Leaf Leaf + Stem Fruit	India Not Stated Not Stated	00.006% Not Stated Not Stated	A03113 L00048 L00048

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Tryptamine, n-n-dimethyl: 5-methoxy	Indole Alkaloid	Leaf	India	00.0025%	A03113
Tryptamine, n-n-dimethyl: methoxy	Indole Alkaloid	Leaf + Stem Fruit	Not Stated Not Stated	Not Stated Not Stated	L00048 L00048
Tryptamine, n-n-dimethyl: n-oxide	Indole Alkaloid	Leaf Leaf + Stem Fruit	India Not Stated Not Stated	00.003% Not Stated Not Stated	A03113 L00048 L00048
Tyrosine	Amino acid	Seed	Not Stated	7,975-16,907 ppm	ZZ1095
Valine		Seed	Not Stated	8,600-18,232 ppm	ZZ1095
Vernolic acid	Lipid	Seed Oil Seed Oil	India India	Not Stated 04.0%	K10006 N14511

PHYTOCHEMICAL SCREENING

ALKALOIDS ABSENT	LEAF	M21329
ALKALOIDS PRESENT	SEED	T05143
	SEED	W00233
ANTHOCYANINS ABSENT	SEED	W00233
CARDENOLIDES/BUFADIENOLIDES ABSENT	SEED	W00233
FLAVONOIDS ABSENT	SEED	W00233
PYRROLIZIDINE ALKALOIDS ABSENT	SEED	T05143
QUINONES ABSENT	SEED	W00233
SAPONINS (UNSPECIFIED TYPE OR HEMOLYTIC) PRESENT	SEED	W00233
STEROLS AND/OR TRITERPENES PRESENT	SEED	W00233
TANNINS (FERRIC CHLORIDE TEST) PRESENT	SEED	W00233
PROTEASE INHIBITORS PRESENT	SEED	BP1007
LECTINS PRESENT	SEED	BP1007

Biological Activities for Extracts of Velvet bean (*Mucuna pruriens*)

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Toxicity Assessment	ETOH-H2O (1:1) Ext	IP Mouse	1.0 gm/kg			A03335
Root India	Toxicity Assessment	ETOH-H2O (1:1) Ext	IP Mouse	250.0 mg/kg			A03335
Not Stated India	Toxic Effect (general)	ETOH (100%)Ext	Mouse	200.0 mg/kg	Inactive		L10702
Seed India	Toxic Effect (general)	H2O Ext	PO Rat	Variable	Active	Feeding caused weight loss unless supplemented with l-methionine and l-tryptophan. The protein fraction of the seeds was incorporated into the experimental ration.	T06797
Seed Pakistan	Toxic Effect (general)	Not Stated	IG Rabbit	8.0 gm/kg	Inactive		L03572
Seed India	Toxic Effect (general)	ETOH Ext	PO Rat	600 mg/kg	Inactive		BP1006
Bean Honduras	Toxic Effect (general)	Raw Bean Heated Bean	PO Chicken	30%	Active Weak Activity	Growth-inhibiting.	BP1011
Bean India	Toxic Effect (general)	Powder	IG Mice & Rat PO Mice & Rat	2.5 g/kg 5 g/kg 7.5 g/kg 10 g/kg LD50: > 10 g/kg	Inactive	No toxicity, change in behavior and mortality seen. When 10 g/kg were administered for 1 year, no significant abnormalities seen.	BP1012
Seed India	Teratogenic Activity	H2O Ext	IG Rat	175.0 mg/kg	Active		K16006
Seed India	Embryotoxic Effect	H2O Ext	IG Rat	175.0 mg/kg	Inactive		K16006
Leaf Nigeria	Anticoagulant Activity	H2O Ext	Blood-human	1.0 mg/ml	Active		K20898
Not Stated	Antiparkinson Activity	Not Stated	Human Adult	55-88%	Active	<i>Mucuna</i> , in combination with <i>Piper longum</i> and <i>Zingiber officinalis</i> , slows the progression of Parkinson's symptoms (tremors, rigidity, slurring, drooling, balance etc.) Case study conducted over 12 years.	BP1008
Seed India	Antiparkinson Activity	Endocarp Tissue	PO Rat	5.0 gm/kg	Active	Carbidopa administration required to have effect.	J16263

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Seed India	Antiparkinson Activity	MEOH Ext	IP Rat	200.0 mg/kg	Active	An alcohol-insoluble methanol extract, free from l-dopa, was tested.	T06167
Seed India	Antiparkinson Activity	Seeds	GI Rat	400.0 mg/kg	Active		T06167
Seed India	Antiparkinson Activity	Seeds	PO Human Adult	15-40 gm	Active	L-dopa content about 4.5-5.5%.	T03294
Seed India	Antiparkinson Activity	Not Stated	PO Human Adult	Not Stated	Active	Levodopa isolated from extract.	M25765
Bean endocarp India	Antiparkinson Activity	Powder	PO Human Adult	45 mg ± 22.5 mg	Active	60 patients in study; 26 previously treated with l-dopa, 34 l-dopa naive. Statistically significant reductions in Hoehn & Yahr stage & UPDRS scores seen.	BP1012
Seed India	Cholinesterase Inhibition	MEOH Ext	IP Rat	200.0 mg/kg	Inactive		T06167
Not Stated India	Melatonin Level Increase	Not Stated	IG Rat	1.0 gm/kg	Active	Effects described are from a multi-component Rx.	J16920
Not Stated India	Serotonin (5-HT) Releasing Effect	Not Stated	IG Rat	1.0 gm/kg	Active	Effects described are from a multi-component Rx.	J16920
Not Stated India	Correction of Diabetic Blood Alterations	ETOH(100%)Ext	Mouse	200 mg/kg	Inactive	vs. hepatic & skeletal muscle glycogen content, hepatic glucokinase, hexokinase, glucose-6-phosphate & phosphofructokinase levels.	L10702
Fruit India	Hypoglycemic Activity	ETOH-H2O(1:1) Ext	PO Rat	250.0 mg/kg	Active	More than 30% drop in blood sugar level seen.	A03335
Root India	Hypoglycemic Activity	ETOH-H2O(1:1) Ext	PO Rat	250.0 mg/kg	Active	More than 30% drop in blood sugar level.	A03335
Seed India	Hypoglycemic Activity	Seeds	PO Rat	Not Stated	Active		A14339
Seed India	Hypoglycemic Activity	ETOH-H2O (1:1) Ext	PO Rat	250.0 mg/kg	Inactive	Less than 30% drop in blood sugar level.	W00374
Seed Pakistan	Hypoglycemic Activity	Not Stated	IG Rabbit	Not Stated	Active		L03572
Not Stated India	Hypoglycemic Activity	ETOH Ext	PO Rat	200 mg/kg	Active	A 40.17% fall in serum blood glucose seen in 1 month. A fall of 45.63% seen after 2 months.	BP1005

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Seed Faisalabad	Hypoglycemic Activity	Not Stated	Rabbit	0.5 g/kg 1 g/kg 2 g/kg 1 g/kg 2 g/kg	Active Active Active Active Active	vs. normal rabbits. vs. normal rabbits. vs. normal rabbits. vs. alloxan-diabetic rabbits. vs. alloxan-diabetic rabbits.	BP1013
Not Stated India	Hypoglycemic Activity	ETOH(95%) Ext	Rat	250 - 750 mg/kg	Active	vs. alloxan-diabetic rats.	BP1014
Seed Pakistan	Antihyperglycemic Activity	Not Stated	IG Rabbit	Not Stated	Active	vs. alloxan-induced hyperglycemia.	L03572
Seed India	Antihyperglycemic Activity	Ash ETOH(100%)Ext	IG Rat IG Rat	90.0 mg/kg 250.0 mg/kg	Active Inactive	vs. glucose tolerance tests. vs. glucose tolerance tests.	L05654
Seed India	Antihyperglycemic Activity	ETOH(100%)Ext	PO Mouse	200.0 mg	Active	The urine volume and urinary albumin level was decreased. vs. streptozotocin-induced hyperglycemia.	L15573
Not Stated India	Antihyperglycemic Activity	ETOH(100%)Ext ETOH(100%)Ext	Rat Mouse	200.0 mg/kg 200.0 mg/kg	Active Inactive	vs. alloxan-induced hyperglycemia. 51.01% reduction at 4 months. vs. streptozotocin-induced hyperglycemia.	L10702
Not Stated India	Diabetic Cataract Inhibition	ETOH Ext	PO Rat	200 mg/kg	Active	All rats in the control group developed cataracts when administered with the diabetogenic agent alloxan. Incidence rate in rats treated with the plant extract was two.	BP1005
Fruit India	Cytotoxic Activity	ETOH-H2O (1:1) Ext	Cell Culture	ED50=>20.0 mcg/ml	Inactive	Ca-9kb.	A03335
Fruit India	Antispasmodic Activity	ETOH-H2O (1:1) Ext	Guinea Pig ileum	Not Stated	Active	vs. Ach- and histamine-induced spasms.	A03335
Root India	Antispasmodic Activity	ETOH-H2O (1:1) Ext	Guinea Pig ileum	Not Stated	Active	vs. Ach- and histamine-induced spasms	A03335
Seed Nigeria	Spasmogenic Activity	Decoction	Guinea Pig ileum	ED50=3.3 mg/ml	Active	Atropine, promethazine, nifedipine, cyproheptadine and verapamil antagonized effect with increasing effectiveness.	J10474
Seed Cuba	Bronchodilator Activity	Hot H2O Ext	IV Guinea Pig	1.5 ml	Inactive		M29843

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Not Stated India	Histamine Release Stimulation	Not Stated	IG Rat	1.0 gm/kg	Active		J16920
Fruit Trichomes Africa	Anti-inflammatory Activity	ETOH (95%) Ext	IG Rat	3.0 gm/kg	Active	vs. carrageenan-induced pedal edema.	K12860
Leaf Africa	Anti-inflammatory Activity	ETOH (95%) Ext	IG Rat	1.0 gm/kg	Active	vs. carrageenan-induced pedal edema.	K12860
Leaf + Root + Seed India	Anti-inflammatory Activity	Root	PO Human Adult	Variable	Active		T06320
Fruit Trichomes Africa	Analgesic Activity	ETOH (95%) Ext	IG Rat	1.0 gm/kg	Active	vs. hot plate method.	K12860
Fruit Trichomes Africa	Analgesic Activity	ETOH (95%) Ext	IG Rat	2.0 gm/kg	Active	vs. acetic acid-induced writhing.	K12860
Leaf Africa	Analgesic Activity	ETOH (95%) Ext ETOH (95%) Ext	IG Rat IG Rat	1.0 gm/kg 1.0 gm/kg	Active Active	vs. hot plate method. vs. acetic acid-induced writhing.	K12860
Leaf Africa	Antipyretic Activity	ETOH (95%) Ext	IG Rat	1.0 gm/kg	Active	vs. yeast-induced pyrexia.	K12860
Fruit Trichomes Africa	Antipyretic Activity	ETOH (95%) Ext	IG Rat	1.0 gm/kg	Active	vs. yeast-induced pyrexia.	K12860
Commercial Sample of Leaf	Antihypercholesterolemic Activity	Decoction Decoction	IG Rat IG Rat	5.0 gm/kg 5.0 gm/kg	Active Active	vs. diet-induced hypercholesterolemia. vs. triton-induced hypercholesterolemia.	M22106
Commercial Sample of Leaf	Antihyperlipemic Activity	Decoction Decoction	IG Rat IG Rat	5.0 gm/kg 5.0 gm/kg	Active Active	vs. diet-induced hypercholesterolemia. vs. triton-induced hypercholesterolemia.	M22106
Seed India	Hypocholesterolemic Activity	Seeds	PO Rat	Not Stated	Active		A14339
Seed India	Lipid Peroxide Formation Inhibition	ETOH (100%) Ext ETOH (100%) Ext	IG Rat IG Rat	600.0 mg/kg 600.0 mg/kg	Active Active	vs. stress-induced lipid peroxidation. vs. alloxan-induced lipid peroxidation.	L15713
Not Stated India	Anabolic Activity	Plant	PO Mouse (Castrate) Male	7.70 mg	Active	Animals pre-treated with testosterone. Effects described are from a multi-component Rx.	W00486

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Not Stated	Growth Hormone Stimulant	Not Stated	Not Stated	250 mg with 20% l-dopa	Active	Contains l-dopa which converts to dopamine. Dopamine stimulates the release of growth hormone by the pituitary gland.	BP1016
Entire Plant India	Benign Prostatic Hyperplasia Improvement	Hot H2O Ext	PO Human Male	Not Stated	Active	45 patients with prostatitis were given the test preparation and 10 patients were untreated controls. Of 38 patients with benign hypertrophy in the test group, 28 improved and did not need surgery. All controls needed surgery. Effects described are from a multi-component rx.	T15944
Not Stated India	Androgenic Effect	Plant	PO Mouse (castrate)	7.7 mg	Active	Animals pre-treated with testosterone. Effects described are from a multi-component rx.	W00486
Not Stated India	Androgenic Effect	Plant	PO Mouse	22.0 mg	Active	Increased maltase, activity of dorsoventral prostate and increase in fructose content of seminal vesicles. Effects described are from a multi-component rx.	W00486
Not Stated India	Aphrodisiac Activity	Plant	PO Human Male	Not Stated	Active	A clinical trial involving 133 subjects ranging in age from 18-46 years. The subjects presented cases of improper erection, night emissions, premature ejaculations, spermatorrhoea, functional impotence and/or oligospermia. 71.4% of patients were claimed to be aided by the drug with no side effects. Effects described are from a multi-component rx.	T01692
Seed India	Aphrodisiac Activity	Not Stated	PO Human Male	Variable	Active	Study involving 21 infertile oligospermic patients in the age group 25-35 years. 50% of subjects showed improvement of prostatic function. Effects described are from a multi-component rx.	T04226
Seed India	Aphrodisiac Activity	Ether Ext	IP Rat Male	Not Stated	Inactive		T03102
Seed India	Aphrodisiac Activity	ETOH (95%)Ext	IP Rat Male	Not Stated	Inactive		T03102

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Seed Not Stated	Penis Erectile Stimulant	Not Stated	PO Human Male	Not Stated	Active	Improvement in erection, duration of coitus and post-coital satisfaction has been observed in 56 cases treated for 4 weeks.	T14366
Seed India	Sexual Behavior Modification	H2O Ext	IG Rat Male	500.0 mg/kg	Active	Effects described are from a multi-component rx.	J18758
Seed India	Sexual Behavior Modification	H2O Ext	IG Rat Male	500.0 mg/kg	Active	In alcohol exposed rats.	J18758
Seed India	Sexual Behavior Modification	Seeds	IG Rat Male	1.0 gm/kg	Active		K26652
Entire Plant India	Fertility Promotion Effect	Not Stated	PO Human Male	96.0 mg	Active	35 patients with oligospermia had an improvement in total sperm count and sperm motility.	T12794
Seed India	Spermatogenic Effect	Not Stated	PO Human Male	Variable	Equivocal	30 oligospermic infertiles in the age group of 24-46 years were studied over 4 months. Increases in magnesium content and in sperm count reported. Effects described are from a multi-component rx.	T04225
Seed India	Spermatogenic Effect	H2O Ext	IG Rat Male	500.0 mg/kg	Active	Effects described are from a multi-component Rx.	J18758
Seed India	Spermatogenic Effect	H2O Ext	IG Rat Male	500.0 mg/kg	Active	In alcohol exposed rats.	J18758
Seed India	Spermatogenic Effect	Plant	PO Human Male	Not Stated	Active	40 subjects. Most had a marked improvement relative to showing better semen profiles. Effects described are from a multi-component rx.	T03252
Seed India	Testosterone Level Increased	H2O Ext	IG Rat Male	500.0 mg/kg	Active	In alcohol & non-alcohol exposed rats.	J18758
Seed India	FSH Release Inhibition	Not Stated	PO Human Male	Variable	Equivocal	Effects described are from a multi-component Rx.	T04226
Seed India	FSH Release Stimulation Effect	Not Stated	PO Human Male	Variable	Equivocal	Effects described are from a multi-component Rx.	T04226
Seed India	FSH Synthesis Stimulation	Not Stated	PO Human Male	Variable	Equivocal	Effects described are from a multi-component Rx.	T04226

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Seed India	Gonadotropin Release Stimulation	Not Stated	PO Human Male	Variable	Equivocal	Effects described are from a multi-component Rx.	T04226
Seed India	Gonadotropin Synthesis Stimulation	Not Stated	PO Human Male	Variable	Equivocal	Effects described are from a multi-component Rx.	T04226
Seed India	LH-release Inhibition	Not Stated	PO Human Male	Variable	Equivocal	Effects described are from a multi-component Rx.	T04226
Seed India	LH-release Stimulation	Not Stated	PO Human Male	Variable	Equivocal	Effects described are from a multi-component Rx.	T04226
Seed India	LH-synthesis Stimulation	Not Stated	PO Human Male	Variable	Equivocal	Effects described are from a multi-component Rx.	T04226
Seed India	Prolactin Inhibition	Seeds	PO Human Female	15.0 gm	Inactive	Subjects had hyperprolactinemia and galactorrhea. Both subjects had a history of secondary amenorrhea and primary sterility.	T02368
Seed India	Prolactin Inhibition	Seeds	PO Human Male	15.0 gm	Active	Inhibition of prolactin response to chlorpromazine injection.	T02367
Not Stated	Prolactin Inhibitor	Not Stated	Not Stated	250 mg with 20% l-dopa	Active	L-dopa inhibits the release of prolactin by the pituitary gland.	BP1016
Bean endocarp India	Galactorrhea Inhibition	Powder	Human Adult	Not Stated	Active	Effect may be due to its dopamine agonist activity.	BP1012
Seed India	Antigalactagogue Effect	Seeds	PO Human Female	15.0 gm	Inactive	Subjects had hyperprolactinemia and galactorrhea. Both subjects had a history of secondary amenorrhea and primary sterility.	T02368
Root India	Cytotoxic Activity	ETOH-H2O(1:1) Ext	Cell Culture	ED50=>20.0 mcg/ml	Inactive	Ca-9kb.	A03335
Prothallus Japan	Antiradiation Effect	MEOH Ext	IP Mouse	100 mg/kg	Inactive	vs. soft X-ray irradiation at lethal dose.	T14342
Seed Nigeria	Skeletal Muscle Stimulant Activity	H2O Ext	Rat	300 mcg/ml	Active	Phrenic nerve-diaphragm.	J19367
Seed Nigeria	Smooth Muscle Stimulant Activity	H2O Ext	Guinea Pig	1.2 mg/ml	Active	Ileum.	J19367

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Seed Nigeria	Smooth Muscle Stimulant Activity	H2O Ext	Rabbit	1.5 mg/ml	Active	Jejunum.	J19367
Entire Plant India	Genitourinary Effect	H2O Ext	Oral Mouse	5.0 mg	Active	Mice received a single dose of cadmium chloride (1 mg) plus test preparation or placebo for up to 60 days. The test group showed fewer toxic effects than the control group on the seminiferous tubules, epididymis and spermatids. Effects described are from a multi-component rx.	T15943
Seed Brazil	Hemagglutinin Activity	Protein Fraction	RBC	25.0 microliters	Inactive		J17190
Seed Brazil	Trypsin Inhibition	Protein Fraction	Not Stated	5.0 microliters	Active		J17190
Seed India	Pharmacokinetic Study	Powder	PO Human Male	300.0 ml	Active		E00148
Seed India	Antioxidant Activity	ETOH Ext	Cell Culture (rat liver)	Not Stated	Inactive Active Active	vs. oxidation of GSH. vs. FeSO(4)-induced lipid peroxidation. vs. superoxide & hydroxyl radical reactions.	BP1006
Seed India	Antioxidant Activity	ETOH Ext	PO Rat	600 mg/kg	Inactive	vs. TBA-reactive substances, reduced GSH content & SOD activity in the liver. Activity of serum GOT, GPT & ALP unchanged.	BP1006
Entire Plant	Insecticide Activity	Plant	Not Stated	Not Stated	Inactive		A04807
Seed Sri Lanka	Nematocidal Activity	Decoction	Not Stated	10.0 mg/ml	Inactive	<i>Toxocara canis</i>	M26175
Seed Bangladesh	Nematocidal Activity	H2O Ext MEOH Ext	Not Stated Not Stated	10.0 mg/ml 1.0 mg/ml	Inactive Weak Activity	<i>Toxocara canis</i> <i>Toxocara canis</i>	M28316
Seed India	Taenicide Activity	ETOH(95%)Ext	Not Stated	Not Stated	Active	<i>Taenia solium</i>	T08066
Seed India	Taenicide Activity	H2O Ext	Not Stated	Not Stated	Active	<i>Taenia solium</i>	T08066
Seed Nigeria	Antivenin Effect	H2O Ext	IP Rat	21.0 mg/kg	Active	The increased LDH, SGPT, CK and changed coagulation parameters due to the venom effect of <i>Echis carinatus</i> were inhibited; lethality was decreased.	L18859

Part - Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Seed Nigeria	Antivenin Effect	Not Stated	IP Mouse	Variable	Active		L09550
Seed Nigeria	Antivenin Effect	H2O Ext	Mouse	Variable	Active	vs. <i>Echis carinatus</i> venom.	L14375
Seed Italy	Anitvenin Activity	H2O Ext	Not Stated Mice	21 ug/g	Active	Protective effect against <i>Echis carinatus</i> venom evident at 24 h and 1-4 weeks after administration. Antivenin effect due to an immune mechanism; Mucuna proteins raised antibodies.	BP1007
Seed Japan	Plant Growth Inhibitor	Plant	Not Stated	Not Stated	Active		K10998
Seedling Japan	Plant Growth Inhibitor	ETOH(80%)Ext	External Plant	Not Stated	Active	<i>Lactuca sativa</i> seedlings.	M27351

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A03113	ALKALOIDS OF MUCUNA PRURIENS. CHEMISTRY AND PHARMACOLOGY. GHOSAL,S: SINGH,S: BHATTACHARYA,SK: PLANTA MED 19 : 279- (1971) (DEPT PHARM INST TECHNOL BANARAS HINDU UNIV VARANASI UP 5 INDIA)
A03335	SCREENING OF INDIAN PLANTS FOR BIOLOGICAL ACTIVITY: PART I. DHAR,ML: DHAR,MM: DHAWAN,BN: MEHROTRA,BN: RAY,C: INDIAN J EXP BIOL 6 : 232-247 (1968) (MEDICINAL PLANTS PROJECT CENTRAL DRUG RES INST LUCKNOW UP INDIA)
A04132	ECBOLIC PROPERTIES OF INDIAN MEDICINAL PLANTS. PART 1. SAHA,JC: SAVINI,EC: KASINATHAN,S: INDIAN J MED RES 49 : 130-151 (1961) (DEPT BIOL PHARMACOL MED COLL PONDICHERRY UT INDIA)
A04300	MEDICINAL,ECONOMIC AND USEFUL PLANTS OF INDIA. BALLY SEED STORE,WEST BENGAL. DAS,SK:BOOK : - (1955) (NO ADDRESS GIVEN)
A04606	BOTANICAL HERBS AND DRUGS,SUNRISE HERB AND DRUGS SERVICE,PAKISTAN. ANON: BOOK : - (1959) (NO ADDRESS GIVEN)
A04807	INSECTICIDAL TESTS OF PLANTS FROM TROPICAL AMERICA. SIEVERS,AF: ARCHER,WA: MOORE,RH: MC GOVRAN,BR: J ECON ENTOMOL 42 : 549- (1949) (DIV TOBACCO,MEDICINAL SP CROPS ARS USDA MAYAGUEZ PUERTO RICO)
A04923	LES PLANTES MEDICINALES ET TOXIQUES DE MADAGASCAR. A. CHALLAMEL, PARIS. HECKEL,E: BOOK : - (1903)(NO ADDRESS GIVEN)
A06590	DICTIONARY OF THE ECONOMIC PRODUCTS OF THE MALAY PENINSULA. MINISTRY OF AGRICULTURE AND COOPERATIVES, KUALA LUMPUR, MALAYSIA. VOLUME II. BURKILL,IH: BOOK : 1- (1966) (NO ADDRESS GIVEN)

A14339	BLOOD SUGAR AND TOTAL CHOLESTEROL LOWERING EFFECT OF GLYCINE SOYA (SIEB AND ZUCC.), MUCUNA PRURIENS (D.C.) AND DOLICHOS BIFLORUS (LINN.) SEED DIETS IN NORMAL FASTING ALBINO RATS. PANT,MC: UDDIN,I: BHARDWAJ,UR: TEWARI,RD:INDIAN J MED RES 56 12: 1808-1812 (1968) (DEPT PHYSIOL BIOCHEM SEC MLN MED COLL ALLAHABAD UP INDIA)
E00148	BIOAVAILABILITY OF L-DOPA FROM HP-200-A FORMULATION OF SEED POWDER OF MUCUNA PRURIENS (BAK): A PHARMACOKINETIC AND PHARMACODYNAMIC STUDY. MAHAJANI,SS: DOSHI,VJ: PARIKH,KM: MANYAM,BV: PHYTOTHER RES 10 3: 254-256 (1996) (DIV PHARMACOL CHEM RES DEVELOP LAB BOMBAY INDIA)
H29734	5,6,4'-TRIHYDROXY-7,8,3'-TRIMETHOXY FLAVONE-4'-O-BETA-D-XYLOPYRANOSYL-(1-2)-O-ALPHA-L-RHAMNOPYRANOSIDE: A NOVEL BIOACTIVE FLAVONE GLYCOSIDE FROM THE MUCUNA PRURITA HOOK. YADAVA,RN: JAIN,S: ASIAN J CHEM 13 3: 1187-1191 (2001) (DEPT CHEMISTRY DR H S GOUR UNIVERSITY SAGAR INDIA)
J10115	ETHNOBOTANICAL OBSERVATIONS ON THE CUNA INDIANS. DUKE,JA:ECON BOT 29 : 278-. (1975)(PLANT TAXONOMY LAB ARS USDA BELTSVILLE MD USA)
J10474	MECHANISM OF ACTION OF THE AQUEOUS SEED EXTRACT OF MUCUNA PRURIENS ON THE GUINEA-PIG ILEUM. UGURU,MO: AGUIYI,JC: GESA,AA: PHYTOTHER RES 11 4: 328-329 (1997) (DEPT PHARMACOL CLIN PHARM UNIV JOS JOS NIGERIA)
J16263	MUCUNA PRURIENS PROVES MORE EFFECTIVE THAN L-DOPA IN PARKINSON'S DISEASE ANIMAL MODEL. HUSSAIN,G: MANYAM,BV: PHYTOTHER RES 11 6: 419-423 (1997) (DEPT NEUROL SOUTHERN ILLINOIS UNIV SCH MED SPRINGFIELD IL USA)
J16920	CHANGES IN BRAIN BIOGENIC AMINES UNDER INFLUENCE OF AN INDIGENOUS DRUG, GERIFORTE, FOLLOWING IMMOBILIZATION STRESS. UPADHYA,L: SHUKLA,SS: AGRAWAL,A: DUBEY,GP: INDIAN J EXP BIOL 26 11: 911-912 (1988) (DEPT BASIC PRINCIPLES INST MED SCI BANARAS HINDU UNIV VARANASI 221 005 INDIA)
J17190	BRAZILIAN MUCUNA PRURIENS SEEDS (VELVET BEAN) LACK HEMAGGLUTINATING ACTIVITY. UDEDIBIE,ABI: CARLINI,CR: J AGR FOOD CHEM 46 4: 1450-1452 (1998) (DEPT BIOCHEM FED UNIV RIO DE JANEIRO RIO DE JANEIRO BRAZIL)
J18758	EXPERIMENTAL ASSESSMENT OF RELATIVE EFFICACY OF DRUGS OF HERBAL ORIGIN ON SEXUAL PERFORMANCE AND HORMONE LEVELS IN ALCOHOL EXPOSED AND NORMAL RATS. MITRA,SK: MURALIDHAR,TS: RAO,DRB: PHYTOTHER RES 10 4: 296-299 (1996) (RES DEVELOP CENTRE HIMALAYA DRUG CO BANGALORE 562 123 INDIA)
J19367	EFFECTS OF MUCUNA PRURIENS SEED EXTRACT ON SMOOTH AND SKELETAL MUSCLE PREPARATIONS. AGUIYI,JC: UGURU,MO: JOHNSON,PB: OBI,CI: ADOGA,GI: FITOTERAPIA 68 4: 366-370 (1997) (DEPT PHARMACOL CLIN PHARM UNIV JOS JOS NIGERIA)
K10006	THE CHARACTERIZATION AND MEASUREMENT OF HBR-REACTING ACIDS IN MUCUNA PRURIENS AND URENA LOBATA SEED OILS. AHMAD,MU: HUSAIN,SK: OSMAN,SM: J AGR FOOD CHEM 29 2: 372-376 (1978) (DEP CHEM ALIGARH MUSLIM UNIV ALIGARH INDIA)
K10998	ALLELOPATHY OF VELVETBEAN: ITS DISCRIMINATION AND IDENTIFICATION OF L-DOPA AS A CANDIDATE OF ALLELOPATHIC SUBSTANCES. FUJII,Y: SHIBUYA,T: YASUDA,T: JARQ 25 4: 238-247 (1992) (DEPT ENVIRONM BIOL NATL INST AGR-ENVIRONM SCI TSUKUGBA 305 JAPAN)
K11747	FOLK USE OF PLANTS IN VETERINARY MEDICINE IN CENTRAL NEPAL. BHATTARAI,NK: FITOTERAPIA 63 6: 497-506 (1992) (DEPT FOREST PLANT RES NATL HERB PLANT LAB KATHMANDU NEPAL)

K12860	ANALGESIC AND ANTIPYRETIC EFFECTS OF MUCUNA PRURIENS. JAUK,L: GALATI,EM: KIRJAVAINEN,S: FORESTIERI,AM: TROVATO,A: INT J PHARMACOG 31 3: 213-216 (1993) (PHARM BIOL DEPT UNIV MESSINA MESSINA ITALY)
K14252	MUCUNA PRURIENS: IMPROVEMENT OF THE BIOTECHNOLOGICAL PRODUCTION OF ANTI-PARKINSON DRUG L-DOPA BY PLANT CELL SELECTION. PRAS,N: WOERDENBAG,HJ: BATTERMAN,S: VISSER,JF: VAN UDEN,W: PHARM WORLD SCI 15 6: 263-268 (1993) (LAB PHARMACOG & GALENIC PHARM UNIV GRONINGEN GRONIGEN NETHERLANDS)
K15489	DETERMINATION OF LEVODOPA IN MAODOU (MUCUNA PRURIENS) AND LIDOU (M.MACROCARPA) BY TLC SCANNING. CHEN,Y: ZHEN,HS: XU,XJ: PAN,Y: TANG,J: CHUNG TS'AO YAO 24 6: 294-295 (1993) (DEPT PHARM GUANGXI COLL TRAD CHIN MED NANJING 530001 CHINA)
K15824	OCCURRENCE OF L-DOPA AND DOPAMINE IN PLANTS AND CELL CULTURES OF MUCUNA PRURIENS AND EFFECTS OF 2,4-D AND SODIUM CHLORIDE ON THESE COMPOUNDS. WICHERS,HJ :VISSER,JF: HUIZING,HJ: PRAS,N: PLANT CELL TISSUE ORGAN CULT 33 3: 259-264 (1993) (LAB PHARMACOG & GALENIC PHARM UNIV GRONINGEN GRONIGEN NETHERLANDS)
K16006	COMMONLY USED INDIAN ABORTIFACIENT PLANTS WITH SPECIAL REFERENCE TO THEIR TERATOLOGIC EFFECTS IN RATS. NATH,D: SETHI,N: SINGH,RK: JAIN,AK: J ETHNOPHARMACOL 36 2: 147-154 (1992) (CENTRAL DRUG RESEARCH INST LUCKNOW UP 226 001 INDIA)
K20642	TRADITIONAL AMAZONIAN NERVE TONICS AS ANTIDEPRESSANT AGENTS: CHAUNOCHITON KAPPLERI: A CASE STUDY. ELISABETSKY,E: FIGUEIREDO,W: OLIVERIA,G: J HERBS SPICES MED PLANTS 1 1/2: 125-162 (1992) (DEPT FARMACOL UNIV FED RIO GRANDE DO SUL PORTO ALEGRE 90 0650 BRAZIL)
K20898	THE EFFECT ON BLOOD CLOTTING OF SOME WEST AFRICAN PLANTS USED AGAINST SNAKEBITE. HOUGHTON,PJ: SKARI,KP:J ETHNOPHARMACOL 44 2: 99-108 (1994) (PHARMACOG RES LAB KING'S COLLEGE UNIV LONDON LONDON SW3 6LX ENGLAND)
K23294	TRADITIONAL PLANT REMEDIES AMONG THE KONDH OF DISTRICT DHENKANAL (ORISSA). GIRACH,RD: AMINUDDIN: SIDDIQUI,PA: KHAN,SA: INT J PHARMACOG 32 3: 274-283 (1994) (SURVEY MED PLANTS UNIT REG RES INST UNANI MED BHADRAK 756 INDIA)
K23365	MEDICAL ETHNOBOTANY OF THE SIDDIS OF UTTARA KANNADA DISTRICT, KARNATAKA, INDIA. BHANDARY,MJ: CHANDRASHEKAR,KR: KAVERIAPPA,KM: J ETHNOPHARMACOL 47 3: 149-158 (1995) (DEPT APPL BOTANY MANGALORE UNIV KARMATAKA 574 199 INDIA)
K25892	ANTISNAKE VENOM BOTANICALS FROM ETHNOMEDICINE. SELVANAYAHGAM,ZE: GNANEVENDHAN,SG: BALAKRISHNA,K: RAO,RB:J HERBS SPICES MED PLANTS 2 4: 45-100 (1994) (FORENSIC SCI DEPT MADRAS 600 004 INDIA)
K26652	SEXUAL FUNCTION IMPROVING EFFECT OF MUCUNA PRURIENS IN SEXUALLY NORMAL MALE RATS. AMIN,KMY: KHAN,MN: ZILLUR-REHMAN,S: KHAN,NA: FITOTERAPIA 67 1: 53-58 (1996) (DEPT ILMUL ADVIA AJMAL KHAN TIBBIYA COLL ALIGARH MUSLIM UNIV ALIGARH 202002 INDIA)
L00048	TRYPTAMINE AND RELATED COMPOUNDS IN PLANTS. (REVIEW). SMITH,TA: PHYTOCHEMISTRY 16 : 171-175 (1977) (LONG ASHTON RES STA UNIV BRISTOL BRISTOL BS18 9AF ENGLAND)
L01568	MEDICINAL PLANTS OF SOUTHERN ZAMBESIA. AMICO,A: FITOTERAPIA 48 : 101-139 (1977) (INST BOTANY UNIV BARI BARI ITALY)

L03572	HYPOGLYCAEMIC ACTIVITES OF SOME INDIGENOUS MEDICINAL PLANTS TRADITIONALLY USED AS ANTIDIABETIC DRUGS. AKHTAR,MS: J PAK MED ASS 42 11: 271-277 (1992) (DEPT PHYSIOL PHARMACOL UNIV AGRICULTURE FAISALABAD PAKISTAN)
L05654	PRELIMINARY STUDIES ON THE INORGANIC CONSTITUENTS OF SOME INDIGENOUS HYPOGLYCAEMIC HERBS ON ORAL GLUCOSE TOLERANCE TEST. KAR,A: CHOUDHARY,BK: BANDYOPADHYAY,NG: J EXP BOT 64 2: 179-184 (1999) (SATSANG HERBAL RES ANALYTICAL LAB DEOGHAR 814116 INDIA)
L09550	STUDIES ON POSSIBLE PROTECTION AGAINST SNAKE VENOM USING MUCUNA PRURIENS PROTEIN IMMUNIZATION. AGUIYI,JC: IGWEH,AC: EGESIE,UG: LEONCINI,R: FITOTERAPIA 70 1: 21-24 (1999) (DEPT PHARMACOL CLINICAL PHARM UNIV JOS JOS NIGERIA)
L10702	THE EFFECT OF MOMORDICA CHARANTIA AND MUCUNA PRURIENS IN EXPERIMENTAL DIABETES AND THEIR EFFECT ON KEY METABOLIC ENZYMES INVOLVED IN CARBOHYDRATE METABOLISM. RATHI,SS: GROVER,JK: VATS,V: PHYTOTHER RES 16 3: 236-243 (2002) (DEPT PHARMACOL ALL INDIA INST MED SCI NEW DELHI UT 110 016 INDIA)
L11392	WATER SOLUBLE POLYSACCHARIDE FROM GARHWAL REGION FLORA ON MUCUNA PRURIENS BAK. SEEDS. SINGH,RB: ORIENT J CHEM 15 1: 187-188 (1999) (DEPT ZOOL SCI FOREST ENVIRON DR B R AMBEDKAR UNIV AGRA 282 002 INDIA)
L14375	EFFECTS OF MUCUNA PRURIENS EXTRACT ON ACTIVATION OF PROTHROMBIN BY ECHIS CARINATUS VENOM. GUERRANTI,R: AGUIYI,JC: ERRICO,E: PAGANI,R: MARINELLO,E: J ETHNOPHARMACOL 75 2/3: 175-180 (2001) (INST BIOCHEM ENZYMOLOGY UNIV SIENA SIENA ITALY)
L15573	TRADITIONAL INDIAN ANTI-DIABETIC PLANTS ATTENUATE PROGRESSION OF RENAL DAMAGE IN STREPTOZOTOCIN INDUCED DIABETIC MICE. GROVER,JK: VATS,V: RATHI,SS: DAWAR,R: J ETHNOPHARMACOL 76 3: 233-238 (2001) (DEPT PHARMACOL ALL INDIA INST MED SCI NEW DELHI UT 110 016 INDIA)
L15713	ANTIOXIDANT PROPERTY OF MUCUNA PRURIENS LINN. TRIPATHI,YB: UPADHYAY,AK: CURR SCI 80 11: 1377-1378 (2001) (DEPT MED CHEM INST MED SCI BANARAS HINDU UNIV VARANASI INDIA)
L15749	DETERMINATION OF L-DOPA CONTENT AND OTHER SIGNIFICANT NITROGENOUS COMPOUNDS IN THE SEEDS OF SEVEN MUCUNA AND STIZOLOBIUM SPECIES IN CHINA. YANG,X: ZHANG,X: ZHOU,R: PHARMACEUTICAL BIOL 39 4: 312-316 (2001) (INST TRAD CHINESE MEDICINE CHINA PHARMACEUTICAL UNIV NANJING CHINA)
L17233	GRADED HYDROLYTIC STUDIES OF MUCUNA PRURIENS BAK SEED POLYSACCHARIDES. SINGH,RB: ORIENT J CHEM 16 2: 339-341 (2000) (DEPT ZOOLOGY INST BASIC SCI DR B R AMBEDKAR UNIV AGRA INDIA)
L18859	BLOOD CHEMISTRY OF RATS PRETREATED WITH MUCUNA PRURIENS SEED AQUEOUS EXTRACT MP101UJ AFTER ECHIS CARINATUS VENOM CHALLENGE. AGUIYI,JC: GUERRANTI,R: PAGANI,R: MARINELLO,E: PHYTOTHER RES 15 8: 712-714 (2001) (DEPT PHARMACOL CLINICAL PHARMACY UNIV JOS JOS NIGERIA)
M13521	PRODUCTION OF L-DOPA BY SUSPENSION GROWN CELLS OF MUCUNA PRURIENS. WICHERS,HJ: PHARM WEEKBL(SCI ED) 9 1: 34-35 (1987) (STATE UNIV GRONINGEN GRONINGEN NETHERLANDS)
M18213	APHRODISIAC EFFECT OF INDIGENOUS DRUGS- A MYTH OR REALITY? NISTESWAR,K: MURTHY,VK: PROBE 28 2: 89-92 (1989) (DEPT DRAVYAGUNA AYURVEDIC COLL VIJAYAWADA AP INDIA)

M21329	SURVEY OF SOME WEST SUMATRAN PLANTS FOR ALKALOIDS. ARBAIN,D: CANNON,JR: AFRIASTINI: KARTAWINATA,K: DJAMAL,R: BUSTARI,A: DHARMA,A: ROSMAWATY: RIVAI,H: ZAHERMAN: BASIR,D: SJAFAR,M: SJAIFUL: NAWFA,R: KOSELA,S: ECON BOT 43 1: 73-78 (1989) (UNIV WESTERN AUSTRALIA NEDLANDS WA 6009 AUSTRALIA)
M22106	MUCUNA PRURIENS DECOCTION LOWERS CHOLESTEROL AND TOTAL LIPID PLASMA LEVELS IN THE RAT. IAU,K,L: GALATI,EM: FORESTIRI,AM: KIRJAVAINEN,S: TROVATO,A: PHYTOTHER RES 3 6: 263-264 (1989) (PHARMACO-BIOL LAB UNIV MESSINA MESSINA ITALY)
M23826	TRIBAL REMEDIES FROM SARANDA FOREST, BIHAR, INDIA-I. JAIN,SP:INT J CRUDE DRUG RES 27 1: 29-32 (1989) (CENTRAL INST MED & AROMATIC PL LUCKNOW UP 226 016 INDIA)
M25765	PARALYSIS AGITANS AND LEVODOPA IN "AYURVEDA": ANCIENT INDIAN MEDICAL TREATISE. MANYAM,BV: MOVEMENT DISORDERS 5 1: 47-48 (1990) (DIV NEUROL SCH MED SOUTHERN ILLINOIS UNIV SPRINGFIELD IL USA)
M26175	SCREENING OF CRUDE DRUGS USED IN SRI LANKA FOR NEMATOCIDAL ACTIVITY ON THE LARVA OF TOXOCARIA CANIS. KIUCHI,F: HIOKI,M: NAKAMURA,N: MIYASHITA,N: TSUDA,Y: KONDO,K: SHOYAKUGAKU ZASSHI 43 4: 288-293 (1989) (FAC PHARM SCI KANAZAWA UNIV KANAZAWA 920 JAPAN)
M27166	A SURVEY OF PLANT CRUDE DRUGS OF RAYALASEEMA, ANDHRA PRADESH, INDIA. NAGARAJU,N: RAO,KN: J ETHNOPHARMACOL 29 2: 137-158 (1990) (DEPT BOT MED PLANTS RES LAB SRI VENKATESWARA UNIV TIRUPATI AP 517 502 INDIA)
M27351	L-3,4-DIHYDROXYPHENYLALANINE AS AN ALLELOCHEMICAL CNADIDATE FROM MUCUNA PRURIENS (L.) DC. VAR.UTILIS. FUJII,Y: SHIBUYA,T: YASUDA,T: AGR BIOL CHEM 55 2: 617-618 (1991) (NATL INST AGRO-ENVIRON SCI TSUKUBA 305 JAPAN)
M28316	SCREENING OF CRUDE DRUGS USED IN BANGLADESH FOR NEMATOCIDAL ACTIVITY ON THE LARVA OF TOXOCARA CANIS. ALI,MA: MIKAGE,M: KIUCHI,F: TSUDA,Y: KONDO,K: SHOYAKUGAKU ZASSHI 45 3: 206-214 (1991) (FAC PHARM SCI KANAZAWA UNIV KANAZAWA 920 JAPAN)
M29360	ETHNOPHARMACOLOGICAL STUDY OF THE ATI TRIBE IN NAGPANA, BAROTAC VIEJO, ILOILO*. MADULID,DA: GAERLAN,FJM: ROMERO,EM: AGOO,EMG: ACTA MANILANA 38 1: 25-40 (1989) (BOTANY DIV NATL MUSEUM MANILA PHILIPPINES)
M29843	PHARMACOLOGICAL SCREENING OF PLANT DECOCTIONS COMMONLY USED IN CUBAN FOLK MEDICINE. CARBAJAL,D: CASACO,A: ARRUZAZABALA,L: GONZALEZ,R: FUENTES,V: J ETHNOPHARMACOL 33 1/2: 21-24 (1991) (DEPT PHARM NATL CENTER SCI RES HAVANA CITY CUBA)
M30478	STUDIES ON CHEMICAL COMPOSITION AND ANTINUTRITIONAL FACTORS IN THREE GERMPLASM SEED MATERIALS OF THE TRIBAL PULSE, MUCUNA PRURIENS (L.) DC. JOSEPHINE,RM: JANARDHANAN,K: FOOD CHEM 43 1: 13-18 (1992) (DEP BOT VBHARATHIAR UNIV COIMBATORE TAMIL NADU 641 046 INDIA)
M31139	ESTIMATION OF L-DOPA FROM THE PLANT MUCUNA PRURIENS AND ITS FORMULATIONS USING HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC). PARIKH,KM: DOSHI,VJ: SAWANT,SV: SALUNKHE,UB: INDIAN DRUGS 27 6: 353-356 (1990) (RES DEV DEP ZANDU PHARM WORKS LTD DADAI 400 025 INDIA)
N14511	EPOXY ACIDS OF MUCUNA PRURITA SEED OIL. HASAN,SQ: SHERWANI,MRK: AHMAD,I: AHMAD,F: OSMAN,SM: J INDIAN CHEM SOC 57 : 920-923 (1980) (DEPT CHEM ALIGARH MUSLIM UNIV ALIGARH UP 202 001 INDIA)

T00701	MEDICINAL PLANTS OF THE WEST INDIES. AYENSU,ES: UNPUBLISHED MANUSCRIPT : 110 P- (1978) (OFFICE OF BIOLOGICAL CONSERVAT SMITHSONIAN INSTITUTION WASHINGTON DC 20560 USA)
T01692	FORTEGE, AND INDIGENOUS DRUG IN COMMON SEXUAL DISORDERS IN MALES. BHARGAVA,NC: SINGH,OP:MEDISCOPE 21 6: 140-144 (1978) (SEFDHARJANG HOSP S.T.D. CENT NEW DELHI INDIA)
T02367	THE INHIBITORY EFFECT OF THE COWHAGE PLANT MUCUNA PRURIENS AND L-DOPA ON CHLORPROMAZINE-INDUCED HYPERPROLACTINEMIA IN MAN. VAIDYA,RA: SHETH,AR: ALOORKAR,SD: REGE,NR: BAGADIA,VN: DEVI,PK: SHAH,LP: NEUROLOGY(INDIA) 26 : 177-178 (1978) (DEPT BIOCHEM INST RES REPRODUCTION BOMBAY MAHARASTRA 400 012 INDIA)
T02368	ACTIVITY OF BROMOERGOCRYPTINE, MUCUNA PRURIENS AND L-DOPA IN THE CONTROL OF HYPERPROLACTINEMIA. VAIDYA,RA: ALOORKAR,SD: SHETH,AR: PANDYA,SK: NEUROLOGY(INDIA) 26 : 179-182 (1978) (INST RES REPRODUCTION BOMBAY MAHARASTRA 400 012 INDIA)
T02510	TISSUE CULTURE OF MEDICINAL PLANTS:SANDALWOOD,EUCALYPTUS,MUCUNA AND AGAVE.(ABSTRACT). SITA,GL: VAIDYANATHAN,CS: ABSTR 4TH ASIAN SYMP MED PLANTS SPICES BANGKOK THAILAND SEPTEMBER 15-19 1980 1980 : 106- (1980) (MICROBIOL & CELL BIOL LAB INDIAN INST SCI BANGALORE KARNATAKA 560 012 INDIA)
T03102	EFFECT OF SOME INDIGENOUS DRUGS ON THE SEXUAL BEHAVIOR OF MALE RATS. (ABSTRACT). RAO,MRR: PARAKH,SR: INDIAN J PHARM SCI 40 : 236E-. (1978) (DEPT CHEM TECHNOL MATUNGA BOMBAY 400 019 INDIA)
T03252	STUDY OF THE EFFECTS OF SPEMAN ON SEMEN QUALITY IN OLIGOSPERMIC MEN. PARDANANI,DS: DELIMA,RJ: RAO,RV: VAZE,AY: JAYATILAK,PG: SHETH,AR: INDIAN J SURG 38 : 34-39 (1976) (DEPT UROLOGY SETH G.S.MEDICAL COLLEGE BOMBAY MAHARASTRA 400 012 INDIA)
T03294	TREATMENT OF PARKINSON'S DISEASE WITH COWHAGE PLANT-MUCUNA PRURIENS BAK. VAIDYA,AB: RAJAGOPALAN,TG: MANKODI,NA: ANTARKAR,DS: TATHED,PS: PUROHIT,AV: WADIA,NH: NEUROLOGY(INDIA) 26 : 171-176 (1978) (CIBA-GEIGY RES CENT BOMBAY MAHARASTRA 400 063 INDIA)
T04225	THE EFFECT OF 'SPEMAN' ON QUALITY OF SEMEN IN RELATION TO MAGNESIUM CONCENTRATION. SOLEPURE,AB: JOSHI,NM: DESHKAR,BV: MUZUMDAR,SR: SHIROLE,CD: INDIAN PRACTITIONER 32 : 663-668 (1979) (MEDICAL COLLEGE AURANGABAD INDIA)
T04226	EFFECT OF AN INDIGENOUS DRUG(SPEMAN) ON HUMAN ACCESSORY REPRODUCTIVE FUNCTION. JAYATILAK,PG: SHETH,AR: MUGATWALA,PP: PARDANANI,DS: INDIAN J SURG 38 : 12-15 (1976) (INST RES REPRODUCTION BOMBAY MAHARASTRA INDIA)
T05143	STUDIES ON MEDICINAL PLANTS OF SRI LANKA: OCCURRENCE OF PYRROLIZIDINE ALKALOIDS AND HEPATOTOXIC PROPERTIES IN SOME TRADITIONAL MEDICINAL HERBS. ARSECULERATNE,SN: GUNATILAKA,AAL: PANABOKKE,RG: J ETHNOPHARMACOL 4 2: 159-177 (1981) (DEPT MICROBIAL UNIV SRI LANKA PERADENIYA SRI LANKA)
T05894	MEDICINAL PLANT WEALTH OF THE KARIMNAGAR DISTRICT OF ANDHRA PRADESH. KAPOOR,SL: KAPOOR,LD: BULL MED ETHNOBOT RES 1 : 120-144 (1980) (NATIONAL BOTANIC GARDENS LUCKNOW UP 226 001 INDIA)
T06167	STUDY OF ANTIPARKINSONIAN ACTIVITY OF SEEDS OF MUCUNA PRURITA HOOK. NATH,C: GUPTA,GP: BHARGAVA,KP: LAKSHMI,V: SINGH,S: POPLI,SP: INDIAN J PHARMACOL 13 : 94-95 (1981) (DEPT PHARMACOL KING GEORGE'S MED COLL LUCKNOW UP INDIA)

T06203	STUDIES ON CARBOHYDRATES AND AMINO ACIDS OF SOME NON-CULTIVATED LEGUMINOUS SEEDS. KATIYAR,SK: NIRANJAN,GS: J INDIAN CHEM SOC 58 : 98-100 (1981) (DEPT CHEM DAVANAND VEDIC COLLEGE ORAI UP INDIA)
T06320	EVALUATION OF THE ROLE OF RUMALAYA AND GERIFORTE IN CHRONIC ARTHRITIS-A PRELIMINARY STUDY. DABRAL,PK: SHARMA,RK: PROBE 22 2: 120-127 (1983) (DEPT ORTHOPEDICS M.L.B. MEDICAL COLLEGE JHANSI UP INDIA)
T06797	CHEMICAL EXAMINATION AND BIOLOGICAL EVALUATION OF PROTEINS ISOLATED FROM SOME WILD LEGUMES. NIRANJAN,GS: KATIYAR,SK: J INDIAN CHEM SOC 58 : 70-72 (1981) (DEPT CHEM D.V.COLLEGE ORAI UP INDIA)
T07201	SOME FOLK MEDICINES OF DANGS, GUJARAT STATE. JOSHI,MC: PATEL,MB: MEHTA,PJ: BULL MED ETHNOBOT RES 1 : 8-24 (1980) (REGIONAL RES INST JUNAGARH GUJURAT INDIA)
T07452	L-DIHYDROXYPHENYLALANINE (L-DOPA) IN MUCUNA SEEDS. LUBIS,I: SASTRAPRADJA,S: LUBIS,SHA: SASTRAPRADJA,D: ANN BOGOR 7 3: 107-114 (1981) (NATL BIOL INST BOGOR INDONESIA)
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