# Technical Data Report

for

# BITTER MELON

(Momordica charantia)





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## Bitter Melon

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Family: Cucurbitaceae Genus: Momordica Species: charantia

**Synonyms:** Momordica chinensis, M. elegans, M. indica, M. operculata, M. sinensis, Sicyos fauriei

Common names: Bitter melon, papailla, melao de sao caetano, bittergourd, sorosi, a'jayib al maasi, assorossie, balsam apple, balsam pear, chin li chih, ejinrin gule khandan, fu-kua, karela, k'u kua kurela, kor-kuey, ku gua, lai p'u t'ao, pava-aki, salsamino, sorci, sorossi, sorossie, sorossies, pare, peria laut, peria

Part Used: Whole plant, Fruit, Seed

Bitter melon grows in tropical areas, including parts of the Amazon, east Africa, Asia, and the Caribbean, and is cultivated throughout South America as a food and medicine. It's a slender, climbing annual vine with long-stalked leaves and yellow, solitary male and female flowers borne in the leaf axils. The fruit appears as a warty gourd, usually oblong and resembling a small cucumber. The young fruit is emerald green, turning to orange-yellow when ripe. At maturity the fruit splits into three irregular valves that curl backwards and release numerous brown or white seeds encased in scarlet arils. The Latin name Momordica means "to bite" (referring to the jagged edges of the leaf, which appear as if they have been bitten). All parts of the plant, including the fruit, taste very bitter.

In the Amazon, local people and indigenous tribes grow bitter melon in their gardens for food and medicine. They add the fruit and/or leaves to beans and soup for a bitter or sour flavor; parboiling it first with a dash of salt may remove some of the bitter taste. Medicinally, the plant has a long history of use by the indigenous peoples of the Amazon. A leaf tea is employed for diabetes; as a carminative for colic; topically for sores, wounds, and infections; internally and externally for worms and parasites; as an emmenagogue; and as an antiviral for measles, hepatitis, and feverish conditions.

In Brazilian herbal medicine, bitter melon is used for tumors, wounds, rheumatism, malaria, leucorrhea, inflammation, menstrual problems, diabetes, colic, fevers, worms, to induce abortions, and as an aphrodisiac. It is also employed topically for skin problems, vaginitis, hemorrhoids, scabies, itchy rashes, eczema, and leprosy. In Mexico the entire plant is used for diabetes and dysentery; the root is a reputed aphrodisiac. In Peruvian herbal medicine, the leaf or aerial parts of the plant are used to treat measles, malaria, and all types of inflammation. In Nicaragua the leaf commonly is used for stomach pain, diabetes, fevers, colds, coughs, headaches, malaria, skin complaints, menstrual disorders, aches and pains, hypertension, infections, and as an aid in childbirth.

Many in vivo clinical studies have demonstrated the relatively low toxicity of all parts of the bitter melon plant when ingested orally. However, toxicity and even death in laboratory animals has been reported when extracts are injected intravenously or intraperitoneally (with the fruit and seed demonstrating greater toxicity than the leaf or aerial parts of the plant). Other studies have shown ethanol and water extracts of the fruit and leaf (ingested orally) to be safe during pregnancy.<sup>2,3</sup> The seeds, however, have demonstrated the ability to induce abortions in rats and mice, and the root has been documented with a uterine stimulant effect in animals. 4-7 The fruit and leaf of bitter melon has demonstrated an in vivo antifertility effect in female animals;8,9 in male animals, it was reported to affect the production of sperm negatively.<sup>10</sup>

Bitter melon contains an array of novel and biologically active phytochemicals including triterpenes, proteins and steroids. In numerous studies, at least three different groups of constituents found in all parts of bitter melon have clinically demonstrated hypoglycemic properties (blood sugar lowering) or other actions of potential benefit against diabetes mellitus. 11-20 These hypoglycemic chemicals include a mixture of steroidal saponins known as charantins, insulin-like peptides, and alkaloids. The hypoglycemic effect is more pronounced in the fruit of bitter melon where these chemicals are in greater abundance. To date, close to 100 *in vivo* studies have demonstrated the blood glucose-lowering effect of this bitter fruit. The fruit has also shown the ability to enhance cells' uptake of glucose, 21 to promote insulin release, and potentiate the effect of insulin. 22,23 In other *in vivo* studies, bitter melon fruit and/or seed has been shown to reduce total cholesterol and triglycerides in both the presence and absence of dietary cholesterol. Also in one study, elevated cholesterol and triglyceride levels in diabetic rats were returned to normal after 10 weeks of treatment.

A novel phytochemical in bitter melon has clinically demonstrated the ability to inhibit an enzyme named *guanylate cyclase*. This enzyme is thought to be linked to the pathogenesis and replication of not only psoriasis, but leukemia and cancer as well.<sup>26-32</sup> Other phytochemicals that have been documented with cytotoxic activity are a group of ribosome-inactivating proteins named *alpha*- and *beta-momorcharin, momordin,* and *cucurbitacin B*. A chemical analog of bitter melon proteins was developed and named MAP-30 and its inventors reported that it was able to inhibit prostate tumor growth.<sup>33</sup> The phytochemical momordin has clinically demonstrated cytotoxic activity against Hodgkin's lymphoma *in vivo*,<sup>34</sup> and several other *in vivo* studies have demonstrated the cytostatic and antitumor activity of the entire plant of bitter melon. In one study, a water extract blocked the growth of rat prostate carcinoma;<sup>31</sup> another study reported that a hot water extract of the entire plant inhibited the development of mammary tumors in mice.<sup>35</sup> Numerous *in vitro* studies have also demonstrated the anti-cancerous and anti-leukemic activity of bitter melon against numerous cell lines including liver cancer, human leukemia, melanoma and solid sarcomas.<sup>28,36-38</sup>

Bitter melon (and several of its isolated phytochemicals) also has been documented with *in vitro* antiviral activity against numerous viruses including Epstein-Barr, herpes, and HIV viruses.<sup>39</sup> In an *in vivo* study, a leaf extract demonstrated the ability to increase resistance to viral infections as well as to provide an immunostimulant effect in humans and animals (increasing interferon production and natural killer cell activity).<sup>40</sup> Two proteins known as alpha- and beta-momorcharin (which are present in the seeds, fruit, and leaves) have been reported to inhibit the HIV virus *in vitro*.<sup>41-43</sup> In one study, HIV-infected cells treated with alpha- and beta-momorcharin showed a nearly complete loss of viral antigen while healthy cells were largely unaffected.<sup>43</sup> In 1996 the inventors of the chemical protein analog MAP-30 filed a U.S. patent, stating it was "useful for treating tumors and HIV infections . . . In treating HIV infections, the protein is administered alone or in conjunction with conventional AIDS therapies."<sup>44</sup> Another clinical study showed that MAP-30's antiviral activity was also relative to the herpes virus *in vitro*.<sup>45</sup>

In addition to these properties, leaf extracts of bitter melon have clinically demonstrated broad spectrum antimicrobial activity. Various water, ethanol, and methanol extracts of the leaves have demonstrated *in vitro* antibacterial activities against *E. coli*, *Staphylococcus*, *Pseudomonas*, *Salmonella*, *Streptobacillus and Streptococcus*;<sup>46-49</sup> an extract of the entire plant was shown to have antiprotozoal activity against *Entamoeba histolytica*.<sup>50</sup> The fruit and fruit juice has demonstrated the same type of antibacterial properties and, in another study, a fruit extract has demonstrated activity against the stomach ulcer-causing bacteria *Helicobacter pylori*.<sup>51</sup>

Over the years scientists have verified many of the traditional uses of this bitter plant that continues to be an important natural remedy in the natural health practitioner's medicine chest. Bitter melon capsules and tinctures are becoming more widely available in the U.S. and are employed by natural health practitioners for diabetes, viruses, colds and flu, and psoriasis.

Concentrated fruit or seed extracts can be found in capsules and tablets, as well as whole herb/vine powders and extracts in capsules and tinctures.

**Documented Properties and Actions:** Anthelmintic, antibacterial, antibiotic, antidiabetic, antiinflammatory, antileukemic, antimicrobial, antimutagenic, antimycobacterial, antioxidant, antitumor, antiulcer, antiviral, aperitive, aphrodisiac, astringent, carminative, cytostatic, cytotoxic, depurative, hormonal, hypocholesterolemic, hypotensive, hypotriglyceridemic, hypoglycemic, immunostimulant, insecticidal, lactagogue, laxative, purgative, refrigerant, stomachic, styptic, tonic, vermifuge

Main Phytochemicals: Alkaloids, charantin, charine, cryptoxanthin, cucurbitins, cucurbitacins, cucurbitanes, cycloartenols, diosgenin, elaeostearicacids, erythrodiol, galacturonicacids, gentisic acid, goyaglycosides, goyasaponins, guanylate cyclase inhibitors, gypsogenin, hydroxytryptamines, karounidiols, lanosterol, lauric acid, linoleic acid, linolenic acid, momorcharasides, momorcharins, momordenol, momordicilin, momordicins, momordicinin, momordicosides, momordin, momordolo, multiflorenol, myristic acid, nerolidol, oleanolic acid, oleic acid, oxalic acid, pentadecans, peptides, petroselinic acid, polypeptides, proteins, ribosome-inactivating proteins, rosmarinic acid, rubixanthin, spinasterol, steroidal glycosides, stigmasta-diols, stigmasterol, taraxerol, trehalose, trypsin inhibitors, uracil, vacine, v-insulin, verbascoside, vicine, zeatin, zeatin riboside, zeaxanthin, zeinoxanthin

**Traditional Remedy:** One-half to 1 cup of a standard leaf or whole herb decoction 1–2 times daily or 1–3 ml of a 4:1 tincture twice daily. One to 2 grams of powdered leaf in tablets or capsules daily can be substituted if desired. The traditional South American remedy for diabetes is to juice 1–2 fresh bitter melon fruits and drink twice daily. For seed or fruit extracts in capsules or tinctures, follow the labeled instructions.

**Contraindications:** Bitter melon traditionally has been used as an abortive and has weak uterine stimulant activity; therefore, it is contraindicated during pregnancy.

This plant has been documented to reduce fertility in both males and females and should therefore not be used by those undergoing fertility treatment or seeking pregnancy.

The active chemicals in bitter melon can be transferred through breast milk; therefore, it is contraindicated in women who are breast feeding.

All parts of bitter melon (especially the fruit and seed) have demonstrated in numerous *in vivo* studies that they lower blood glucose levels. As such, it is contraindicated in persons with hypoglycemia. Diabetics should check with their physicians before using this plant and use with caution while monitoring their blood sugar levels regularly.

Although all parts of the plant have demonstrated active antibacterial activity, none have shown activity against fungi or yeast. Long-term use of this plant may result in the die-off of friendly bacteria with resulting yeast/candida opportunistic overgrowth. Cycling off the use of the plant (every 30 days for one week) may be warranted, and adding probiotics to the diet may be beneficial if this plant is used for longer than 30 days.

The fruit and seed of bitter melon have demonstrated (in animal studies) to lower blood cholesterol levels. Persons on medications to lower blood cholesterol should monitor their cholesterol levels.

**Drug Interactions**: May potentiate insulin and anti-diabetic drugs.

May potentiate cholesterol-lowering drugs.

## WORLDWIDE ETHNOBOTANICAL USES

Country	Uses
Brazil	Abortifacient, anthelmintic, aphrodisiac, burn, catarrh, colic, dermatosis, diabetes, diarrhea, eczema, emetic, emmenagogue, emollient, fever, febrifuge, hemorrhoids, hepatitis, hypoglycemic, inflammation (liver), leprosy, leucorrhoea, leukemia, malaria, menstrual colic, pain, pruritus, purgative, rheumatism, scabies, skin, tumor, vaginitis, vermifuge, wound,
China	Aphrodisiac, cancer (breast), diabetes, food, glucosuria, halitosis, hematuria, polyuria, refrigerant
Colombia	Bite (snake), malaria
Cuba	Anemia, colitis, emmenagogue, fever, hepatosis, hypoglycemic, kidney (stone), sterility (female), vermifuge
Ghana	Aphrodisiac, dysentery, fever, gonorrhea
Haiti	Anemia, appetite stimulant, dermatosis, eye, fever, insecticide, laxative, liver, skin, rage, rhinitis
India	Abortifacient, anthelmintic, bite(snake), contraceptive, diabetes mellitus, dysmenorrhea, eczema, emmenagogue, fat loss, fever (malarial), galactagogue, gout, hydrophobia, hyperglycemia, jaundice, kidney (stone), laxative, leprosy, leucorrhea, liver, piles, pneumonia, psoriasis, purgative, rheumatism, scabies, skin, tonic, vegetable
Mexico	Aphrodisiac, burn, diabetes, dysentery, purgative, scabies, sore, vermifuge
Malaya	Abdomen, asthma, burn, dermatosis, diarrhea, headache, scald, sprue, stomachache, vermifuge,
Nicaragua	Ache, ache (head), anemia, blood, childbirth, cold, cough, diabetes, fever, hypertension, infection, malaria, pain, pain (belly), pain (menstrual), pregnancy, purgative, rash, lung, skin, tonic
Panama	Cold, emmenagogue, diabetes, fever, gallbladder, hypertension, insecticide, malaria, pruritus
Peru	Colic, contusions, diabetes, diarrhea, emetic, emmenagogue, febrifuge, hepatitis, inflammation, lung, malaria, measles, purgative, skin (sores), suppurative, vermifuge, wound
Trinidad	Diabetes, dysentery, fever, hypertension, malaria, rheumatism, vermifuge

Country	Uses
Elsewhere	Abdomen, abortifacient, allergy, amoeba, anemia, anthelmintic, appetite stimulant, arthritis, asthma, astringent, antibiotic, aphrodisiac, boil, burn, bilious, bladder, cancer, cancer (breast), carminative, cold, colic, colitis, cough, catarrh, cicatrizant, chilblain, childbirth, constipation, contraceptive, depurative, diabetes, diarrhea, dyspepsia, dysentery, dysmenorrhea, earache, emetic, emmenagogue, eruption, eye (veterinary), fever, flatulence, flu, food, gout, halitosis, headache, heart, hemorrhoids, hepatitis, hyperglycemia, hypertension, hypoglycemic, itch, indigestion, infection, inflammation, insecticide, jaundice, kidney (stones), lactagogue, laxative, leprosy, liver, malignancy, night blindness, pain (intestine), phlegm, pile, poison, pruritus, psoriasis, purgative, pyrexia, malaria, menstrual abnormalities, menstrual suppression, refrigerant, rheumatism, ringworm, roundworms, skin, skin (fungal), snakebite, soap, sore, sore (mouth), spleen, splenitis, stomachache, stomachic, stone, styptic, throat (sore), thrush, tiredness, tonic, ulcer (malignant), ulcer (peptic) urethritis, vermifuge, wound

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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 Bitter Melon (Momordica charantia) Leaf / Plant / Vine

Plant Part / Location	Documented Ethnomedical Use	Type Extract / Route	Used By	Ref #
Leaf Africa	Used for colic.	Not Stated / Oral	Human Adult	ZZ1049
Vine Bahamas	Used as an emmenagogue and to induce abortion.	Hot H2O Ext / Oral	Human Female	T05032
Entire Plant Belize	Used for skin conditions, infections, infestations of ticks and chiggers and stubborn sores and wounds.	Decoction / External	Human Adult	ZZ1019
Entire Plant Belize	Used to treat diabetes. Used as a blood and organ cleanser.	Not stated / Oral	Human Adult	ZZ1019
Leaf + Vine Belize	Used to prevent intestinal parasites, amoebas, anemia, tiredness, constipation, delayed menses, skin problems and painful periods.	Decoction / Oral	Human Adult	ZZ1019
Leaf Belize	Raw leaves chewed for sore throat and mouth sores.	Raw / Oral	Human Adult	ZZ1019
Leaf Belize	Used for diabetes.	Hot H2O Ext / Oral	Human Adult	T05011
Vine Bimini	Used for diabetes, fevers and as an abortifacient.	Hot H2O Ext / Oral	Human Adult	T00359
Meristem Brazil	Used as a vermifuge.	Not Stated / External	Human Adult	K18765
Entire Plant Brazil	Used against colic and fevers.	Tincture / Oral	Human Adult	A00499
Entire Plant Brazil	Used as a vermifuge and febrifuge.	Decoction / Oral	Human Adult	T15975
Entire Plant Brazil	Used for eczema. Used for fevers and as a substitute for quinine. Used for hemorrhoids.	Not stated / External Tincture / Not stated Infusion / Not stated	Human Adult Human Adult Human Adult	ZZ1002
Leaf Brazil	Used for leucorrhea, colic, worms, rheumatism and menstrual problems. Used for scabies.	Not Stated / Oral Juice / External	Human Adult Human Adult	ZZ1002
Leaf Brazil	Used as a malaria remedy and for the treatment of hepatitis.	Infusion / Oral	Human Adult	L15570
Leaf Brazil	Used to treat rheumatism. Cataplasm of the fresh leaves is applied to treat leprosy	H2O Ext / Oral Cataplasm / External	Human Adult Human Adult	A00499
Leaf Brazil	Used for fever, itch and sores.	Decoction / Oral	Human Adult	L04137

Plant Part / Location	Documented Ethnomedical Use	Type Extract / Route	Used By	Ref #
Leaf Brazil	Used for leucorrhea diabetes; as an emmenagogue and vermifuge. Used for dermatosis. Used for hemorrhoids.	Infusion / Oral Leaf / External Fruit / Bath	Human Adult Human Adult Human Adult	ZZ1096
Leaf Brazil	Used for leukemia, diabetes, menstrual colic; as an emollient and anthelmintic. Used as a purgative and employed to combat scabies.	Infusion / Oral Juice / Oral	Human Adult	ZZ1099
Stem Brazil	Used for fevers and malaria.	Decoction / Oral	Human Adult	K07977
Fruit + Leaf + Stem Brazil	Used as a purgative, febrifuge. Used for leucorrhea, catarrh, rheumatism, liver inflammation, diabetes, abdominal colic. Used for problems of the skin, burns and hemorrhoids.	Hot H2O Ext / Oral Hot H2O Ext / External	Human Adult Human Adult	ZZ1093
Stem + Leaf Brazil	Used as a febrifuge, for fevers, antirheumatic and anthelmintic. Used for rheumatism, leucorrhea and vaginitis.	Infusion / Oral Decoction / External	Human Adult	ZZ1007
Aerial Parts Colombia	Used for snakebite.	Infusion / External	Human Adult	L15991
Leaf Costa Rica	Used as an emmenagogue.	Not stated / Oral	Human Female	T01287
Entire Plant Cuba	Used to treat sterility in women.	Not stated	Human Female	A00115
Leaf Cuba	Used as an anti-anemic, hypoglycemic and vermifuge.	Not stated / Oral	Human Adult	K27017
Vine Curacao	Decocted with sugar; drunk for high blood pressure.	Hot H2O Ext / Oral	Human Adult	A05449
Aerial Parts England	Used for diabetes.	Aerial Parts / Oral	Human Adult	L05182
Leaf Juice Fiji	Used for hypertension, dysentery and diabetes.	Juice / Oral	Human Adult	T10632
Leaf Guatemala	Used for diabetes, stomachaches, hepatitis, malaria and urinary problems.	Decoction / Oral	Human Adult	K28434
Leaf Guatemala	Used for ringworm and skin fungal diseases.	Infusion / Not stated	Human Adult	M27151
Leaf Guinea	Used as an anthelmintic.	H2O Ext / Rectal	Human Adult	K27039
Plant Juice Haiti	Used for fever and a deficiency of appetite. Used for eye affection.	Juice / Oral Juice / Ophthalmic	Human Adult	T13846
Aerial Parts Haiti	Used for fever.	Decoction / Oral	Human Adult	T13846
Entire Plant Haiti	Used against fever and to stimulate the appetite.	Hot H2O Ext / Oral	Human Adult	T04647

Plant Part / Location	Documented Ethnomedical Use	Type Extract / Route	Used By	Ref #
Entire Plant Haiti	Used for cutaneous affection. Used for deficiency of appetite, liver troubles, rage, and anemia. Used for eye affection.	Plant / External Decoction / Oral H2O Ext / Ophthalmic	Human Adult Human Adult Human Adult	T13846
Entire Plant India	Used as an abortifacient and emmenagogue.	Juice / Oral	Human Female	A04132
Leaf India	Used as a purgative in children.	Leaves / Oral	Human Child	K11282
Leaf India	Used as an anthelmintic.	Hot H2O Ext / Oral	Human Adult	W00384
Leaf India	Used as a galactagogue. Used as an emmenagogue in dysmenorrhea. Used for leprosy, piles and jaundice. Used as an anthelmintic.	Butanol Ext / Oral Hot H2O Ext / Oral Hot H2O Ext / Oral Juice / Oral	Human Female Human Female Human Adult Human Adult	T05236
Flower + Leaf India	Used regularly each month to avoid childbirth through early abortion.	Hot H2O Ext / Oral	Human Female	A04902
Vine India	Used as an emmenagogue.	Hot H2O Ext / Oral	Human Female	A04179
Leaf Ivory Coast	Used as an aphrodisiac. Leaves crushed and juice drunk with palm wine.	Juice / Oral	Human Male	A04941
Entire Plant Jamaica	Used as bush tea.	Hot H2O Ext / Oral	Human Adult	W04546
Whole Plant Japan	Used for constipation, headache and skin ailments.	Not Stated / Oral	Human Adult	ZZ1049
Entire Plant Mexico	Used to treat diabetes. Used to treat dysentery.	Decoction / Oral Decoction / Oral	Human Adult Human Adult	K16948
Leaf Mexico	Used as an aphrodisiac.	Hot H2O Ext / Oral	Human Male	A04179
Leaf Juice Nepal	Used as a purgative and an emetic.	Juice / Oral	Human Adult	A00020
Leaf Nicaragua	Used for belly pain, to build up the blood, for diabetes, fever, colds, cough, childbirth, headache, malaria, menstrual pain and as a purgative. Used for skin disease.	Leaves / Oral Leaves / Not stated	Human Adult Human Adult	K26492

Plant Part / Location	Documented Ethnomedical Use	Type Extract / Route	Used By	Ref #
Leaf Nicaragua	Used for skin rashes and aches and pains.	Decoction / External	Human Adult	K27070
	Used as a tonic. Used for anemia, colds, fever, cough, malaria, hypertension, infections, diabetes and for childbirth	Decoction / Oral	Human Adult	
Leaf + Stem Nicaragua	Used for skin rashes and sores. Used for aches and pains, childbirth and pregnancy, for fever, hypertension, infections, diabetes, respiratory and pulmonary disorders, malaria and as a tonic for anemia.	Decoction / External  Decoction / Oral	Human Adult Human Adult	L16047
Leaf Nigeria	Eaten as a pot herb.	Leaves / Oral	Human Adult	T06510
Leaf Nigeria	Used to treat breast cancer.	Not Stated	Human Adult	T07722
Entire Plant Nigeria	Used for malignant ulcers.	Plant / External	Human Adult	T07722
Leaf Nigeria	Used to treat diarrhea. 15-20 leaves crushed into 2-3 glasses water. Filtrate taken orally with table salt to taste.	H2O Ext / Oral	Human Adult	K08933
Aerial Parts Panama	Used as an antihypertensive.	Infusion / Oral	Human Adult	L18181
Leaf Panama	Used as an antipyretic, choleretic and antidiabetic.	Hot H2O Ext / Oral	Human Adult	T01287
Leaf Peru	Used for diabetes.	H2O Ext / Oral	Human Adult	ZZ1008
Leaf Peru	Used for inflammation.	Not Stated / Oral	Human Adult	ZZ1084
Leaf Peru	Used to treat measles. Used to treat sores. Used against malaria.	Decoction / Oral Decoction / External Infusion / Oral	Human Adult Human Adult Human Adult	L04137
Entire Plant Philippines	Used as a bath for newborns. Believed to remove disease-causing elements from the skin. Used for coughs in infants.	Decoction / External  Benzene Ext / Oral	Human Child Human Child	T10116
Leaf Philippines	Used as an antidiabetic.	Leaves / Oral	Human Adult	J17272
Leaf Philippines	Used for diabetes.	Decoction / Oral	Human Adult	J16266
Vine Philippines	Used as a powerful emmenagogue.	Hot H2O Ext / Oral	Human Female	A04179
Vine Puerto Rico	Used for diabetes.	Hot H2O Ext / Oral	Human Adult	A00637
Vine Puerto Rico	Used as an antidiabetic.	Hot H2O Ext / Oral	Human Adult	A04179

Plant Part / Location	Documented Ethnomedical Use	Type Extract / Route	Used By	Ref #
Vine Puerto Rico	Vine is rubbed on skin to relieve itching.	Plant / External	Human Adult	A06027
Entire Plant Puerto Rico	Used for diabetes.	Hot H2O Ext / Oral	Human Adult	A14280
Leaf Rodrigues Islands	Used for indigestion, flatulence and diabetes.	Decoction / Oral	Human Adult	K26851
Entire Plant Senegal	Used medicinally.	Hot H2O Ext / Oral	Human Adult	T09739
Entire Plant Senegal	Used as a cicatrizant. Used for intestinal pain.	Hot H2O Ext / External Hot H2O Ext / Oral	Human Adult	T12145
Entire Plant Surinam	Used for appetite, as a tonic, for colds, fever, arthritis, hypertension, diabetes, kidney stones and colic.	Infusion / Oral	Human Adult	J12451
Entire Plant Thailand	Used as an antipyretic.	Hot H2O Ext / Oral	Human Adult	W3022A
Leaf Thailand	Said to be edible.	Plant / Oral	Human Adult	L12243
Leaf Thailand	Eaten as a food.	Leaves / Oral	Human Adult	K25144
Leaf Thailand	Used as an antipyretic.	Hot H2O Ext / Oral	Human Adult	W03804
Leaf Togo	Used for malaria.	Decoction / Oral	Human Adult	M23556
Leaf Trinidad	Used to treat diabetes.	Not Stated / Oral	Human Adult	J19078
Fruit + Leaf + Stem Trinidad	Used for diabetes (non insulin-dependent).	Decoction / Oral	Human Adult	M23565
Leaf West Indies	Used as an emmenagogue.	Hot H2O Ext / Oral	Human Female	A00115
Leaf West Indies	Used for diabetes, hypertension, worms and malarial fever.	Hot H2O Ext / Oral	Human Adult	T00701
Leaf West Indies	Used to make a bitter-tasting tea for its anti-diabetic properties.	Infusion / Oral	Human Adult	M23109
Vine West Indies	Used regularly each month by women to avoid childbirth by early abortion.	Hot H2O Ext / Oral	Human (pregnant)	A04179
Entire Plant West Indies	Used as a laxative. Infusion alone or with <i>Bidens reptans</i> for menstrual troubles. Used as an abortifacient.	Hot H2O Ext / Oral H2O Ext / Oral H2O Ext / Oral	Human Adult Human Female Human (pregnant)	T00701
Aerial Part West Indies	Fresh, dried or boiled vine with salt added given to women before or after childbirth.	Hot H2O Ext / Oral	Human (pregnant)	T00701

## Ethnomedical Information on Bitter Melon (Momordica charantia) Fruit / Seed / Root

Plant Part / Location	Documented Ethnomedical Use	Type Extract / Route	Used By	Ref #
Fruit Asia	Traditionally consumed in large amounts for the treatment of diabetes.	Fruit / Oral	Human Adult	M23109
Fruit Australia	Bitter, but edible after steeping in salt water and cooking. Used as an anthelmintic and emetic.	Plant / Oral	Human Adult	A05524
Fruit Bimini	Eaten as food.	Fruit / Oral	Human Adult	T00359
Fruit Brazil	Used to treat wounds. Fruit juice mixed with ricinus oil in equal parts and serves as an anthelmintic when used internally.	Hot H2O Ext / External Juice / Oral	Human Adult Human Adult	A00499
Fruit Brazil	Used for tumors.	Not Stated	Human Adult	ZZ1049
Fruit + Leaf Brazil	Used as a vermifuge.	Not Stated	Human Adult	ZZ1002
Fruit Brazil	Used as an anthelmintic and to lower blood sugar.	Fruit / Oral	Human Adult	ZZ1099
Fruit China	Used as a male aphrodisiac.	Decoction / Oral	Human Male	K29113
Fruit China	Used as a food.	Fruit / Oral	Human Adult	J18457
Fruit China	Used for diabetes mellitus both mild-moderate chronic cases. Used to reduce glucose in the blood and urine and the frequency of urination.	Not Stated / Oral	Human Adult	ZZ1049
Fruit Colombia	Used for snakebite.	Infusion / External	Human Adult	L15991
Fruit + Leaf Cuba	Used as an emmenagogue.	Hot H2O Ext / Oral	Human Adult(female)	W02855
Fruit England	Used for diabetes.	Fruit / Oral	Human Adult	L05182
Fruit England	Used for diabetes. Used as an ingredient in curries eaten by immigrants.	Hot H2O Ext / Oral Fruit / Oral	Human Adult	M22031
Fruit Fiji	Used for stomach worms, fever, phlegm and diabetes. Fruits are fried or curried.	Fruit / Oral	Human Adult	T10632
Fruit Guadeloupe	Reported to have hypoglycemic activity.	Not stated	Not Stated	T07660
Fruit India	Used for diabetes.	Hot H2O Ext / Oral	Human Adult	A14379

Plant Part / Location	Documented Ethnomedical Use	Type Extract / Route	Used By	Ref #
Fruit India	Used for diabetes.	Decoction / Oral	Human Adult	A14458
Fruit India	Used for diabetes.	Decoction / Oral	Human Adult	L15996
Fruit India	Used for diabetes.	Hot H2O Ext / Oral	Human Adult	M22671
Fruit India	Used for hydrophobia. <i>Notonia grandiflora</i> juice is mixed with bitter gourd powder and taken internally.	Powder / Oral	Human Adult	M27166
Fruit India	Used as an abortifacient in large doses.	Fruit / Oral	Human (pregnant)	A00115
Fruit India	Used as a remedy for diabetes mellitus.	Hot H2O Ext / Oral	Human Adult	J03769
Fruit India	Used as an antivenin.	Oil Ext / External or Juice / Not stated	Human Adult	K25892
Fruit India	Used for diabetes.	Decoction / Oral	Human Adult	L05654
Fruit India	Used as an antileprotic. Used as an anthelmintic.	Not stated Not Stated / Oral	Human Adult Human Adult	W00113
Fruit India	Used as an anthelmintic.	Fruit / Oral	Human Adult	W00384
Fruit India	Used as a common vegetable.	Fruit / Oral	Human Adult	K17959
Fruit India	Used for jaundice, piles, leprosy, rheumatism and gout. Used as a tonic and laxative, dysmenorrhea and as a emmenagogue.	Not Stated / Oral	Human Adult	T05236
Fruit India	Commonly eaten as a vegetable. Used for diabetes mellitus.	Fruit / Oral Juice / Oral	Human Adult Human Adult	W00678
Fruit Juice India	Used to treat diabetes. 5 ml of fruit juice mixed with 5 to 10 fruits of black pepper powder is given early in the morning 3-6 weeks.	Fruit Juice / Oral	Human Adult	K25290
Fruit Juice India	Used for malarial fevers.	Juice / Oral	Human Adult	M23219
Fruit Iraq	Used for leprosy. Used as an anthelmintic.	Not Stated / Not stated Not Stated / Oral	Human Adult Human Adult	W00113
Fruit Jamaica	Used for diabetes.	Not Stated / Oral	Human Adult	K20280
Fruit Jamaica	Used for diabetes.	Hot H2O Ext / Oral	Human Adult	T07170
Fruit Nigeria	Eaten as a pot herb.	Fruit / Oral	Human Adult	T06510
Fruit + Leaf Nigeria	Used as a laxative and anthelmintic.	Decoction / Oral	Human Adult	K08933

Plant Part / Location	Documented Ethnomedical Use	Type Extract / Route	Used By	Ref #
Fruit + Leaf Nigeria	Used as an anthelmintic.	Juice / Oral	Human Adult	T07722
Fruit Pakistan	Used for diabetes.	Fruit / Oral	Human Adult	L03572
Fruit Pakistan	Eaten as a food.	Fruit / Oral	Human Adult	H19648
Fruit Juice Panama	Used as a malaria preventative.	Not Stated / Oral	Human Adult	ZZ1049
Fruit Peru	Used as a purgative. Used for contusions, respiratory conditions and wounds.	Hot H2O Ext / Oral Hot H2O Ext / External	Human Adult Human Adult	T15323
Fruit Peru	Used to treat hepatitis. Used as a suppurative. Used as a vermifuge, an emetic and a febrifuge. Used as an emmenagogue.	Infusion / Oral Not Stated / External Not Stated / Oral Not Stated / Oral	Human Adult Human Adult Human Adult Human Female	L04137
Fruit Peru	Used for diarrhea and colic.	Juice / Oral	Human Adult / Child	ZZ1008
Fruit Saudi Arabia	Used for diabetes, rheumatism, gout, liver disorders, spleen disorders, pyrexia, colic, flatulence and menstrual suppression.	Hot H2O Ext / Oral	Human Adult	M22673
Fruit Saudi Arabia	Used for diabetes, rheumatism, gout, liver disorders, spleen disorders, pyrexia, colic and flatulence. Used for menstrual suppression.	Hot H2O Ext / Oral	Human Adult Human Female	T10348
Fruit Sri Lanka	Used as a hypoglycemic agent.	Hot H2O Ext / Oral	Human Adult	T08396
Fruit Sri Lanka	Used as an anthelmintic.	Not Stated / Oral	Human Adult	W00113
Fruit Juice Sri Lanka	Used to treat diabetes mellitus.	Juice / Oral	Human Adult	K17959
Fruit Juice Sri Lanka	Used for diabetes.	Hot H2O Ext / Oral	Human Adult	M17655
Fruit Thailand	Said to be edible.	Plant / Oral	Human Adult	L12243
Fruit Thailand	Used as an anti-inflammatory.	Decoction / Oral	Human Adult	T16711
Fruit Thailand	Used for diabetes.	Hot H2O Ext / Oral	Human Adult	W01792
Fruit Thailand	Used as a food.	Fruit / Oral	Human Adult	J18457
Fruit Turkey	Used as a treatment for peptic ulcers.	Not Stated / Oral	Human Adult	K11898
Fruit Turkey	Used as an antiallergic, antihepatic and antipruritic. Used as an anti-inflammatory.	Plant / Oral Plant / External	Human Adult Human Adult	K27792

Plant Part / Location	Documented Ethnomedical Use	Type Extract / Route	Used By	Ref #
Fruit Turkey	Used to treat ulcers.	Fruit / Oral	Human Adult	K18219
Fruit USA	Used as a remedy for hemorrhoids. Used to treat snakebite, leprosy, itching skin, burns and wounds.	Hot H2O Ext / Rectal Plant / External	Human Adult Human Adult	A04179
Fruit USA	Used for bacillary dysentery and to relieve chronic colitis. Used in large doses as an abortifacient.	Plant / Oral Plant / Oral	Human Adult Human(pregnant)	A04179
Fruit Juice USA	Used to treat burns. Used for thrush. Used as a substitute for quinine in intermittent fever, liver and spleen ailments, gout, menstrual difficulties, and rheumatism. Used as a vermifuge and purgative.	Plant / External Plant / Oral  Hot H2O Ext / Oral	Human Adult Human Adult Human Adult	A04179
Fruit Virgin Islands	Used for a bad heart and diabetes.	Fruit / Oral	Human Adult	W00903
Fruit West Africa	Used as an antidiabetic remedy.	Not Stated / Oral	Human Adult	T02106
Fruit West Africa	Used as an abortifacient.	Fruit / Oral	Human (pregnant)	W00113
Fruit West Indies	Juice used for diabetes.	Juice / Oral	Human Adult	T00701
Fruit Not Stated	Used as insecticide. Used to treat colds. Unripe fruit eaten. Used as a purgative. Used as an anthelminthic. Dose in brazil is two or three seeds. Used as an abortifacient.	Fruit / Not stated Fruit / Oral Not Stated / Oral Plant Juice / Oral Not Stated / Oral	Human Adult Human Adult Human Adult Human Adult Human (pregnant)	K19563
Fruit Not Stated	Used to treat diabetes.	Not Stated / Oral	Human Adult	J13964
Root Africa	Used as an aphrodisiac.	Hot H2O Ext / Oral	Human Adult(male)	A04179
Root East Africa	Used as an abortifacient.	Hot H2O Ext / Oral	Human (pregnant)	W00113
Root Australia	Claimed to be abortifacient.	Hot H2O Ext / Oral	Human(pregnant)	A05524
Root Brazil	Claimed to be a purgative in small doses. Claimed to induce abortion. Claimed to have an aphrodisiac effect. Used as an emetic or vomitive in large doses.	Hot H2O Ext / Oral Hot H2O Ext / Oral Tincture / Oral Hot H2O Ext / Oral	Human Adult Human (pregnant) Human Male Human Adult	A00499
Roots + Leaf Brazil	Used for rheumatism and diarrhea.	Not Stated / Oral	Human Adult	ZZ1099
Root Ghana	Used for fever, possibly malaria.	Hot H2O Ext / Oral	Human Adult	T16158

Plant Part / Location	Documented Ethnomedical Use	Type Extract / Route	Used By	Ref #
Root India	Used for abortions up to the fifth month of pregnancy.	Hot H2O Ext / Oral	Human(pregnant)	T04748
Root India	Used to procure abortion.	Not stated	Human (pregnant)	W00002
Root India	Used as an abortifacient.	Hot H2O Ext / Oral	Human (pregnant)	W04510 W00384 A05825 A00115 A04179
Root India	Used as an abortifacient.	Decoction / Oral	Human (pregnant)	T14891
Root Mexico	Used as an aphrodisiac.	Not stated	Not Stated	A00136
Root Philippines	Used to produce abortions.	Hot H2O Ext / Oral	Human (pregnant)	A04179
Root Venezuela	Used as an antimalarial.	Hot H2O Ext / Oral	Human Adult	A04179
Root West Africa	Used as an abortifacient, together with the fruits or seeds.	Not Stated / Oral	Human (pregnant)	A00115
Seed Africa	Used for roundworm.	Not Stated / Oral	Human Adult	ZZ1049
Seed Brazil	Used as an anthelmintic.	Seeds / Oral	Human Adult	W00408
Seed India	Used as an anthelmintic.	Seeds / Oral	Human Adult	W00384
Seed India	Used for diabetes.	Hot H2O Ext / Oral	Human Adult	A14461
Seed India	Used as an anthelmintic.	Not Stated / Oral	Human Adult	T05236
Seed India	The seeds are boiled and the extremely bitter effusion is said to produce instantaneous vomiting.	Hot H2O Ext / Oral	Human Adult	T02487
Seed India	Used for diabetes, hepatic disorders, pain relief in gout and rheumatism.	Hot H2O Ext / Oral	Human Adult	M25712
Seed India	Used for diabetes.	Seeds / Oral	Human Adult	L15996
Shoots India	Used to treat pneumonia and leucorrhagia.	Shoots / Oral	Human Adult	K11282
Seed India	Used for diabetes, diabetes insipidus, and lithontriptics. Used to reduce fat.	Seeds / Oral	Human Adult	L04280
Seed Peru	Used for suppurations. Used for colic and as a vermifuge.	Hot H2O Ext / External Hot H2O Ext / Oral	Human Adult Human Adult	T15323

Plant Part / Location	Documented Ethnomedical Use	Type Extract / Route	Used By	Ref #
Seed Peru	Used for suppurative wounds. Seeds are crushed and made into a paste with pig butter.	Seed / External	Human Adult	ZZ1008
Seed West Indies	Used as an anthelmintic.	Seeds / Oral	Human Adult	T00701
Not Stated Bahamas	Used for colds, flu and fever.	Not Stated / Oral	Human Adult	ZZ1049
Not Stated Brazil	Used to treat malaria.	Not Stated / Oral	Human Adult	J14512
Not Stated Brazil	Used for abortion.	Not Stated / Oral	Human (pregnant)	L16798
Not Stated Colombia	Used for malaria.	Not Stated / Oral	Human Adult	ZZ1049
Not Stated Congo-Brazzaville	Used for menstrual irregularities.	Not Stated / Oral	Human Female	A04171
Not Stated Cuba	Used for colitis, fever and hepatosis. Used as a litholytic.	Not Stated / Oral	Human Adult	ZZ1049
Not Stated Guam	Used for malignant ulcers.	Not Stated / External	Human Adult	W00113
Not Stated Haiti	Used as an insecticide.	Not Sstated	Not Stated	T01287
Not Stated Honduras	Used as a depurative.	Not Stated / Oral	Human Adult	ZZ1049
Not Stated India	Used for scabies, psoriasis and other skin diseases.	Not Stated / Oral	Human Adult	ZZ1049
Not Stated Jamaica	Used for colds, constipation, dysmenorrhea, fever and stomachache.	Not Stated / Oral	Human Adult	ZZ1049
Not Stated Malaysia	Used as an abortifacient.	Hot H2O Ext / Oral	Human (pregnant)	A03602
Not Stated Puerto Rico	Used as an antidiabetic.	Not Stated / Oral	Human Adult	W00113
Not Stated Puerto Rico	Used for treatment of diabetes mellitus.	Hot H2O Ext / Oral	Human Adult	A01947
Not Stated Trinidad	Used for diabetes.	Not Stated / Oral	Human Adult	J18701
Not Stated Venezuela	Used as a tonic for colds and fever.	Not Stated / Oral	Human Adult	ZZ1049
Not Stated West Indies	Used as an abortifacient and monthly as a method of birth control.	Not Stated / Oral	Human Female	A03403

## Biological Activities for Extracts of Bitter Melon (Momordica charantia)

Extracts with the Leaf / Aerial Parts / Entire Plant

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Aerial Parts India	Toxicity Assessment (quantitative)	ETOH-H2O (1:1) Ext	IP Mouse	LD50= >1000 mg/kg	Active		T10126
Aerial Parts India	Toxicity Assessment (quantitative)	ETOH-H2O (1:1) Ext	IP Mouse	LD50= 681.0 mg/kg	Active		T02678
Entire Plant India	Toxicity Assessment (quantitative)	ETOH-H2O (1:1) Ext	IP Mouse	LD50= 681.0 mg/kg	Active		K09153
Entire Plant Thailand	Toxic Effect (general)	ETOH-H2O (1:1) Ext	GI Mouse SC Mouse	10.0 gm/kg 10.0 gm/kg	Inactive Inactive		R00001
Leaf Puerto Rico	Toxic Effect (general)	ETOH (95%) Ext	Oral Mice	500.0 mcg	Inactive		L12432
Entire Plant India	Toxic Effect (general)	Not stated	Oral Rat	0.02% 0.1% 0.5%	Inactive	No adverse influence on food intake, growth and organ weights seen. Hematologic parameters remained normal.	AM1031
Aerial Parts India	Abortifacient Effect	ETOH-H2O (1:1) Ext	Oral Rat (pregnant)	100.0 mg/kg	Inactive		T02678
Root India	Uterine Stimulant Effect	ETOH (95%) Ext	IV Guinea Pig	10.0 mcg/ml	Active	Uterus (non-pregnant).	W 04510
Leaf + Stem India	Hemorrhagic Effect	Not stated	IG Rat	Not stated	Active	Uterus (pregnant).	J11478
Leaf USA	Antifertility Effect	Juice	Oral Mouse (Female)	Not stated	Active		W02108
Leaf India	Abortifacient Effect	H2O Ext	Oral Rat (pregnant)	200.0 mg/kg	Inactive		W01362
Leaf India	Abortifacient Effect	ETOH (100%) Ext	IG Rat (pregnant)	200.0 mg/kg	Inactive		L11141
Aerial Parts India	Antiimplantation Effect	ETOH-H2O (1:1) Ext	Oral Rat (Female)	100.0 mg/kg	Inactive		T02678
Leaf India	Antiimplantation Effect	Hot H2O Ext	Oral Rat (Female)	500.0 mg/kg	Inactive		A04902

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf India	Antiimplantation Effect	ETOH(100%) Ext	Intragastric Rat (Female)	200.0 mg/kg	Inactive	vs. early pregnancy.	L11141
Leaf India	Antiimplantation Effect	Not stated	IP Rat (Female)	Not stated	Inactive		T14891
Leaf India	Embryotoxic Effect	H2O Ext	Oral Rat (Female)	200.0 mg/kg	Inactive		W01362
Leaf India	Embryotoxic Effect	Hot H2O Ext	Oral Rat (Female)	500.0 mg/kg	Inactive		A04902
Entire Plant West Indies	Growth Inhibitor Activity	Hot H2O Ext	Rat	2.0 mg	Active	Inhibition of fetal development.	A00706
Entire Plant	Antileukemic Activity	Acidic polysaccharide fraction	In ration Cats	2 mg	Active	Feline infectious leukemia. 60% improvement in symptoms in cats treated with extract for 3-6 months.	AM1074
Entire Plant	Antileukemic Activity	Alkaline polysaccharide fraction	IM Cats	0.5 ml	Active	Feline infectious leukemia. 80% improvement in symptoms in cats treated with extract for 3-6 months.	AM1074
Entire Plant West Indies	Antitumor Activity Antileukemic Activity	Hot H2O Ext	Oral Human Adult	15.0 ml	Active	Administered to one lymphatic leukemia patient. Caused a marked increase in hemoglobin content of blood and decrease in WBC. Dosing 3 times daily for 62 days.	A00706
Leaf Japan	Antitumor Activity	Hot H2O Ext	Oral Mouse	0.5%	Active	Mammary tumors.	AM1001
Entire Plant West Indies	Antitumor Activity	Hot H2O Ext	IP Rat	0.4 mg	W eak Activity	Sarcoma 180 (asc). Slight increase in lifespan.	A00706
Entire Plant USA	Antitumor Activity	H2O Ext	IP Mouse	Not stated	Active	P388 tumor cells.	T09137
Entire Plant	Antitumor Activity	Fraction: Alpha- momorcharin	Not stated	Not stated	Active		AM1042
Entire Plant	Antitumor Activity	Fraction: Alpha- momorcharin	Not stated	Not stated	Active	Inhibition of tumor growth. Related to its ribosome inhibiting activity.	AM1053

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Entire Plant	Antitumor Activity	Fraction: Beta- momorcharin	Cell Culture	Not stated	Active	Human squamous carcinoma of the tongue and larynx.	AM1055
Entire Plant	Antitumor Activity	Fraction: Beta- momorcharin	Not stated	Not stated	Active		AM1042
Entire Plant	Antitumor Activity	Fraction: Momordin	Cell Culture	IC50=10(-13) - 2.75 x 10(-11) M	Active	Inhibited protein synthesis in Hodgkin's disease and anaplastic large-cell lymphoma-derived CD30+ cell lines.	AM1065
Entire Plant	Antitumor Activity	Fraction: Momordin	Mouse	LD50=7mg/kg	Active	vs. mice xenografted with CD30+ human ALCL. 3 day treatment with extract started 24 hours after transplantation, prevented tumor development in 40% of cases and delayed tumor growth rate in others.	AM1065
Leaf Japan	Antiproliferation Activity	Hot H2O Ext	Oral Mouse	0.5%	Active	Uterine adenomyosis.	AM1001
Entire Plant Not stated	Cytostatic Activity	Aqueous Ext	Rat (prostate)	Not stated	Active	Blocked the growth of rat prostatic adenocarcinoma and (3H) thymidine incorporation into DNA.	AM1041
Entire Plant West Indies	Cytotoxic Activity	Hot H2O Ext	Cell Culture	4.0 mg/ml	Active	Hep2 cells.	A00706
Entire Plant	Cytotoxic Activity	Protein Fractuibs	Rat Mice	Not stated	Active Active	Prostate adenocarcinoma. Lymphoma.	AM1070
Entire Plant	Cytotoxic Activity	Fraction: Alpha- momorcharin	Cell Culture	Not stated	Active Active	Melanoma. Hepatoma.	AM1058
Entire Plant	Cytotoxic Activity	Fraction: Momordin	Cell Culture	AC50=1x10(-9) M	Active	Thy 1.1-expressing mouse lymphoma cell line AKR-A	AM1066
Entire Plant	Cytotoxic Activity	Fraction: Momordin	Cell Culture	AC50=3x10(-8) M	Inactive	Mouse lymphoma EL4 cells which lacked Thy 1.1 antigen	AM1066
Entire Plant	Cytotoxic Activity	Chromatographic Fraction	Cell Culture	Not stated	Active	Cells-BHK-21.	T08985
Entire Plant	Cytotoxic Activity	Fraction: Cucurbitacin B	Not stated	Not stated	Active		AM1051

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Entire Plant	Cytotoxic Activity	Fractions: Protein ext	IP Mice	8 mcg twice a week for 0-4 weeks	Active	Activated peritoneal exudate cells; demonstrated cytotoxicity to L1210, P388 and MOLT-4 tumor cells.	AM1033
Entire Plant	Metastasis Inhibition	Chromatographic Fraction	Cell Culture	Not stated	Active	Virus - vesicular stomatitis	T08985
Entire Plant China	Antimutagenic Activity	Juice	Mouse	Not stated	Active	vs. cyclophosphamide induced mutagenesis	AM1043
Entire Plant	Antimutagenic Activity	MEOH insoluable Fraction	Not stated	Not stated	Active	vs. methylnitrosamine, methyl methane sulfonate and tetracycline-induced genotoxicity.	K17876
Leaf Puerto Rico	Anticrustacean Activity	ETOH(95%) Ext	Not stated	LD50=33.0 mcg/ml	Active	Artemia salina Assay system is intended to predict for antitumor activity.	L12432
Leaf Thailand	Antitumor-promoting Activity	MEOH Ext	Cell Culture (RAJI cells)	200.0 mcg/ml	Strong Activity	vs. 12-o-tetradecanoylphorbol-13- acetate(tpa)-induced epstein-barr virus early antigen activation.	L12243
Leaf Thailand	Antitumor-promoting Activity	MEOH Ext	Cell Culture (RAJI cells)	200.0 mg/ml	Strong Activity	vs. EBV activation induced by HPA (40 ng/ml).	K25144
Leaf China	Antiproliferation Activity	MEOH Ext	Cell Culture (Monocyte)	100.0 mcg/ml	Active		L13363
Leaf Turkey	Immunostimulant Activity	H2O Ext	Human Adult	Not stated	Equiv	Enhanced intracellular killing of neutrophils.	J14375
Leaf China	Imm unostimulant Activity	Not stated	IP Mice	0.4 mg	Active	Increased interferon production.	AM1068
Leaf China	Immunostimulant Activity	Not stated	IV Rabbit IV Mice	Not stated Not stated	Active Active	Type 1 interferon inducer. Enhanced natural killer cell activity.	AM1068
Leaf Turkey	Chemotaxis Stimulation	H2O Ext	Human Adult	10.0 mg/ml	Active		J14375
Leaf Cuba	Genotoxicity Activity	Decoction	Not stated	0.10 mg/ml	Active	Aspergillus nidulans Results significant at p < 0.01 level.	K27017
Leaf Nigeria	ATP-ase Inhibition	ETOH (100%) Ext	IG Rat	385.0 mg/kg	Active		L14997

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Entire Plant West Indies	DNA Synthesis Inhibition	Hot H2O Ext	Sea Urchin (Ova)	0.1 mg/ml	Active	Antimitotic effect.	A00706
Leaf Nigeria	Protein Synthesis Inhibition	ETOH (100%) Ext	IG Rat (Brain) IG Rat (Liver)	385.0 mg/kg	Active		L14997
Leaf Nigeria	Protein Synthesis Stimulating	ETOH (100%) Ext	IG Rat	385.0 mg/kg	Active Inactive	Increase in muscle and liver protein levels. Reduction in the levels of brain protein.	L14997
Whole Plant China	Antiviral Activity	Not stated	in vitro	Not stated	Active	Induces resistance to viral infection.	AM1068
Entire Plant	Antiviral Activity	Fraction: Alpha- momorcharin	CD4/gp120 interaction assay in vitro	100 nM	Weak Activity Strong Activity	HIV-1 reverse transcriptase and HIV-1 protease. InhibitedHIV-1 integrase 26.1-96.3%.	AM1052
Leaf China	Antiviral Activity	H2O Ext	IP Mice	0.4 mg	Active	vs. Japanese B encephalitis virus. Administered 18 hr, 12 hr and 4 hr before subcutaneous challenge with the virus protected the treated group by 66%.	AM1068
Entire Plant	Antiviral Activity	Fraction: Acidic polysaccharides	Not stated	Not stated	Active	Retrovirus' such as HIV.	AM1074
Entire Plant	Antiviral Activity	Fraction: Acidic polysaccharides	Cell Culture MDCK cells MA104 cells	0.1 mg/ml 1 mu g/ml	Active Active	vs. influenza virus. Vs. herpes virus. Virus inhibited by more than 90%.	AM1074
Entire Plant	Anti-HIV Activity	Fraction: Acidic polysaccharides	Cell Culture MT-4 cells	EC50=15 mu g/ml	Active	vs. HIV. 50% protection against HIV-induced cytopathogenicity.	AM1074
Entire Plant	Anti-HIV Activity	Fraction: Acidic polysaccharides	Oral Kitten	2 mg	Active	Kittns were injected several times with feline HIV. 100% of control group developed feline HIV vs. 20% of the group treated with the extract.	AM1074
Entire Plant	Anti-HIV Activity	Fraction: Acidic polysaccharides	Oral Cat	2 mg	Active	Cats with feline HIV were treated with the extract for 3-6 months. 60% improvement in symptoms in treated group.	AM1074

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Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Entire Plant	Anti-HIV Activity	Fraction: Aljaline polysaccharides	IM Cats	0.5 ml	Active	Cats with feline HIV were treated for 3-6 months. 80% improvement in symptoms in treated group.	AM1074
Entire Plant	Anti-HIV Activity	Protein Ext	in vitro	IR50=18 mcg/ml 0.175 mcg/ml	Active Active	HIV-1 reverse transcriptase. 82% reduction of viral core protein p24 expression in HIV- infected cells.	H28024
Entire Plant	Anti-HIV Activity	Fraction: Alpha- momorcharin	Not stated	Not stated	Active	Inhibited HIV-1 propagation.	AM1042
Entire Plant	Anti-HIV Activity	Fraction: Beta- momorcharin	CD4/gp120 interaction assay in vitro	100 nM	Weak Activity Strong Activity	HIV-1 reverse transcriptase and HIV-1 protease. Inhibited HIV-1 integrase from 26.1% to 96.3%.	AM1052
Entire Plant	Anti-HIV Activity	Fraction: Alpha- momorcharin	Not stated	Not stated	Active	Related to its ribosome-inhibiting activity.	AM1053
Entire Plant	Anti-HIV Activity	Fraction: Alpha- momorcharin	Cell Culture	Not stated	Active	Inhibition of viral replication and reverse transcriptase activity. Loss of p24 antigen after 4 days of exposure to momorcharin.	AM1076
Entire Plant	Anti-HIV Activity	Fractions: Alpha- and Beta- momorcharin	Cell Culture T lymphocytes and monocyte /macrophages	0.3 and 3 mu.g/ml	Active	T lymphocytes and monocyte/macrophages. HIV infected cells showed a rapid and nearly complete loss of viral antigen; loss of HIV envelope protein or loss of HIV core protein. Uninfected cells largely unaffected.	AM1076
Flower + Leaf Thailand	Antihyperglycemic Activity	MEOH-H2O (1:1) Ext	IG Rat	30.0 mg/kg	Active	vs. streptozotocin-induced hyperglycemia. Decreased blood glucose levels by 25% 3 hrs after administration.	J11388
Entire Plant Bangladesh	Hyperglycemic Activity	MEOH Ext	IG Rat	150 mg	Active	Non-diabetic rats. Results were significant at 60 min.	K13947

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Entire Plant India	Antihyperglycemic Activity	ETOH (95%) Ext	IG Rat	250.0 mg/kg 250.0 mg/kg	Active Inactive Inactive Inactive	vs. rats fasted for 18 hrs. vs. overfed rats. vs. glucose-induced hyperglycemia. vs. streptozotocin-induced hyperglycemia. vs. glucose-induced hyperglycemia.	M22670
Flower + Leaf Thailand	Antihyperglycemic Activity	MEOH-H2O (1:1) Ext	IG Rat	30.0 mg/kg	Active	vs. streptozotocin-induced hyperglycemia. Decreased blood glucose levels by 25% 3 hrs after administration.	J11388
Entire Plant Bangladesh	Hyperglycemic Activity	MEOH Ext	IG Rat	150 mg	Active	Non-diabetic rats. Results were significant at 60 min.	K13947
Entire Plant India	Antihyperglycemic Activity	ETOH(95%) Ext	IG Rat	250.0 mg/kg Dosing for 21 days.	Inactive	vs. rats fasted for 18 hrs. vs. overfed rats. Vs. glucose-induced hyperglycemia. vs. streptozotocin-induced hyperglycemia. vs. glucose-induced hyperglycemia.	M22670
Vine Puerto Rico	Hypoglycemic Activity	Hot H2O Ext	Oral Rabbit	Not stated	Active		A00637
Entire Plant India	Antihyperglycemic Activity	ETOH(95%) Ext	IG Rat	250.0 mg/kg	Active	vs. rats fasted for 18 hrs.	M22670
Flower + Leaf Thailand	Antihyperglycemic Activity	MEOH-H2O (1:1) Ext	IG Rat	30.0 mg/kg	Active	Vs. streptozotocin-induced hyperglycemia. Decreased blood glucose levels by 25% 3 hrs after administration.	J11388
Fruit + Leaf + Stem Trinidad	Antihyperglycemic Activity	Decoction	IP Mouse	0.5 ml	Active	vs. streptozotocin-induced hyperglycemia. Single dose of the extract reduced plasma glucose concentration by about 50% after 5 hours.	M23565
Whole Plant Bangladesh	Hypoglycemic Activity	MEOH Ext	IG Rat	150 mg	Inactive	vs. normal and IDDM rats.	K13947

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Flower + Leaf Thailand	Hypoglycemic Activity	MEOH-H2O (1:1) Ext	IG Rat	10.0 mg/kg 30.0 mg/kg	Active Active	Intraperitoneal glucose. Oral glucose.	J11388
Entire Plant India	Hypoglycemic Activity	ETOH-H2O (1:1) Ext	IG Rat	250.0 mg/kg	Inactive		K09153
Leaf Nigeria	Glycolytic Effect	ETOH(100%) Ext	IG Rat (Liver)	385.0 mg/kg	Active		L14997
Leaf Nigeria	Glycolytic Effect	ETOH(100%) Ext	IG Rat (Liver)	385.0 mg/kg	Active		L14997
Entire Plant India	Spasmolytic Activity	ETOH-H2O (1:1) Ext	Rat	Not stated	Inactive	Uterus(unspec.cond).	K09153
Entire Plant India	Analgesic Activity	ETOH-H2O (1:1) Ext	IG Mouse	Not stated	Inactive	vs. hot plate method. vs. tail clip method.	K09153
Entire Plant India	Anticonvulsant Activity	ETOH-H2O (1:1) Ext	IP Mouse	Not stated	Inactive	vs. supramaximal electroshock-induced convulsions.	K09153
Leaf Nigeria	Anticonvulsant Activity	ETOH(70%) Ext	IP Mouse	Variable	Inactive	vs. metrazole-induced convulsions. vs. strychnine-induced convulsions.	T06510
Whole Plant Origin Not stated	Antiacne Activity	Acidic Ext	External Human Adult	Not stated	Active	Manages various grades of acne: comedos, papules, pustules and nodules. Also active against furuncles.	AM1073
Entire Plant Surinam	Binding Effect	ETOH (80%) Ext	Human Adult	10.0 mcg/ml	Inactive	Did not inhibited radioligand binding to serotonin, dopamine, beta-2-adrenergic or muscarinic receptors nor to adenosine NMDR receptor channel complex.	J12451
Entire Plant Surinam	Binding Effect	ETOH(80%) Ext	Human Adult	100.0 mcg/ml	Active	Inhibited radioligand binding to adrenergic-receptor in human frontal cortex.	J12451
Entire Plant Surinam	Serotonin (5-ht) Receptor Binding Activity	CHCL3 Ext	Calf	100.0 mcg/ml	Inactive	(Hippocampus) Inhibited the binding of 3h-rauwolscine to serotonin receptors.	J10986
Leaf India	Estrogenic Effect	Hot H2O Ext	SC Rat (Female)	20.0 mg	Inactive		A04902

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Entire Plant Thailand	Parasympatholytic Activity	ETOH-H2O (1:1) Ext	Guinea Pig (Ileum)	0.01 gm/ml	W eak Activity		W3022A
Leaf Nigeria	CNS Depressant Activity	ETOH (70%) Ext	IP Mouse	Variable	Active		T06510
Entire Plant Thailand	Antihistamine Activity	ETOH-H2O (1:1) Ext	Guinea Pig (Ileum)	0.01 gm/ml	W eak Activity	vs. yeast-induced pyrexia.	W3022A
Entire Plant Thailand	Antipyretic Activity	ETOH-H2O (1:1) Ext	GI Rabbit	Variable	Inactive		W3022A
Entire Plant Thailand	Hypotensive Activity	ETOH-H2O (1:1) Ext	IV Dog	Variable	Inactive		W3022A
Entire Plant India	Hypothermic Activity	ETOH-H2O (1:1) Ext	IG Rat	Not stated	Inactive		K09153
Entire Plant India	Diuretic Activity	ETOH-H2O (1:1) Ext	IG Rat	510.7 mg/kg	Inactive		K09153
Leaf Nigeria	Alanine Transaminase Level Decrease	ETOH(100%) Ext	IG Rat (Plasma)	385.0 mg/kg	Active		L14997
Leaf Nigeria	Alanine Transaminase Level Decrease	ETOH(100%) Ext	IG Rat (Plasma)	385.0 mg/kg	Active		L14997
Leaf Nigeria	Aspartate Transaminase Level Decrease	ETOH(100%) Ext	IG Rat	385.0 mg/kg	Inactive		L14997
Leaf Nigeria	Aspartate Transaminase Level Decrease	ETOH(100%) Ext	IG Rat	385.0 mg/kg	Weak Activity	L-aspartate transaminase and adenosine triphosphatase activity slightly elevated.	L14997
Fresh Leaf Niigeria	Adenosine Triphosphatase Stimulation	ETOH(100%) Ext	IG Rat	385.0 mg/kg	Weak Activity	L-aspartate transaminase activity unaffected. Adenosine triphosphatase activity reduced.	L14997
Leaf Not Stated	Cyclic GMP Modulation	Aqueous Ext	Rat (prostate)	Not stated	Active	Reduced cyclic GMP levels in tumor.	AM1041
Leaf USA	Guanylate Cyclase Inhibition	H2O Ext	Rat (Liver)	Not stated	Strong Activity		M00425
Leaf Nigeria	Alkaline Phosphatase Inhibition	ETOH(100%) Ext	IG Rat (Plasma)	385.0 mg/kg	Active		L14997

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Nigeria	Alkaline Phosphatase Inhibition	ETOH(100%) Ext	IG Rat (Plasma)	385.0 mg/kg	Active		L14997
Aerial Parts Panama	AT-1 Receptor Inhibition	CHCL3 Sol Fract ETOAC Sol Fract H2O Ext H2O-insol Ext Hexane Ext MEOH-CH2CL2	Not stated Not stated Not stated Not stated Not stated Not stated	10.0 mcg/ml 10.0 mcg/ml 10.0 mcg/ml 10.0 mcg/ml 10.0 mcg/ml 10.0 mcg/ml	Inactive Inactive Inactive Inactive Inactive		L18181
Aerial Parts Panama	ET-A Receptor Inhibition	MEOH-H2O(1:1) Ext	Not stated	100 mcg/ml	Active		L18181
Aerial Parts Panama	Y-1 Receptor Inhibition	H2O Ext Hexane Ext MEOH-CH2CL2 1:1	Not stated Not stated Not stated	10.0 mcg/ml 10.0 mcg/ml 10.0 mcg/ml	Inactive Inactive Inactive		L18181
Leaf Philippines	Glucose Transport Inhibition	MEOH Ext	Cell Culture	5.0 mcg/ml	Active	Cells-ehrlich.	J17272
Leaf Philippines	Glucose Transport Stimulation	MEOH Ext	Cell Culture	1.0 mcg/ml	Strong Activity	Ca-ehrlich-ascites.	J16266
Aerial Parts Haiti	Antihepatotoxic Activity	Hot H2O Ext	Cell Culture	1.0 mg	Inactive	Hepatocytes measured by leakage of LDH and ASAT.	K23019
Aerial Parts Haiti	Lipid Peroxide Formation Inhibition	Hot H2O Ext	Cell Culture	1.0 mg	Inactive	Hepatocytes monitered by production of malonaldehyde.	K23019
Aerial Parts Haiti	Radical Scavenging Effect	Hot H2O Ext	Not stated	250.0 mg/liter	Inactive	Measured by decoloration of diphenylpicryl hydroxyl radical solution. Decoloration 6%.	K23019
Entire Plant India	Antiprotozoan Activity	ETOH-H2O (1:1) Ext	Broth Culture	125.0 mg/ml	Active	Entamoeba histolytica	K09153
Aerial Parts Origin Not Specified	Antimalarial Activity	CHCL3 Ext CCHL3 Ext H2O Ext H2O Ext H2O Ext	SC Chicken SC Duckling Oral Chicken Oral Duckling Oral Duckling	42.0 mg/kg 496.0 mg/kg 3.44 gm/kg 2.37 gm/kg 2.37 gm/kg	Inactive Inactive Inactive Inactive	Plasmodium gallinaceum Plasmodium cathemerium Plasmodium gallinaceum Plasmodium cathemerium Plasmodium lophurae	A00785
Flowers Brazil	Antimalarial Activity	H2O Ext	IG Mouse	1.0 gm/kg	Inactive	Plasmodium berghei	K07998

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Aerial Parts Bolivia	Antimalarial Activity	Not stated	Rodent	Not stated	W eak Activity	P. vinckei petteri 279BY (rodent malaria).	AM1016
Leaf Brazil	Antimalarial Activity	ETOH(95%) Ext	IG Mouse	500.0 mg/kg	Inactive	Plasmodium berghei	J11857
Leaf + Stem Brazil	Antimalarial Activity	ETOH(95%) Ext Infusion	IG Mouse IG Mouse	1.0 gm/kg 1.0 gm/kg	Active Active	Plasmodium berghei Plasmodium berghei	J13276
Leaf + Stem Brazil	Antimalarial Activity	Infusion	Oral Human	Not stated	Inactive	Plasmodium berghei	J13276
Leaf Sierra Leone	Antimalarial Activity	ETOH(100%) Ext	Not stated	IC50=125.0 mcg/ml	W eak Activity	Plasmodium falciparum	L11358
Leaf Togo	Antimalarial Activity	ETOH(95%) Ext	Not stated	IC50 68.4 mcg/ml	W eak Activity	Plasmodium falciparum	M23556
Leaf Puerto Rico	Antimycobacterial Activity	ETOH(95%) Ext	Agar Plate	500.0 mcg	Equiv Equiv	Mycobacterium smegmatis Mycobacterium tuberculosis	L12432
Leaf India	Antibacterial Activity	ETOH(95%) Ext ETOH(95%) Ext Hot H2O Ext Hot H2O Ext	Agar Plate Agar Plate Agar Plate Agar Plate	Undiluted Undiluted Undiluted Undiluted	Active Active Active Equiv	Escherichia coli Staphylococcus aureus Escherichia coli Staphylococcus aureus	W03693
Entire Plant India	Antibacterial Activity	ETOH-H2O(1:1) Ext	Broth Culture	1.0 mg/ml	Inactive	Pseudomonas aeruginosa	K09153
Entire Plant Senegal	Antibacterial Activity	MEOH Ext	Agar Plate	15.0 mg/ml	Active	Sarcina lutea	T09739
Leaf Nigeria	Antibacterial Activity	MEOH-H2O(1:1) Ext	Broth Culture	Not stated	Active Inactive Inactive Inactive Inactive	Staphylococcus aureus Bacillus subtilis Escherichia coli Proteus species Pseudomonas aeruginosa Staphylococcus albus	J00209
Leaf Nigeria	Antibacterial Activity	ETOH(95%) Ext	Agar Plate	0.63 mg/ml 0.63 mg/ml 1.25 mg/ml	Active Active Active	Escherichia coli Salmonella paratyphi Shigella dysenteriae	L07663

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Leaf Nigeria	Antibacterial Activity	MEOH Ext	Agar Plate	2.0 mg/ml	Active Active Active Active Active Inactive	Corynebacterium diphtheriae Neisseria species Pseudomonas aeruginosa Salmonella species Streptobacillus species Streptococcus species Staphylococcus aureus	M27767
Leaf India	Antibacterial Activity	ETOH(95%) Ext Hot H2O Ext	Agar Plate	Undiluted Undiluted	Inactive Active	Escherichia coli Staphylococcus aureus Escherichia coli Staphylococcus aureus	W03693
Entire Plant India	Antiyeast Activity	ETOH-H2O (1:1) Ext	Broth Culture	1.0 mg/ml	Inactive	Candida albicans Cryptococcus neoformans Sporotrichum schenckii	K09153
Leaf Guatemala	Antifungal Activity	Hot H2O Ext	Broth Culture	1.0 ml	Inactive	Epidermophyton floccosum Microsporum canis Trichophyton mentagrophytes var. Algodonosa Trichophyton mentagrophytes var. Granulare	M27151
Entire Plant India	Antifungal Activity	ETOH-H2O(1:1) Ext	Broth Culture	1.0 mg/ml	Inactive	Aspergillus fumigatus Trichophyton mentagrophytes	K09153
Root Puerto Rico	Molluscicidal Activity	Aqueous Slurry	Not stated	LD100 >1000 ppm	Inactive	Lymnaea columella Lymnaea cubensis	T04621
Leaf Origin Not Specified	Insecticide Activity	H2O Ext	Not stated	40.0 ml/kg	Strong Activity	Blatella germanica Periplaneta americana	W 03405
Leaf Origin Not Specified	Insecticide Activity	H2O Ext	Not stated	Variable	Inactive	Oncopeltus fasciatus	W 03405
Entire Plant West Indies	Plant Germination Inhibition	Hot H2O Ext	Not stated	20.0 ppm	Active	vs. cotton and broad beans.	A00706
Aerial Parts Colombia	Antivenin Effect	ETOH(100%) Ext	Not stated	Not stated	Inactive	vs. bothrops atrox venom.	L15991

# Biological Activities for Extracts of Bitter Melon (Momordica charantia) Extracts of the Fruit / Fruit Juice / Fruit Seed

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Toxicity Assessment (quantitative)	ETOH-H2O (1:1) Ext	IP Mouse	LD50= 681.0 mg/kg	Active		K09153
Fruit USA	Toxicity Assessment (quantitative)	H2O Ext	IP Mouse	LD50= 16.0 mcg/ml	Active		T09137
Fruit USA	Toxicity Assessment (quantitative)	H2O Ext	SC Mouse	LD50= 27.0 mcg/ml	Active		T09137
Seed Not Stated	Toxicity Assessment (quantitative)	H2O Ext	IP Rat	LD50= 25.0 mg/kg	Active		T01769
Fruit India	Toxic Effect (general)	ETOH(95%) Ext ETOH(95%) Ext	Oral Gerbil Oral Gerbil	1.10 gm/kg 150.0 mg/kg	Inactive Weak Activity	Daily dosing for 30 days. Daily dosing for 30 days. 20-30% of animals died within 30 days.	M01152
Fruit India	Toxic Effect (general)	Juice Juice Juice	IP Rabbit IP Rat Oral Human	15.0 ml/kg 40.0 ml/kg 50.0 ml	Active Active Inactive	Died within 18 hours. Died within 18 hours.	J11478
Fruit India	Toxic Effect (general)	H2O Ext	Mouse	200.0 mg/kg	Inactive		L10702
Fruit India	Toxic Effect (general)	Decoction	Oral Human Adult	500.0 mg	Inactive		A14458
Fruit Pakistan	Toxic Effect (general)	Not stated	IG Rabbit	8.0 gm/kg	Inactive		L03572
Fruit India	Toxic Effect (general)	Juice	IG Rabbit	6.0 ml/kg	Active	Death occurred within 23 days.	A14328
Fruit India	Toxic Effect (general)	Juice	IG Rabbit (pregnant)	6.0 ml/kg	Active	Two pregnant animals suffered from uterine hemorrhage and then died.	A14328
Fruit India	Toxic Effect (general)	Juice	IP Rat	15.0 ml/kg	Active	Death occurred within 18 hours.	A14328
Fruit India	Abortifacient Effect	ETOH-H2O (1:1) Ext	Oral Rat (pregnant)	100.0 mg/kg	Inactive		T02678
Seed Not Stated	Abortifacient Effect	Fraction	IP Rat (pregnant)	8.0 mg/kg	Active	A fraction designated as ap-ii was tested.	T00398

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Seed China	Abortifacient Effect	Acetone Ext	IP Mouse (pregnant)	4.0 mcg/gm	Active	Dosing on day 12 of pregnancy.	T10072
Seed China	Abortifacient Effect	H2O Ext	IP Mouse (pregnant)	0.04 mg/ml	Active	Midterm abortion.	K21690
Seed China	Abortifacient Effect	H2O Ext	IP Mouse (pregnant)	80.0 mg/kg	Active		J12388
Fruit India	Antiimplantation Effect	ETOH-H2O (1:1) Ext	Oral Rat (Female)	100.0 mg/kg	Inactive		T02678
Fruit India	Uterine Stimulant Effect	ETOH-H2O (1:1) Ext	Rat (Female)	Not stated	Inactive	Uterus(non-preg).	T02678
Fruit Juice (unripe) Indonesia	Antifertility Effect(unspecified)	Juice	Gastric Intubation Rat (Male)	5.0 ml/kg	Active		T05027
Fruit India	Antifertility Effect (unspecified)	Not stated	IG Mouse (Female)	Not stated	Active		J11478
Fruit Juice Indonesia	Spermicidal Effect	Juice	Rat (Male) (Sperm)	Not stated	Active		T05027
Fruit India	Antispermatogenic Effect	Not stated	IG Dog (Female)	1.75 gm	Active		J11478
Seed India	Antisperm atogenic Effect	Benzene Ext ETOH (95%) Ext Pet Ether Ext	IG Rat and IP Rat	250.0 mg/kg 250.0 mg/kg	Active Active	Number of spermatocytes, spermatids and spermatozoa decreased. Steroidogenesis inhibited.	J19694
Fruit India	Antisperm atogenic Effect	ETOH (95%) Ext	Oral Dog (Male)	1.75 gm	Active	Daily dosing for 20 days. Seminiferous tubules lacked primary spermatocytes:38.7% of tubule contained normal spermatids.	M01152
Fruit India	Antisperm atogenic Effect	ETOH (95%) Ext	Oral Dog (Male)	1.75 gm Daily dosing for 40 days.	Active	Tubule diameter decreased to 167 microns (220 = control). Testes exhibited variable degrees of spermatogenic arrest, mainly at spermatid stage.	M01152

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Antisperm ato genic Effect	ETOH (95%) Ext	Oral Dog (Male)	1.75 gm Daily dosing for 60 days.	Active	Seminiferous tubules completely devoid of spermatozoa: 75% completely lacked step 1-8 spermatid.	M01152
Fruit India	Antisperm ato genic Effect	ETOH (95%) Ext	Oral Gerbil SC Gerbil (Male)	200.0 mg/kg 200.0 mg/kg Daily dosing for 14 days.	Active	Resulted in reduction in testicular weight and disruption of spermatogenesis without affecting seminal vesicle or prostrate.	M01152
Peel + Seed + Fruit India	Translactational Effect	Not stated	Mice	100 microl	Active	Increased hepatic levels of GST and acid soluble sulfhydryl in lactating dams (p<0.01) after 14 or 21 days of treatment, and translactationally exposed neonates (p<0.05).	AM1022
Fruit India	Hepatotoxic Activity	Juice	IG Rat	Not stated	Inactive		J11478
Fruit Sri Lanka	Respiration(cellular) inhibition	Juice	Gastric Intubation Rat	10.0 ml/kg	Inactive		T12703
Fruit Thailand	Antitumor Activity	Lyophilized Ext	Oral Rat (Female)	6.25 % of diet	Weak Activity		L04084
Fruit India	Antitumor Activity	Aqueous Ext	Oral Mice	Not stated	Active	Protected against the development of skin tumor and increased life expectancy.	AM1010
Fruit India	Antitumor Activity	Aqueous Ext	Oral Mice	Not stated	Active	Reduced carcinogen-induced lipid peroxidation in the liver and DNA damage in lymphocytes.	AM1010
Fruit India	Antitumor Activity	Aqueous Ext	Oral Mice	Not stated	Active	Activated liver enzymes glutathione-S-transferase, glutathione peroxidase and catalase which were depressed after carcinogen exposure.	AM1010
Fruit USA	Antitumor Activity	H2O Ext	IP Mouse	100.0 mcg/ml	W eak Activity	Cells-CBA/D1.	T09137
Fruit USA	Antitumor Activity	H2O Ext	IP Mouse	Not stated	Active	LEUK-L1210. Drug was pre- incubated with tumor cell line in vitro.	T09137

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit USA	Antitumor Activity	H2O Ext	IP Mouse	Not stated	Weak Activity	LEUK-P388. Drug was pre- incubated with tumor cell line in vitro.	T09137
Fruit Turkey	Genotoxicity Activity	Saline Ext	Agar Plate	40.0 mcg	Active	Lymphocytes.	K27792
Fruit Turkey	Mutagenic Activity	Saline Ext Saline Ext	Agar Plate Agar Plate	40.0 mcg 40.0 mcg	Inactive Inactive	Salmonella typhimurium ta100 Salmonella typhimurium ta98	K27792
Fruit China	Cytotoxic Activity	Not stated	Cell Culture	Not stated	Active	Ca-755.	T08662
Fruit China	Cytotoxic Activity	Not stated	Cell Culture	Not stated	Active	LEUK-CML (human).	T08662
Fruit USA	Cytotoxic Activity	H2O Ext	Cell Culture	Not stated	Active	DD-lymphocytes-human-leukemic.	T08985
Fruit USA	Cytotoxic Activity	H2O Ext	Cell Culture	Not stated	Inactive	Lymphocytes-human.	T08985
Fruit Origin Not Specified	Cytotoxic Activity	H2O Ext	Cell Culture	Not stated	Active	Lymphoblasts-human	T01575
Fruit Not Stated	Cytotoxic Activity	H2O Ext	Cell Culture	Not stated	Inactive	Lymphocytes-human.	T01575
Seed Not Stated	Cytotoxic Activity	H2O Ext	Cell Culture	ED50= >1.0 mg/ml	Inactive	Sarcoma (yoshida asc).	A04780
Fruit USA-CA	Cytotoxic Activity	H2O Ext	Cell Culture	CD10= 50.0 mcg/ml	Active	Cells-CBA/D1.	T09137
Fruit USA	Cytotoxic Activity	Juice	Cell Culture	0.14 mg/ml	Active	Melanoma-beta cell-m9 viable cells decreased from 100% to 5% between 18 and 26 hrs.	T04893
Fruit USA	Cytotoxic Activity	Juice	Cell Culture	ED50= 0.16 mg	Active	Lymphocytes-human-leukemic.	T04893
Fruit USA	Cytotoxic Activity	Juice	Cell Culture	ED50= 0.35 mg	Active	Lymphocytes-human.	T04893
Fruit + Seed Not Stated	Antileukemic Activity	Not stated	Not stated	Not stated	Active		AM1033
Fruit Thailand	Antimutagenic Activity	ETOH(80%) Ext	IG Rat (Male) (Colon)	1.0 gm/kg	Active	vs. azoxymethane-induced aberrant crypt foci.	L14935
Fruit Philippines	Antimutagenic Activity	CCL4 MEOH Ext Pet Ether Ext	IG Mouse	5.0 mg/gm 5.0 mg/gm 5.0 mg/gm	Active Inactive Active		M24272
Fruit Thailand	Antimutagenic Activity	CHCL3 Ext Hexane Ext MEOH Ext	Agar Plate	10.0 mg	Inactive	Salmonella typhimurium ta100 vs.direct acting mutagens in the ames mutagenicity test.	L04084

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Thailand	Antimutagenic Activity	CHCL3 Ext Hexane Ext MEOH Ext	Agar Plate Agar Plate Agar Plate	>1.0 mg <1.0 mg <5.0 mg	Active	Salmonella typhimurium ta100 vs. indirect acting mutagens in the ames mutagenicity test.	L04084
Fruit Thailand	Antimutagenic Activity	ETOH(80%) Ext	Agar Plate	Variable	Active	Salmonella typhimurium ta100 vs. mutagenicity of b(alpha)p.	L14935
Fruit Thailand	Antimutagenic Activity	ETOH(80%) Ext	Agar Plate	Variable	Active	Salmonella typhimurium ta98. Inhibited the mutagenicity of IQ, MEIQ, MEIQX, PHIP, GLU-P-2 and AFB1.	L14935
Fruit India	Carcinogenesis Inhibition	H2O Ext	External Mouse	100.0 mcl	Active	vs. DMBA-initiated, croton oil promoted skin tumors.	J14866
Fruit Pulp India	Carcinogenesis Inhibition	H2O Ext	External Mouse	100.0 mcl	Active	vs. DMBA-initiated, croton oil promoted skin tumors.	J14866
Fruit Peel India	Carcinogenesis Inhibition	H2O Ext	External Mouse	100.0 mcg	Active	vs. DMBA-initiated, croton oil promoted skin tumors.	J14866
Seed India	Carcinogenesis Inhibition	H2O Ext	External Mouse	100.0 mcl	Active	vs. DMBA -initiated, croton oil promoted skin tumors.	J14866
Fruit Japan	Tumor Promotion Inhibition	MEOH Ext	Cell Culture	200.0 mcg	Inactive	Virus-Epstein-barr vs. 12-o-hexadecanoylphorbol-13- acetate-induced epstein-barr virus activation.	T15279
Fruit India	Cell Proliferation Inhibition	Not stated Not stated Protein Fraction	Cell Culture Cell Culture Cell Culture	Not stated Not stated Not stated	Active Active Active	Hep2 cells. Sea urchin ova.	J11478
Fruit Thailand	DNA Adduct Formation Inhibition	ETOH(80%) Ext	IG Rat	0.5 gm/kg	Active	vs. AOM-induced DNA adduct formation.	L14935
Seed China	DNA Synthesis Inhibition	ETOH(100%) Ext	Cell Culture	Not stated	Active	Sarcoma 180(solid).	M27078
Seed China	RNA Synthesis Inhibition	ETOH(100%) Ext	Cell Culture	Not stated	Active	Sarcoma 180(solid).	M27078
Seed China	Protein Synthesis Inhibition	H2O Ext	Not stated	10.0 mcg/ml	Active	Plasma cell tumor-ypc-1.	J12388

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit China	Protein Synthesis Inhibition	Not stated	Cell Culture	Not stated	Active	Reticulocyte lysate(rabbit).	T08662
Seed China	Protein Synthesis Inhibition	H2O Ext	Rabbit	10.0 mcg/ml	Active	(reticulocytes)	J12388
Seed China	Protein Synthesis Inhibition	H2O Ext	Rabbit	10.0 mcg/ml	Strong Activity	Reticulocyte lysate (rabbit) 99% inhibition.	K21690
Seed Origin Not Stated	Protein Synthesis Inhibition	H2O Ext	Rabbit	ID50=0.01 mcg/ml	Active	Reticulocyte lysate.	T01769
Fruit + Seed Origin Not Stated	Immunostimulant Activity	Not stated	Mouse	Not stated	Active	Activation of NK cells.	AM1033
Seed Bangladesh	Hyperglycemic Activity	MEOH Ext	IG Rat	150 mg	Active	Non-diabetic rats.	K13947
Seed China	Hyperglycemic Activity	Fractions	Mouse	Not stated	Active		T08662
Seed Bangladesh	Antihyperglycemic Activity	MEOH Ext	IG Rat	2.5 gm/kg	Inactive	vs. streptozotocin-induced hyperglycemia.	K13947
Fruit Not Stated	Antihyperglycemic Activity	Infusion	Oral Human Adult	Not stated	Inactive		J12034
Fruit 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
Fruit India	Antihyperglycemic Activity	ETOH(95%) Ext Juice	Oral Rabbit Oral Rabbit	3.0 ml/kg 3.0 ml/kg	Active Active	vs. alloxan-induced hyperglycemia. vs. alloxan-induced hyperglycemia.	A07281
Fruit India	Antihyperglycemic Activity	CHCL3 Ext	IG Rabbit	Not stated	Active	vs. alloxan-induced hyperglycemia.	J11478
Fruit India	Antihyperglycemic Activity	Fruit	IG Mouse	Not stated	Active	vs. streptozotocin-induced hyperglycemia.	J11478
Fruit India	Antihyperglycemic Activity	Fruit	IG Rat	Not stated	Active	vs. alloxan-induced hyperglycemia.	J11478
Fruit India	Antihyperglycemic Activity	Juice	IG Rabbit	Not stated	Active	vs. alloxan-induced hyperglycemia.	J11478
Fruit India	Antihyperglycemic Activity	Fruit Juice Powder	Oral Human Adult	Not stated Not stated Not stated	Active Active Active	Review. Studies in NIDDM and IDDM patients.	J11478

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Antihyperglycemic Activity	ETOH(100%) Ext H2O Ext	IG Rat	400.0 mg 400.0 mg	Active Active		L15207
Fruit India	Antihyperglycemic Activity	H2O Ext	Mouse	200.0 mg/kg	Active	vs. streptozotocin-induced hyperglycemia. Mean reduction in plasma glucose levels of 15.37% (day 40), 18.68% (day 50) and 22.86% (day 60).	L10702
Fruit India	Antihyperglycemic Activity	H2O Ext	Rat	200.0 mg/kg	Active	vs.alloxan-induced hyperglycemia. Mean reduction in plasma glucose levels of 64.33% (1 month), 66.96% (2 months), 69.7% (3 months) and 70.53% (4 months).	L10702
Fruit China	Antihyperglycemic Activity	Decoction	IG Rat IP Rat	Not stated Not stated	Active Active	vs. alloxan- and streptozotocin-induced hyperglycemia.	J17491
Fruit England	Antihyperglycemic Activity	Fruit	Oral Human Adult	Not stated	Active	A diabetic woman recovered from glycosuria after taking a kind of curry. Karela was believed to be an active ingredient.	M22031
Fruit India	Antihyperglycemic Activity	Acetone Ext	Oral Rat	250.0 mg/kg	Active	Fall in blood sugar of 49% in 30 days. Blood sugar was maintained within normal limits for 2 weeks after treatment ceased. vs. alloxan-induced hyperglycemia.	M22671
Fruit India	Antihyperglycemic Activity	Benzene Ext	IG Rabbit	1.0 gm/kg	Active	vs.glucose-induced hyperglycemia.	M22131
Fruit India	Antihyperglycemic Activity	CHCL3 Ext	IG Rat (Female)	250.0 mg/kg	Inactive	vs. streptozotocin-induced hyperglycemia.	K19538
Fruit India	Antihyperglycemic Activity	Decoction	Oral Human Adult	500.0 mg	Active		A14458
Fruit Pulp India	Antihyperglycemic Activity	ETOH(95%) Ext	IG Rat	500.0 mg/kg	Active	Non-diabetic rat. Depressed plasma glucose level by 10-15% at 1 hr. Efficacy 25-30% of tolbutamide.	K27156

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Antihyperglycemic Activity	ETOH(95%) Ext	IG Rat (Female)	250.0 mg/kg	Active	vs. streptozotocin-induced hyperglycemia.	K19538
Fruit India	Antihyperglycemic Activity	ETOH(95%) Ext	IP Rat	75.0 mg	Inactive	vs. streptozotocin-induced hyperglycemia.	T12220
Fruit India	Antihyperglycemic Activity	H2O Ext	IG Rat (Female)	250.0 mg/kg	Active	vs. streptozotocin-induced hyperglycemia.	K19538
Fruit India	Antihyperglycemic Activity	H2O Ext	Oral Rat	4.0 gm/day	Active	Dosed for 2 months. Onset of retinopathy retarded. vs. alloxan-induced hyperglycemia.	T14959
Fruit India	Antihyperglycemic Activity	Lyophilized Ext	Oral Mouse	200.0 mg	Active	Urine volume decreased, urinary albumin level decreased, renal hypertrophy prevented. vs. streptozotocin-induced hyperglycemia.	L15573
Fruit India	Antihyperglycemic Activity	Lyophilized Ext	Oral Mouse	200.0 mg	Active	Reduced plasma glucose concentrations by 24.4%.	L15573
Fruit India	Antihyperglycemic Activity	Powder	IG Rat	1.0 gm/kg	Active	vs. alloxan-induced hyperglycemia.	J14657
Fruit India	Antihyperglycemic Activity	Not stated	Oral Human Adult	Not stated	Active		T13893
Fruit Pakistan	Antihyperglycemic Activity	Fruit	IG Rabbit	1.0 gm/kg	Active	vs. alloxan-induced hyperglycemia.	M22028
Fruit Pakistan	Antihyperglycemic Activity	Not stated	IG Rabbit	Not stated	Active	vs. alloxan-induced hyperglycemia.	L03572
Fruit Peru	Antihyperglycemic Activity	H2O Ext	Injection Mouse (Male)	100.0 mg/kg	Active Inactive	vs. type 2 diabetic mice. Lowered serum insulin and blood glucose. Non-diabetic mice.	L10622
Fruit Saudi Arabia	Antihyperglycemic Activity	Decoction 25% Ext	IG Mouse	0.5 ml	Inactive	Maximal change in blood sugar was 4.33%. vs. alloxan-induced hyperglycemia.	M22673
Fruit Saudi Arabia	Antihyperglycemic Activity	Hot H2O Ext 25% Ext	Gastric Intubation Mouse	0.5 ml	Inactive	vs. alloxan-induced hyperglycemia.	T10348

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Thailand	Antihyperglycemic Activity	Hot H2O Ext Hot H2O Ext	Rabbit Rabbit	10.20 mg/kg Not stated	Active Inactive	Diabetic rabbits used. Diabetic rabbits used.	P00050
Fruit Thailand	Antihyperglycemic Activity	Lyophilized Ext Lyophilized Ext	Rabbit Rabbit	1.2 gm/kg 400 mg/kg	Inactive Inactive	vs. alloxan-induced hyperglycemia. vs. alloxan-induced hyperglycemia.	P00096
Fruit United Arab Emirates	Antihyperglycemic Activity	Juice	IG Rat (Male)	10.0 ml/kg	Active	vs. streptozotocin-induced type-1 diabetes.	L18419
Fruit India	Antihyperglycemic Activity	Powder	Oral Rat	0.5 % of diet	Inactive	vs. streptozotocin-induced hyperglycemia.	K29851
Seed India	Antihyperglycemic Activity	H2O Ext	Oral Rabbit	3.0 ml/kg	Inactive	vs. alloxan-induced hyperglycemia.	A07281
Seed India	Antihyperglycemic Activity	Powder	IG Rabbit	Not stated Not stated	Active Active	vs. alloxan-induced hyperglycemia. vs. streptozotocin-induced hyperglycemia.	J11478
Seed India	Antihyperglycemic Activity	Powder	Oral Human Adult	Not stated	Active	Assayed in NIDDM and IDDM patients.	J11478
Fruit India	Antihyperglycemic Activity	ETOH(95%) Ext	IG Rat	200.0 mg/kg	Active	Blood sugar levels decreased 22%. vs. streptozotocin-induced hyperglycemia.	K11849
Fruit India	Antihyperglycemic Activity	Fruit	IG Rat	15.0 gm	Active	vs. alloxan-induced hyperglycemia.	K12995
Fruit India	Antihyperglycemic Activity	Fruit	Oral Human Adult	Not stated	Active		J12465
Fruit India	Antihyperglycemic Activity	H2O Ext	IG Rat	1.0 gm	Active	Reduction of initial blood sugar level after 3 weeks from 220mg to 105mg. vs. alloxan-induced hyperglycemia.	K12995
Seed India	Antihyperglycemic Activity	Not stated	GI Rabbit	LC50 =0 gm	Active	Streptozotocin-treated animals.	T05236
Fruit India	Antihyperglycemic Activity	Hot H2O Ext	IG Rat	4.0 gm	Active	vs. alloxan-induced hyperglycemia. Inhibited cataract formation (dependent on blood sugar levels).	M23178

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Antihyperglycemic Activity	Juice	IG Rabbit	6.0 ml/kg	Active Active	vs. alloxan-induced hyperglycemia. vs. glucose-induced hyperglycemia.	A14328
Fruit India	Antihyperglycemic Activity	H2O Ext	Oral Human Adult (Male)	1.0 gm	Active	The subjects included (433) severe to mild (260) diabetics, aged 42 to 70 years. Blood sugar estimated 2,3,4 & 7 weeks of treatment. Overall fall in blood sugar was 54%. vs.alloxan-induced hyperglycemia.	K12995
Fruit India	Antihyperglycemic Activity	Not stated	Oral Human Adult	100.0 gm	Inactive	Tested in 25 diabetics and 10 control subjects. Daily dosing for 2 weeks.	T06311
Fruit Kenya	Antihyperglycemic Activity	H2O Ext	IG Mouse	16.0 gm/kg	Active	vs. streptozotocin-induced hyperglycemia.	M25031
Fruit Sri Lanka	Antihyperglycemic Activity	Juice	IG Rat	10.0 ml/kg	Inactive	Daily dosing for 30 days. vs. streptozotocin-induced hyperglycemia.	T16092
Fruit Sri Lanka	Antihyperglycemic Activity	Juice	Oral Human Adult	100.0 ml	Not stated	Improved glucose tolerance in 73% of patients with maturity onset diabetes. Juice was given 30 minutes before oral glucose load in the glucose tolerance test.	T12706
Fruit Turkey	Antihyperglycemic Activity	H2O Ext	IG Mouse (Male)	0.5 gm/kg	Active	Significant decrease in nonfasting blood glucose levels of hyperglycemia induced mice. Results significant at p < 0.01 level.	K18219
Fruit England	Antihyperglycemic Activity	Fruit	Oral Human Adult	0.23 kg/day	Active	Improved glucose tolerance in diabetic patients. Treatment for 8 to 11 weeks. Results significant at p < 0.05 level.	T12686
Pulp Barisal	Antihyperglycemic Effect	Aqueous homogenized suspension	Human Adult	Not stated	Active	Reduction (p<0.001) of fasting and post-prandial serum glucose levels seen in 86% of non-insulin dependent diabetic subjects after oral glucose intake.	AM1013

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Seed Japan	Antihyperglycemic Activity	H2O Ext	IG Rat	100.0 mg/kg	Active	vs. streptozotocin-induced hyperglycemia.	L12140
Seed India	Antihyperglycemic Activity	Decoction	Oral Human Adult	Variable	Inactive		A14461
Seed Japan	Antihyperglycemic Activity	H2O Ext	IG Rat	100.0 mg/kg	Active	vs. streptozotocin-induced hyperglycemia.	L12140
Seed India	Antihyperglycemic Activity	MEOH Ext	Oral Rat	10.0 mg/kg	Active	vs. adrenaline induced hyperglycemia.	T14966
Fruit Pulp Bangladesh	Antihyperglycemic Activity	Juice MEOH Ext	IG Rat IG Rat	2.5 gm/kg 2.5 gm/kg	Inactive Active	vs. streptozotocin-induced hyperglycemia.	K13947
Fruit Pulp Japan	Antihyperglycemic Activity	H2O Ext	IG Rat	100.0 mg/kg	Active	vs. streptozotocin-induced hyperglycemia.	L12140
Roasted Fruit Pulp Japan	Antihyperglycemic Activity	H2O Ext	IG Rat	100.0 mg/kg	Active	vs. streptozotocin-induced hyperglycemia.	L12140
Fruit India	Antihyperglycemic Activity	Benzene Ext	IG Rabbit	1.0 gm/kg	Active	vs. alloxan-induced hyperglycemia.	H24172
Fruit Egypt	Antihyperglycemic Activity	Juice	IG Rat	Not stated	Active		J10963
Fruit Juice India	Antihyperglycemic Activity	Hot H2O Ext	Oral Rat (Male)	5.0 ml/kg	Equiv	vs. anterior pituitary extract-induced hyperglycemia.	A07232
Fruit Juice England	Antihyperglycemic Activity	Juice	Oral Human Adult	50.0 ml	Active	Improved glucose tolerance in diabetic patients. Treatment for 8 to 11 weeks. Results significant at p < 0.01 level.	T12686
Fruit Juice India	Antihyperglycemic Activity	Juice	IG Mouse (Male)	10.0 ml/kg	Active	vs. streptozotocin-induced hyperglycemia.	L12020
Fruit Juice India	Antihyperglycemic Activity	Juice	IG Rat (Male)	5.0 ml/kg	Active	A glucose tolerance test was used.	A14525
Fruit Juice Sri Lanka	Antihyperglycemic Activity	Hot H2O Ext	IG	Not stated	Active	vs. glucose-induced hyperglycemia.	M17655

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Juice Sri Lanka	Antihyperglycemic Activity	Hot H2O Ext	Oral Human Adult	Not stated	Active	Maturity onset diabetics. 73% improved glucose tolerance. vs. glucose-induced hyperglycemia.	M17655
Fruit Juice China	Antihyperglycemic Activity	Juice Lyophilized Ext	IG Mouse	Not stated Not stated	Active Active	vs. alloxan-induced hyperglycemia.	L19093
Fruit Juice India	Antihyperglycemic Activity	Juice	IG Rabbit	5.0 ml/kg	Active	vs. alloxan-induced hyperglycemia.	L06960
Pulp Juice Bangladesh	Hypoglycemic Activity	Juice	IG Rat	150 mg	Active	Lowered fasting blood glucose levels in non-diabetic rats; (p<0.05 at 120 min).	K13947
Pulp Juice Bangladesh	Hypoglycemic Activity	MEOH Ext Saponin Free	IG Rat	150 mg	Active	Lowered fasting blood glucose levels in non-diabetic rats; (p<0.05 at 60 min / p<0.01 at 120 min).	K13947
Pulp Juice Bangladesh	Hypoglycemic Activity	MEOH Ext Saponin Free	IG Rat	150 mg	Active	Extract fed 45 minutes before oral glucose load in non-diabetic rats.	K13947
Pulp Juice Bangladesh	Hypoglycemic Activity	Juice	IG Rat	150 mg	Inactive	IDDM model rats in fasting or postprandial states.	K13947
Pulp Juice Bangladesh	Hypoglycemic Activity	MEOH Ext Saponin Free	IG Rat	150 mg	Active	Hypoglycemic effect in fasting and postprandial states in NIDDM rats.	K13947
Seed Bangladesh	Hypoglycemic Activity	MEOH Ext MEOH Ext	IG Rat	150 mg	Inactive	A saponin-free extract had no effect in normal and IDDM rats.	K13947
Fruit Juice India	Hypoglycemic Activity	Juice	IG Rabbit	2.0 ml/kg	Equiv		L06960
Seed India	Hypoglycemic Activity	MEOH Ext	IG Rat	Not stated	Active		J11478
Fruit Juice Sri Lanka	Hypoglycemic Activity	Hot H2O Ext	IG	Not stated	Active		M17655
Fruit Juice India	Hypoglycemic Activity	Juice	IG Rabbit	500.0 mg	Inactive		A14310
Fruit Juice India	Hypoglycemic Activity	Not stated	IG Rabbit	200.0 mg 500.0 mg	Inactive Inactive		W 00276
Fruit Pulp Sri Lanka	Hypoglycemic Activity	Juice	Gastric Intubation Rat	10.0 ml/kg	Active		T08396
Fresh Fruit Egypt	Hypoglycemic Activity	Juice	IG Rat	Not stated	Active		J10963

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Pulp Bangladesh	Hypoglycemic Activity	Juice	IG Rat	2.5 mg/kg	Active	Extract fed 45 minutes before the oral glucose load.	K13947
Fruit Pulp Bangladesh	Hypoglycemic Activity	MEOH Ext saponin free	IG Rat	2.5 gm/kg	Active	Non-diabetic rats. Result significant at 60-120 min.	K13947
Fruit Pulp Bangladesh	Hypoglycemic Activity	MEOH Ext saponin free	IG Rat	2.5 mg/kg	Active	NIDDM rats. Hypoglycemic effect in fasting and postprandial states.	K13947
Fruit Pulp Bangladesh	Hypoglycemic Activity	Juice	IG Rat	2.5 mg/kg	Inactive	IDDM rats.	K13947
Seed + Whole Plant Bangladesh	Hypoglycemic Activity	MEOH Ext MEOH Ext	IG Rat	2.5 mg/kg	Inactive Inactive	A saponin-free extract had no effect in normal and IDDM rats.	K13947
Seed India	Hypoglycemic Activity	ETOH-H2O(1:1) Ext MEOH Ext Saline Ext	Oral Rat Oral Rat Oral Rat	20.0 mg/kg 10.0 mg/kg 20.0 mg/kg	Active Active Active		T14966
Fruit + Leaf + Stem Trinidad	Hypoglycemic Activity	Decoction	IP Mouse (Male)	0.3 ml	Active	1.0 ml of extract was equivalent to 10 gm of dried plant material. Following a single dose of the extract, basal plasma glucose concentrations were reduced after 4 and 8 hours. Glucose tolerance was also improved 8 hr after dosing. Plasma insulin levels were unaffected by the extract.	M23565
Fruit + Leaf + Stem Trinidad	Hypoglycemic Activity	Decoction in Drinking Water	Mouse (Male)	0.2%	Inactive	Daily dosing of the extract for 13 days followed by IP glucose tolerance. Plasma glucose and plasma insulin were measured. There was no significant alteration of body weight, food intake, fluid intake or plasma concentrations of glucose or insulin. Glucose tolerance, measured on day 13, was improved by treatment.	M23565
Fruit Turkey	Hypoglycemic Activity	ETOH-H2O(1:1) Ext H2O Ext	IG Mouse (Male)	0.5 gm/kg 0.5 gm/kg	Inactive Inactive		K18219

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Pakistan	Hypoglycemic Activity	Fruit	IG Rabbit	0.5 gm/kg	Active		M22028
Fruit Pakistan	Hypoglycemic Activity	Not stated	IG Rabbit	Not stated	Active		L03572
Fruit India	Hypoglycemic Activity	Fruit	IG Mouse	Not stated	Active		J11478
Fruit India	Hypoglycemic Activity	Juice	IG Rat	Not stated	Active	vs. ant.pituitary extract-induced hyperglycemia.	J11478
Fruit China	Hypoglycemic Activity	Not stated Juice	IV Rabbit  Gastric Intubation Rabbit	12.0 microcuries/ kg	Active Active	vs. alloxan-induced hyperglycemia.	T08662
Fruit China	Hypoglycemic Activity	Not stated	Mouse	Not stated	Active	Tested in diabetic mice.	T08662
Fruit India	Hypoglycemic Activity	Decoction	IG Rabbit	200.0 mg/kg	Active		A14458
Fruit India	Hypoglycemic Activity	ETOH(95%) Ext	IG Rat	500.0 mg/kg	Active	In streptozotocin-induced diabetic rats it improved oral glucose tolerance and reduced plasma glucose by 26% at 3.5 hrs (metformin caused 45-50% reduction at 1, 2 and 3.5 hrs).	K27156
Fruit India	Hypoglycemic Activity	ETOH(95%) Ext	IG Rat (Female)	250.0 mg/kg	Active	Potentiation by using three plants in combination.	K19538
Fruit India	Hypoglycemic Activity	ETOH-H2O(1:1) Ext	IG Rat	250.0 mg/kg	Active		K09153
Fruit India	Hypoglycemic Activity	H2O Ext	Rat (Female)	250.0 mg/kg	Active	Potentiation effect if used with <i>C.</i> longa and <i>E.</i> officinalis.	K19538
Fruit India	Hypoglycemic Activity	H2O Ext	Oral Rabbit	10.0 mg/kg	Active	Drop in blood sugar of 15 mg relative to inert-treated control.	A14379
Fruit Jamaica	Hypoglycemic Activity	Hot H2O Ext	Gastric Intubation Dog	200.0 ml	Weak Activity	Dose = 20 gm of air-dried plant material.	T07170
Fruit Thailand	Hypoglycemic Activity	Glycoside Mixture Lyophilized Ext Lyophilized Ext	Rabbit Rabbit Rabbit	10.0 mg/kg 1.2 gm/kg 400.0 mg/kg	Active Inactive Inactive		P00096

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Thailand	Hypoglycemic Activity	Hot H2O Ext	Rabbit	5 mg/kg 10 mg/kg 20 mg/kg	Inactive		P00050
Fruit Japan	Hypoglycemic Activity	Powder Powder	Oral Rat (Male)	1.0 % of diet 1.0 % of diet	Active Inactive	Serum vs. fed cholesterol-free diets. Serum vs. fed cholesterol-enriched diets.	L11054
Fruit India	Hypoglycemic Activity	Fruit	Oral Human Adult	15.0 gm/day	Equiv	The dose was given for 21 days. The fall in blood sugar was 25% of the initial level; however statistically is insignificant. The overall fall in blood sugar was 25%.	K12995
Fruit India	Hypoglycemic Activity	Juice	IG Rabbit	6.0 ml/kg	Active		A14328
Fruit Israel	Glucose Absorption Inhibition	Aqueous High Speed Supernatant	Rat (Intestine, small)	50.0 mcl	Active		T12135
Fruit Brazil	Glucose Absorption Inhibition	Aqueous High Speed Supernatant	Rat (Adipocytes)	50.0 mcl	Inactive		T12135
Fruit Kenya	Glucose Absorption Inhibition	H2O Ext	IG Mouse	16.0 gm	Inactive	vs. streptozotocin-induced hyperglycemia.	M25031
Fruit Israel	Glucose Absorption Inhibition	Acetone Ext ETOH(95%) Ext	Rat Rat	125.0 mg/ml 125.0 mg/ml	Active Inactive	(Intestine, small) (Adipocytes)	T12135
Fruit Peru	Glucose Uptake Induction	H2O Ext	Injection Mouse (Male)	100.0 mg/kg	Active	Muscle content of GLUT4 transporter was increased (p<0.01).	L10622
Fruit India	Glucose Uptake Induction	Juice	Diaphragm	Not stated	Active		J11478
Fruit Sri Lanka	Glucose Uptake Induction	Juice	Gastric Intubation Rat	10.0 ml/kg	Active	Results significant at p <0.001 level.	T12703
Pulp Juice Bangladesh	Insulin Release Stimulation	Not stated	Mouse (Islets)	Not stated	Active		K13947

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Insulin Level Increase	Not stated	Human Adult Mouse Pig	Not stated Not stated Not stated	Active Active Active		J11478
Fruit Pulp India	Insulin Level Increase	ETOH(95%) Ext	IG Rat	500.0 mg/kg	Inactive		K27156
Fruit India	Insulin Potentiating Effect	ETOH(100%)Ext H2O Ext	IG Rat IG Rat	400.0 mg 400.0 mg	Active Active		L15207
Root Peel India	Hypoglycemic Activity	Not stated	Not stated	Not stated	Active		T11569
Fruit India	Glucose Absorption Inhibition	ETOH(95%) Ext H2O Ext	Intestine (small)	Not stated Not stated	Active Active		J11478
Fruit Juice Sri Lanka	Glucose Uptake Induction	Hot H2O Ext	Not stated	Not stated	Active		M17655
Fruit India	Glucose Utilization Inhibition	ETOH(95%) Ext	Not stated	Not stated	Active		J11478
Fruit Sri Lanka	Insulin Induction	H2O Ext	Cell Culture (Pancreatic islets)	1.0 mg/ml	Active		M21802
Fruit India	Insulin Release Stimulation	H2O Ext	Islets of Langerhan	Not stated	Active		J11478
Fruit India	Glucose-6-phosphat- ase Inhibition	ETOH(95%) Ext	Liver	Not stated	Active		J11478
Fruit India	Hexokinase Inhibition	ETOH(95%) Ext	Agar Plate	Not stated	Active	Yeast.	J11478
Fruit India	Gluconeogenesis Inhibition	Juice ETOH(95%) Ext	Kidney Liver	Not stated Not stated	Equiv Active		J11478
Fruit Juice Sri Lanka	Gluconeogenesis Inhibition	Hot H2O Ext	Kidney	Not stated	Inactive		M17655
Fruit Juice Sri Lanka	Liver Glycogen Increase	Hot H2O Ext	Liver	Not stated	Active	Muscle glycogen levels also increased.	M17655
Fruit India	Fructose Diphosphatase Inhibition	ETOH(95%) Ext	IG Rat	200.0 mg/kg	Active	Activity decreased 20%.	K11849

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Enzyme Modulation	H2O Ext	Rat Mouse	200 mg	Active	In streptozotocin-induced diabetic mice and alloxanized-induced diabetic rats, momordica restored hepatic and skeletal muscle glycogen content, hepatic glucokinase, hexokinase, glucose-6-phosphate and phosphofructokinase.	L10702
Fruit India	Glucose-6-phosphat- ase Inhibition	ETOH(95%) Ext	IG Rat	200.0 mg/kg	Active	vs. streptozotocin-induced hyperglycemia. Activity decreased 23%.	K11849
Fruit India	Glucose-6-phosph-ate Dehydrogenase Stimulation	ETOH(95%) Ext	IG Rat	200.0 mg/kg	Active	vs. streptozotocin-induced hyperglycemia.	K11849
Fruit Israel	Glucose Oxidase Inhibition	ETOH(95%) Ext	Rat (Adipocytes)	125.0 mg/ml	Active	Liver homogenates.	T12135
Fruit Brazil	Glucose Oxidase Inhibition	Supernatant	Rat (Adipocytes)	50.0 mcl	Active		T12135
Fruit Brazil	Glucose Oxidase Inhibition	Supernatant	Rat	50.0 mcl	Active	Liver homogenates.	T12135
Fruit Brazil	Hexokinase Inhibition	Supernatant	Rat	50.0 mcl	Active	Liver homogenates.	T12135
Fruit Israel	Hexokinase Inhibition	ETOH (95%) Ext	Rat	125.0 mg/ml	Active	Liver homogenates.	T12135
Fruit Sri Lanka	Liver & Muscle Glycogen Increase	Juice	GI Rat	10.0 ml/kg	Active	Results significant at p < 0.01 level.	T12703
Fruit Pulp India	Glycogenic Effect	ETOH (95%) Ext	IG Rat	500 mg/kg	Active	4-5-fold increase in the rate of glycogen synthesis.	K27156
Fruit Juice United Arab Emirates	Miscellaneous Effects	Fruit Juice	IG Rat (Male)	10.0 ml/kg	Active	Study of the effect of fruit juice on the increase of alpha, beta, and gamma cells in pancreas of streptozotocin-induced diabetic rats. There was a significant increase in beta and delta cells.	L03902

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Antipancreatotoxic Activity	Powder	IG Rat (Pancreas)	1.0 gm/kg	Active	Treatment significantly countered loss of islets and beta cells. Vs. streptozotocin-induced hyperglycemia.	J14657
Fruit India	Analgesic Activity	MEOH Ext	Mouse	Not stated	Active		J11478
Fruit India	Analgesic Activity	ETOH-H2O Ext	IG Mouse	Not stated	Inactive		K09153
Seed India	Analgesic Activity	MEOH Ext	SC Mouse SC Rat	ED50=5.0 mg/kg	Active Equiv	Dose given 30 min before challenge to both rat and mouse. Naloxone did not inhibit effect. Vs. acetic acid-induced writhing.	M25712
Fruit India	Anticonvulsant Activity	ETOH-H2O Ext	IP Mouse	Not stated	Inactive	vs. hot plate method. vs. tail clip method.	K09153
Fruit Nigeria	Anticonvulsant Activity	ETOH(70%) Ext	IP Mouse	Variable	Inactive	vs. metrazole-induced convulsions. vs. strychnine-induced convulsions.	T06510
Fruit India	Spasmolytic Activity	ETOH-H2O Ext	Rat	Not stated	Inactive	Uterus (unspec.cond).	K09153
Fruit India	Uterine Relaxation Effect	ETOH-H2O Ext	Rat (Female)	Not stated	Inactive	Uterus (non-preg).	T02678
Fruit India	Antiinflamm atory Activity	Not stated	Rat	Not stated	Active	vs. carrageenan-induced pedal edema.	J11478
Fruit Turkey	Antiulcer Activity	ETOH(95%) Ext Hexane Ext CHCL3 Ext Essential Oil	IG Rat	500.0 mg/kg 500.0 mg/kg 500.0 mg/kg 500.0 mg/kg	Inactive Inactive Inactive Inactive		K11898
Fruit Turkey	Antiulcer Activity	ETOH(100%) Ext ETOH(100%) Ext ETOH(100%) Ext Hexane Ext Olive Oil Ext Olive Oil Ext	IG Rat (Stomach)	310.0 mg/kg 310.0 mg/kg 620.0 mg/kg 290.0 mg/kg 330.0 mg/kg 660.0 mg/kg	Active Active Active Active Active Inactive	vs. 80% ethanol-induced ulcers. vs. DDC-induced ulcerogenesis. vs. HCL/ethanol-induced ulcers. vs. 80% ethanol-induced ulcers. vs. 80% ethanol-induced ulcers. vs. HCL/ethanol-induced ulcers.	L09878
Fruit India	Diuretic Activity	ETOH-H2O Ext	IG Rat	510.7 mg/kg	Inactive	vs. supramaximal electroshock-induced convulsions.	K09153
Fruit India	Antihyperuricemic Acitiviy	Acetone Ext	Oral Rat	250.0 mg/kg	Inactive	vs. alloxan-induced hyperglycemia.	M22671

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Hypothermic Activity	ETOH-H2O Ext	IG Rat	Not stated	Inactive		K09153
Seed India	Cholesterol Level Increase	H2O Ext	IG Rat IP Rat	250.0 mg/kg	Active		J19694
Fruit India	Hypercholesterolemic Activity	Not stated	IG Dog	1.75 gm	Active		J11478
Fruit India	Antihypercholesterol- emic Activity	Acetone Ext	Oral Rat	250.0 mg/kg	Active	vs. alloxan-induced hyperglycemia.	M22671
Fruit India	Antihypercholesterol- emic Activity	Fruit Powder	Oral Human Adult (Male)	2.0 gm	Active	Ten mild diabetic patients (23-28 years old) were used in the study. 11 day treatment.	M27532
Fruit Japan	Hypolipemic Activity	Powder	Oral Rat (Male)	1.0 % of diet	Inactive Active Active	Serum vs.fed cholesterol-free and-enriched diets. Elevated HDL levels. Reduced total cholesterol and triglyceride levels in both the presence and absence of dietary cholesterol.	L11054
Fruit India	Hypocholesterolemic Activity	Fruit	IG Rat	Not stated	Active		J11478
Fruit Turkey	Hypocholesterolemic Activity	Juice	IG Rat (Male)	10.0 ml/kg	Active	vs. streptozotocin-induced type-1 diabetes. Over a 10 week period momordica returned to normal the increased cholesterol, triglycerides and phospholipids and LPO and malonedialdehyde as well as the reduced HDL.	L18419
Fruit Japan	Hypocholesterolemic Activity	Powder	Oral Rat (Male)(Liver)	1.0 % of diet	Active	In the presence and absence of dietary cholesterol.	L11054
Oil Japan	Hypocholesterolemic Activity	Oil	Oral Rat	2%	Active Inactive	Reduced free cholesterol. Increased HDL. No change in total cholesterol.	AM1005
Freeze Dried Fruit Japan	Hypotriglyceridemia Activity	Powder	Oral Rat (Male)	1.0 % of diet	Active	Liver vs. fed cholesterol-free and-enriched diets.	L11054
Fruit Turkey	Hypotriglyceridemia Activity	Juice	IG Rat (Male)	10.0 ml/kg	Active	vs. streptozotocin-induced type-1 diabetes.	L18419

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Hong Kong	Antilipolytic Activity	Acetone Ext	Rat (Adipocytes)	500.0 mcg	Active	vs. Acta- Epinephrine bitartrate- and Glucagon- induced lipolysis.	T11178
Seed India	Lipolytic Effect	Seeds	Gastric Intubation Rabbit	3.0 gm	Active	In streptozotocin-treated animals.	T05236
Seed Hong Kong	Antilipolytic Activity	Acetone Ext	Rat (Adipocytes)	500.0 mcg	Active	vs. Acta- and epineparine bitartrate- induced lipolysis.	T11178
Fruit Japan	Lipid Peroxide Formation Inhibition	Not stated	IG Rat (Cerebral Cortex)	100.0 mg	Active	vs. Fe(3+)-induced peroxidation.	K27939
Fruit India	Lipid Peroxide Formation Stimulation	ETOH(100%) Ext	IG Mouse (Male) (Heart)	400.0 mg/kg	Active		L10141
Fruit India	Glycogen Content Increased	Juice	Liver	Not stated	Active		J11478
Fruit Juice India	Apoptosis Inhibition	Juice	Cell Culture	0.1%	Active	vs. RIN cells. vsstreptozotocin-induced hyperglycemia.	L12020
Fruit + Seeds Hong Kong	Antilipolytic Activity	Acid-ETOH Ext	Adipocytes	Variable	Active	Inhibited lipolysis.	T13897
Fruit Juice Sri Lanka	Hyperlipidemic Activity	Hot H2O Ext	Adipose tissue	Not stated	Active	vs. triglyceride content of adipose tissue.	M17655
Seed India	Lipogenesis Stimulation	ETOH(95%) Ext H2O Ext Saline Ext	Adipocytes	Not stated Not stated Not stated	Active Active Active		J11478
Fruit India	Lipogenesis Stimulation	ETOH(95%) Ext H2O Ext Saline Ext	Adipocytes Adipocytes Adipocytes	Not stated Not stated Not stated	Active Active Active		J11478
Fruit India	Radical Scavenging Effect	Juice	Not stated	Not stated	Active		J11478
Fruit Japan	Radical Scavenging Effect	Not stated	Not stated	IC50=0.83 mg/ml	Active	Fenton reaction assay.	K27939

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Japan	Radical Scavenging Effect	Not stated	Not stated	IC50=4.5 mcg/ml	Active	Diphenyl picrylhydralazine assay.	K27939
Fruit Japan	Superoxide Radical Scavenging Activity	Not stated	Not stated	IC50=0.6 mg/ml	Active	Hypoxanthine/xanthine oxidase system.	K27939
Fruit Juice India	Oxygen Radical Inhibition	Juice	Not stated	0.1 ml	Active	A heat, acid and alkali-stable component of extract acted as scavenger of both superoxide and hydroxy radicals. At the given concentration 90.16% scavenging of superoxide seen.	T16453
Fruit Juice India	Oxygen Radical Inhibition	Juice	Not stated	0.33 ml	Active	A heat, acid and alkali-stable component of extract acted as scavenger of both superoxide and hydroxy radicals. At the given concentration 87.70% scavenging of hydroxy radical seen.	T16453
Fruit Juice India	Antioxidant Activity	Juice	Cell Culture	1.0% 5.0%	Active Active	vs. streptozotocin-induced hyperglycemia.	L12020
Oil Japan	Oxidative Activity	Oil	Oral Rat	2%	Active	Increase in hyperoxides, possibly due to the occurrence of c9,t11-18:2 in liver.	AM1005
Fruit Juice India	Antioxidant Activity	Juice	IG Mouse (Male)	10.0 ml/kg	Active	vs. streptozotocin-induced hyperglycemia.	L12020
Fruit Japan	Antioxidant Activity	Not stated	Rat (Cerebral Cortex)	1.0 mg/ml	Active	Fe(2+)/ascorbate-induced oxidative damage.	K27939
Fruit United Arab Emirates	Antioxidant Activity	Juice	Rat	Not stated	Active	Reversed the effect of chronic diabetes on P450-dependent monooxygenase activities and glutathione-dependent oxidative stress related lipid peroxidation and glutathione-S-transferase activities.	AM1015

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit United Arab Emirates	Antioxidant Activity	Juice	Rat	Not stated	Active	A 65% decrease in hepatic glutathione (GSH) content and glutathione-S-transferase (GST) activity and an increase in brain GSH and GST activity observed in diabetic rats. Renal GST was reduced while GSH remained slightly higher than controls.	AM1015
Fruit Nigeria	CNS Depressant Activity	ETOH(70%) Ext	IP Mouse	Variable	Active		T06510
Fruit India	Thyroxine Level Decrease	ETOH(100%) Ext	IG Mouse (Male) (Serum)	400.0 mg/kg	Active		L10141
Fruit India	Triiodothyronine(T3) Level Decrease	ETOH(100%) Ext	IG Mouse (Male) (Serum)	400.0 mg/kg	Active		L10141
Seed India	Androgenic Effect	H2O Ext	IG Rat (Male)	250.0 mg/kg	Active	Measured by changes in accessory reproductive organs. Weight of epididymis, prostate gland, seminal vesicle and levator ani increased.	J19694
Fruit United Arab Emirates	Hepatic Enzyme Modulating Activity	Juice	Oral Rat (streptozoto- cin-induced diabetes)		Active	Reversed 50-100% increase in aniline hydroxylase and ethoxyresorufin-O-deethylase activity. Reversed the 17-20% decreased activity of aminopyrene N-demethylase and ethoxycoumarin-O-deethylase. Normalized a reduced cytosolic glutathione concentration. Increased (20-30%) GST activity.	AM1023
Fruit Juice Sri Lanka	Gamma-glutamyl Transferase Induction	Fruit Juice(unripe)	IG Rat (Male)	10.0 ml/kg	Active	Results significant at p <0.001 level.	K17959
Fruit Juice Sri Lanka	Gamma-glutamyl Transferase Induction	Not stated	IG Rat (Male)	10.0 ml/kg	Active	Results significant at p <0.001 level.	K17959
Fruit India	Cytochrome B-5 Increase	H2O Ext	External Mouse	100.0 mcl	Active		J14866

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Cytochrome B-5 Increase	H2O Ext	IG Mouse (Liver)	100.0 mcl	Active	Activity was passed translactationally to pups of dams treated with extract for 14 days.	J16660
Seed India	Cytochrome B-5 Increase	H2O Ext	External Mouse	100.0 mcl	Active		J14866
Fruit Pulp India	Cytochrome B-5 Increase	H2O Ext	External Mouse	100.0 mcl	Inactive		J14866
Fruit Pulp India	Cytochrome B-5 Increase	H2O Ext	IG Mouse (Female) (Liver)	100.0 mcl	Inactive		J16660
Fruit Peel India	Cytochrome B-5 Increase	H2O Ext	External Mouse	100.0 mcl	Active		J14866
Fruit Peel India	Cytochrome B-5 Increase	H2O Ext	IG Mouse (Female)	100.0 mcl	Active	Liver activity was passed translactationally to pups of dams treated with extract for 14 days.	J16660
Seed India	Cytochrome B-5 Increase	H2O Ext	IG Mouse (Female) (Liver)	100.0 mcl	Active		J16660
Fruit Peel India	Cytochrome P450 Induction	H2O Ext	IG Mouse (Female)	100.0 mcg	Active	Liver activity was passed translactationally to pups of dams treated with extract for 14 days.	J16660
Seed India	Cytochrome P450 Induction	H2O Ext	IG Mouse (Female) (Liver)	100.0 mcl	Active		J16660
Fruit Pulp India	Cytochrome P450 Induction	H2O Ext	IG Mouse (Female) (Liver)	100.0 mcl	Inactive		J16660
Fruit India	Cytochrome P450 Induction	H2O Ext	IG Mouse (Female)	100.0 mcl	Active	Liver activity was passed translactationally to pups of dams treated with extract for 14 days.	J16660
Fruit China	Cytochrome P450 Inhibition	Fruit	Oral Mouse	15.0 % of diet	Inactive	Microsomes-rat-liver.	J18457
Fruit Thailand	Cytochrome P450 Inhibition	Fruit	Oral Rat (Male)	12.5 % of diet	Inactive	Microsomes-rat-liver.	J18457

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Peel India	Sulfhydryl-containing Compounds Increased	H2O Ext	IG Mouse (Female)	100.0 mcl	Active	Liver activity was passed translactationally to pups of dams treated with extract for 14 days.	J16660
Fruit India Pulp India Fruit Peel India	Sulfhydryl-containing Compounds Increased	H2O Ext	External Mouse	100.0 mcl	Active	vs. DMBA initiated and croton oil: promoted sulfhydryl depletion.	J14866
Seed India	Sulfhydryl-containing Compounds Increased	H2O Ext	IG Mouse (Female) (Liver)	100.0 mcl	Active		J16660
Fruit Pulp India	Sulfhydryl-containing Compounds Increased	H2O Ext	IG Mouse (Female) (Liver)	100.0 mcl	Inactive		J16660
Fruit India	Sulfhydryl-containing Compounds Increased	H2O Ext	IG Mouse (Female)	100.0 mcl	Active	Liver activity was passed translactationally to pups of dams treated with extract for 14 days.	J16660
Seed India	Glutathione-s-trans- ferase Induction	H2O Ext	IG Mouse (Female) (Liver)	100.0 mcl	Active		J16660
Fruit Peel India	Glutathione-s-trans- ferase Induction	H2O Ext	External Mouse	100.0 mcg	Active		J14866
Fruit Peel India	Glutathione-s-trans- ferase Induction	H2O Ext	IG Mouse (Male)	100.0 mcl	Active	Liver activity was passed translactationally to pups of dams treated with extract for 14 days.	J16660
Fruit Pulp India	Glutathione-s-trans- ferase Induction	H2O Ext	External Mouse	100.0 mcl	Inactive		J14866
Fruit Pulp India	Glutathione-s-trans- ferase Induction	H2O Ext	IG Mouse (Female) (Liver)	100.0 mcl	Inactive		J16660
Fruit India	Glutathione-s-trans- ferase Induction	ETOH(95%) Ext	External Mouse	10.0 mcl	Active		J14866
Seed India	Glutathione-s-trans- ferase Induction	H2O Ext	External Mouse	100.0 mcl	Active		J14866
Fruit Thailand	Glutathione-s-trans- ferase Induction	Fruit	Oral Rat (Male)	12.5 % of diet	Active	Microsomes-rat-liver.	J18457

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Glutathione-s-trans- ferase Induction	H2O Ext	IG Mouse (Female)	100.0 mcl	Active	Liver activity was passed translactationally to pups of dams treated with extract for 14 days.	J16660
Fruit USA-FL	Guanylate Cyclase Inhibition	H2O Ext	Rat (colon) Rat (heart) Rat (kidney) Rat (liver) Rat (lung) Rat (stomach)	Not stated	Strong Activity		M00425
Seed USA-FL	Guanylate Cyclase Inhibition	H2O Ext	Rat (liver)	Not stated	Inactive		M00425
Fruit USA	Guanylate cyclase Modulation	Aqueous Ext	Rat (prostate)	Not stated	Active	Guanylate cyclase activity was greater in tumor than normal prostate tissue and was reduced by the extract.	AM1041
Fruit India	Catalase Inhibition	ETOH(100%) Ext	IG Mouse (Male) (Heart)	400.0 mg/kg	Active		L10141
Fruit India	Superoxide Dismutase Inhibition	ETOH(100%) Ext	IG Mouse (Male) (Heart)	400.0 mg/kg	Active		L10141
Fruit China	Aminopyrine de-methylase Inhibition	Fruit	Oral Rat (Male)	15.0 % of diet	Inactive	Microsomes-rat-liver.	J18457
Fruit Thailand	Aminopyrine de-methylase Inhibition	Fruit	Oral Rat (Male)	12.5 % of diet	Inactive	Microsomes-rat-liver.	J18457
Fruit Thailand	Aniline Hydroxylase Inhibition	Fruit	Oral Rat (Male)	12.5 % of diet	Inactive	Microsomes-rat-liver.	J18457
Fruit China	Aniline Hydroxylase Inhibition	Fruit	Oral Rat (Male)	15.0 % of diet	Inactive	Microsomes-rat-liver.	J18457
Seed Japan	Alpha-glucosidase Inhibitory Activity	MEOH Ext	Rat(small intestine)	Not stated	Active		AM1002
Fruit China	Benzopyrene Metabolism Inhibition	Fruit	Oral Rat (Male)	15.0 % of diet	Inactive	Microsomes-rat-liver s-9 fractions from animals fed fruit inhibited benzo[a]pyrene-induced mutagenicity towards salmonella typhimurium.	J18457

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Thailand	Benzopyrene Metabolism Inhibition	Fruit	Oral Rat (Male)	12.5 % of diet	Active	Microsomes-rat-liver s-9 fractions from animals fed fruit inhibited benzo[a]pyrene-induced mutagenicity towards salmonella typhimurium.	J18457
Fruit China	Aflatoxin Inactivation	Fruit	Oral Rat (Male)	15.0 % of diet	Inactive	Microsomes-rat-liver s-9 fractions from animals fed fruit inhibited aflatoxin-b-1-induced mutagenicity towards salmonella typhimuriu.	J18457
Fruit Thailand	Aflatoxin Inactivation	Fruit	Oral Rat (Male)	12.5 % of diet	Active	S-9 fractions from animals fed fruit inhibited aflatoxin-b-1- induced mutagenicity towards salmonella typhimurium.	J18457
Fruit China	Glutathione-s-trans- ferase Induction	Fruit	Oral Rat (Male)	15.0 % of diet	Inactive	Microsomes-rat-liver.	J18457
Fruit + Leaf Philippines	Anticlastogenic Activity	Juice	IP Mouse (cells-marrow)	50.0 ml/kg	Active	vs. mitomycin c-, tetracycline- and dimethylnitrosamine-induced micronuclei.	K17561
Seed China	Androgenic Effect	Not stated	Not stated	Not stated	Active		M27078
Fruit China	Adenyl Cyclase Inhibition	Not stated	Cell Culture	Not stated	Inactive		T08662
Fruit Not Stated	Guanylate Cyclase Inhibition	H2O Ext	Cell Culture	ED50=0.3 mg/ml	Active	Lymphoblasts-human.	T01575
Fruit USA	Guanylate Cyclase Inhibition	ETOH Ext	Not stated	ED50= 170.0 mcg/ml	Active	Leukemic lymphocytes.	T12861
Fruit China	Guanylate Cyclase Inhibition	Not stated	Cell Culture	Not stated	Active		T08662
Seed Japan	Hemagglutinin Activity	Buffer	Not stated	Not stated	Active		M25317
Fruit Thailand	Chondrogenesis Inhibition	MEOH Ext	Cell Culture (Raji)	200.0 mcg/ml	Weak Activity	vs. 12-o-tetradecanoylphorbol-13- ace-tate(tpa)-induced epstein-barr virus early antigen activation.	L12243
Fruit Thailand	Antimicrobial Activity (unspecified)	Hot H2O Ext	Agar Plate	Not stated	Active		P00050

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Japan	Antibacterial Activity	MEOH Ext	Agar Plate	MIC=1.0 gm/mI	W eak Activity	Escherichia coli	L07607
Fruit China	Antibacterial Activity	Not stated	Agar Plate	MIC=1100 mg/ml	Inactive		L19726
Fruit India	Antibacterial Activity	H2O Ext H2O Ext H2O Ext Pet Ether Ext Pet Ether Ext Pet Ether Ext	Agar Plate Agar Plate Agar Plate Agar Plate Agar Plate Agar Plate	250.0 mg/ml 250.0 mg/ml 250.0 mg/ml 250.0 mg/ml 250.0 mg/ml 250.0 mg/ml	Active Active Active Active Active	Bacillus subtilis Escherichia coli Pseudomonas aeruginosa Bacillus subtilis Pseudomonas aeruginosa Staphylococcus aureus	K19538
Fruit India	Antibacterial Activity	H2O Ext Pet Ether Ext	Agar Plate Agar Plate	250.0 mg/ml 250.0 mg/ml	Inactive Inactive	Staphylococcus aureus Escherichia coli	K19538
Fruit India	Antibacterial Activity	CHCLI3 Ext ETOH(95%) Ext H2O Ext	Agar Plate	250.0 mg/ml	Active	Bacillus subtilis Escherichia coli Pseudomonas aeruginosa Staphylococcus aureus	K19538
Fruit India	Antibacterial Activity	ETOH-H2O (1:1) Ext	Broth Culture	1.0 mg/ml	Inactive	Pseudomonas aeruginosa	K19538
Fruit Turkey	Antibacterial Activity	Not stated	Agar plate	MIC=1.95 and 250 mcg/mI	Active	Helicobacter pylori (one standard strain and 8 clinical isolates).	AM1018
Fruit Papua- New Guinea	Antibacterial Activity	H2O Ext	Agar Plate	5.0 mcl	Weak Activity	Bacillus cereus Bacillus subtilis Micrococcus luteus Micrococcus roseus Proteus mirabilis Pseudomonas aeruginosa Serratia marcescens Streptococcus faecalis Trichomonas vaginalis	J19353
Fruit Papua- New Guinea	Antibacterial Activity	H2O Ext	Agar Plate	5.0 mcl	Active	Proteus mirabilis Escherichia coli Micrococcus roseus Salmonella typhi Staphylococcus albus Staphylococcus aureus Staphylococcus epidermidis	J19353

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit Papua- New Guinea	Antibacterial Activity	H2O Ext	Agar Plate	5.0 mcl	Inactive	Bacillus cereus Escherichia coli Micrococcus luteus Pseudomonas aeruginosa Salmonella typhi Serratia marcescens Staphylococcus albus Staphylococcus aureus Staphylococcus epidermidis Trichomonas vaginalis Salmonella typhimurium	J19353
Fruit Thailand	Antibacterial Activity	MEOH Ext CHCL3 Ext Ether Ext H2O Ext	Agar Plate	MIC=<50.0 mg	Strong Activity	Bacillus subtilis Staphylococcus aureus	P00093
Seed China	Antibacterial Activity	Not stated	Agar Plate	MIC=75.0 mg/ml	Equiv		L19726
Thailand	Antibacterial Activity	CHCL3 Ext Ether Ext H2O Ext MEOH Ext Ether Ext	Agar Plate	Not stated	Actve	Escherichia coli Pseudomonas aeruginosa Salmonella typhosa Sarcina lutea Shigella dysenteriae	P00093
Fruit Thailand	Antibacterial Activity	Pet Ether Ext	Agar Plate	Not stated	Inactive	Bacillus subtilis Escherichia coli Pseudomonas aeruginosa Salmonella typhosa Sarcina lutea Shigella dysenteriae Staphylococcus aureus	P00093
Seed India	Antibacterial Activity	ETOH(95%) Ext H2O Ext	Agar Plate	10.0 mg/ml	Inactive	Corynebacterium diphtheriae Diplococcus pneumoniae Staphylococcus aureus Streptococcus pyogenes Streptococcus viridans	M29966
Seed India	Antibacterial Activity	Seeds	Agar Plate	Not stated	Active	Bacillus subtilis Escherichia coli Pseudomonas cichorii Salmonella typhimurium	L07721

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Root Pakistan	Antibacterial Activity	ETOH(95%) Ext	Agar Plate	Not stated	Active	Bacillus subtilis Escherichia coli Staphylococcus aureus Vibrio cholera	L11725
Fruit Thailand	Antimycobacterial Activity	CHCL3 Ext H2O Ext MEOH Ext Pet Ether Ext Ether Ext	Agar Plate Agar Plate Agar Plate Agar Plate Agar Plate	Not stated Not stated Not stated Not stated MIC=2.0 mg	Active Active Active Inactive Strong Activity	Mycobacterium smegmatis Mycobacterium smegmatis Mycobacterium smegmatis Mycobacterium smegmatis Mycobacterium smegmatis	P00093
Fruit India	Antifungal Activity	ETOH-H2O (1:1) Ext	Broth Culture	1.0 mg/ml	Inactive	Aspergillus fumigatus Trichophyton mentagrophytes	K09153
Seed India	Antifungal Activity	ETOH(95%) Ext H2O Ext	Agar Plate	10.0 mg/ml	Inactive	Microsporum canis Microsporum gypseum Phialophora jeanselmei Piedraia hortae Trichophyton mentagrophytes	M29966
Seed India	Antiyeast Activity	ETOH(95%) Ext H2O Ext	Agar Plate	10.0 mg/ml	Inactive	Candida albicans Candida tropicalis Candida albicans Candida tropicalis	M29966
Fruit India	Antiyeast Activity	ETOH-H2O Ext	Broth Culture	1.0 mg/ml	Inactive	Candida albicans Cryptococcus neoformans Sporotrichum schenckii	K09153
Fruit Thailand	Antiyeast Activity	CHCL3 Ext Ether Ext MEOH Ext Pet Ether Ext H2O Ext	Agar Plate Agar Plate Agar Plate Agar Plate Agar Plate	Not stated Not stated Not stated Not stated MIC=25 mg	Active Active Active Inactive Strong Activity	Candida albicans Candida albicans Candida albicans Candida albicans Candida albicans	P00093
Fruit India	Antiviral Activity	ETOH-H2O Ext	Cell Culture	0.05 mg/ml	Inactive	Virus-ranikhet Virus-vaccinia	K09153
Fruit India	Antiviral Activity	Not stated	Not stated	Not stated	Active	Virus - herpes simplex 1 Virus - HIV-1	J11478
Fruit + Seed Not Stated	Antiviral Activity	Not stated	Not stated	Not stated	Active		AM1033

Part -Origin	Activity Tested For	Type Extract	Test Model	Dosage	Result	Notes/Organism tested	Ref #
Fruit India	Anthelmintic Activity	ETOH(95%) Ext	Not stated	100.0 mg/ml	Active	Ascaridia galli	K03520
Fruit Juice India	Anthelmintic Activity	ETOH(95%) Ext	Not stated	0.1 ml	Active	Ascaridia galli	K03520
Seed India	Anthelmintic Activity	Hot H2O Ext	Not stated	1-50	Active	Haemonchus contortus	W00384
Fruit India	Antiprotozoan Activity	ETOH-H2O (1:1) Ext	Broth Culture	IC100= 25.0 mcg/ml	Active	Entamoeba histolytica	K09153
Fruit Brazil	Molluscicidal Activity	ETOH(95%) Ext H2O Ext	Not stated Not stated	1000 ppm 1000 ppm	W eak Activity	Biomphalaria glabrata Biomphalaria straminea	W02949
Meristem Brazil	Insecticide Activity	ETOH(95%) Ext	Not stated	50.0 mcg	Inactive	Rhodnius neglectus	K18765
Fruit Thailand	Insecticide Activity	ETOAC Ext MEOH Ext Pet Ether Ext	Not stated Not stated Not stated	Not stated Not stated 1.0 ppm	Inactive Inactive Active	Spodoptera litura larvae Spodoptera litura larvae Spodoptera litura larvae	P00001
Seed Oil India	Feeding Deterrent(insect)	Seed Oil	Not stated	0.5%	Active	Athalia promina	T02572
Fruit India	Plant Root Growth Inhibition	Not stated	Not stated	Not stated	Active		J11478
Seed Oil India	Miscellaneous Effects	Seed Oil	Oral Rat	20.0 % of diet	Active		J18799

## Presence of Compounds in Bitter Melon (Momordica charantia)

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Alanine	Proteid	Seed Fruit	Nepal India	00.01577% Not stated	T06653 A00487
Alanine, beta:	Proteid	Fruit	India	Not stated	A00487
Alanine, phenyl:	Proteid	Fruit	India	Not stated	A00487
Amyrin, beta:	Triterpene	Seed oil	Japan	Not stated	M15045
Arachidic acid	Lipid	Entire plant	Bangladesh	Not stated	L13425
Arginine	Proteid	Seed	Nepal	00.0323%	T06653
Ascorbic acid	Inorganic	Fruit Leaf	Not stated Not stated	570-36,444 ppm 1,700-12,412 ppm	ZZ1047 ZZ1047
Ascorbigen	Unknown	Fruit	Not stated	Not stated	ZZ1047
Asparagine	Proteid	Seed	Nepal	Traces	T06653
Aspartic acid	Proteid	Seed	Nepal	00.009%	T06653
BGIT	Proteid	Seed	Japan	Not Stated	AM1028
Bitter gourd inhibitor bg-i-a	Proteid	Seed	Japan	Not stated	H08562
Butyric acid, gamma-amino	Proteid	Seed Fruit	Nepal India	Traces Not stated	T06653 A00487
Calceolarioside E	Phenylpropanoid	Aerial parts	Peru	Not stated	M28611
Calcium	Inorganic	Fruit Leaf	Not stated Not stated	130-4,333 ppm 2,640-18,701 ppm	ZZ1047 ZZ1047
Capric acid	Lipid	Seed oil Entire plant	India Bangladesh	Not stated Not stated	M19217 L13425
Carotene, alpha: epoxide	Carotenoid	Pericarp	USA	Not stated	K03650
Carotene, beta:	Carotenoid	Pericarp	USA	Not stated	K03650

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Carotene, beta: 5-6-epoxy:	Carotenoid	Pericarp	USA	Not stated	K03650
Carotene, delta:	Carotenoid	Pericarp	USA	Not stated	K03650
Carotene, gamma:	Carotenoid	Pericarp	USA	Not stated	K03650
Charantin	Steroid	Fruit Fruit Seed Fruit(unripe) Fruit Fruit	India China China India India China	Not stated Not stated Not stated 00.035% 00.15% Not stated	J11478 T08662 T08662 W00678 A00485 L14446
Charine	Alkaloid	Fruit(unripe)	Egypt	Not stated	H16247
Cholesta-trans-7-trans-22-25(27)-trien-3-beta-ol, 5-alpha: 3-o-beta-d-glucosyl-24-beta-ethyl	Steroid	Seed	China	Not stated	M27078
Cholesterol	Lipid	Fruit	Not stated	Not stated	ZZ1047
Citrulline	Proteid	Fruit	Japan	41.2 ppm	A00503
Copper	Inorganic	Fruit	Not stated	30 ppm	ZZ1047
Cryptoxanthin	Carotenoid	Pericarp	USA	Not stated	K03650
Cucurbita-5-24-dien-19-al,2-3-dihydroxy:	Triterpene	Entire plant	Bangladesh	Not stated	L16527
Cucurbita-5-24-dien-3-beta-ol, 1o-alpha:	Triterpene	Seed oil	Japan	Not stated	M15045
Cucurbita-5-24-diene, 3-beta-7-beta- 23-trihydroxy: 7-o-beta-d-glucoside	Triterpene	Leaf	Nigeria	00.03238%	M26112
Cucurbitacin B	Triterpene	Seed	Not stated	Not stated	L00734
Cucurbitacin K	Triterpene	Seed	Not stated	Not stated	L00734
Cycloart-cis-23-ene-3-beta-25-diol	Triterpene	Seed	Japan	Not stated	H24527
Cycloartenol	Triterpene	Seed oil	Japan	Not stated	M15045
Cycloartenol, 24-methylene:	Triterpene	Seed oil	Japan	Not stated	M15045
Cymene, para:	Monoterpene	Seed essential oil	Japan	Not stated	M13369

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Diosgenin	Sapogenin	Fruit(unripe) Suspension	India Not stated	01.69 mg/gm 13.66 mg/gm	A00475 A00475
Elaeostearic acid, alpha:	Lipid	Kernel Cotyledons Fruit	Japan Not stated PNew Guinea	Not stated 65.89% Not stated	A00488 T06928 M27944
Elasterol	Sterol	Plant	Not stated	Not stated	ZZ1047
Erythrodiol	Triterpene	Seed	Japan	Not stated	H24527
Ethylene	Alkene to c3	Fruit	USA	Not stated	T00436
Flavochrome	Unknown	Fruit	Not stated	Not stated	ZZ1047
Galacturonic acid, D:	Carbohydrate	Fruit	India	00.06%	A00486
Gentisic acid	Benzenoid	Leaf	Trinidad	Not stated	A06190
Glucose, alpha:	Carbohydrate	Seed	Japan	Not stated	M16315
Glucose, beta:	Carbohydrate	Seed	Japan	Not stated	M16315
Glutamic acid	Proteid	Fruit Seed	India Nepal	Not stated 00.0212%	A00487 T06653
Glycine	Proteid	Seed	Nepal	00.00382%	T06653
Gourd protein mrk-29	Proteid	Endosperm	Thailand	Not stated	H28024
Goyaglycoside A	Triterpene	Fruit	Japan	00.00007%	H27988
Goyaglycoside B	Triterpene	Fruit	Japan	00.00005%	H27988
Goyaglycoside C	Triterpene	Fruit	Japan	00.00006%	H27988
Goyaglycoside D	Triterpene	Fruit	Japan	00.00008%	H27988
Goyaglycoside E	Triterpene	Fruit	Japan	00.0001%	H27988
Goyaglycoside F	Triterpene	Fruit	Japan	00.00008%	H27988
Goyaglycoside G	Triterpene	Fruit	Japan	00.00006%	H27988

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Goyaglycoside H	Triterpene	Fruit	Japan	00.00007%	H27988
Goyasaponin I	Triterpene	Fruit	Japan	00.0001%	H27988
Goyasaponin II	Triterpene	Fruit	Japan	00.00027%	H27988
Goyasaponin III	Triterpene	Fruit	Japan	00.00008%	H27988
Guanylate cyclase inhibitor	Unknown	Not stated	Not stated	Not stated	AM1041
Gypsogenin	Triterpene	Not stated	Egypt	Not stated	J12384
Hexadecan-1-ol	Alkanol c5 or more	Seed essential oil	Japan	Not stated	M13369
Histidine	Proteid	Seed	Nepal	00.00436%	T06653
Inulin	Carbohydrate	Callus tissue Fruit Fruit Callus tissue	Not stated Not stated India Not stated	Not stated Not stated 01.0 gm/100 gm 01.9 gm/100.0 g	K01330 K03348 K00778 K00778
lodine	Inorganic	Fruit	Not stated	0.41 ppm	ZZ1047
Iron	Inorganic	Fruit Leaf	Not stated Not stated	2-560 ppm 50-357 ppm	ZZ1047
Kakara I-B	Structure unknown	Fruit(unripe)	India	Not stated	H24172
Kakara III-A	Structure unknown	Fruit(unripe)	India	Not stated	H24172
Kakara III-B	Structure unknown	Fruit(unripe)	India	Not stated	H24172
Karounidiol	Triterpene	Seed	Japan	Not stated	H24527
Karounidiol, dihydro: 7-oxo:	Triterpene	Seed	Japan	Not stated	H24527
Karounidiol, iso:	Triterpene	Seed	Japan	Not stated	H24527
Karounidiol,iso: 3-para-methoxy-benzoate	Triterpene	Seed	Japan	Not stated	H24527
Karounidiol-3-benzoate	Triterpene	Seed	Japan	Not stated	H24527
Lanosterol	Sterol	Fruit	Not stated	Not stated	ZZ1047

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Lauric acid	Lipid	Fruit Seed oil Entire plant	PNew Guinea India Bangladesh	Not stated Not stated Not stated	M27944 M19217 L13425
Lectin inhibitor	Proteid	Seed	India	Not stated	N04644
Lectin	Proteid	Seed Seed	India China	Not stated Not stated	N04644 T08662
Leucine	Proteid	Seed	Nepal	00.00416%	T06653
Leucine, iso:	Proteid	Seed	Nepal	00.00384%	T06653
Linoleic acid	Lipid	Entire plant Seed oil Fruit Cotyledons Cotyledons	Bangladesh India PNew Guinea Not stated Not stated	Not stated Not stated Not stated 07.22% 10.39%	L13425 M19217 M27944 T06928 T06928
Linolenic acid	Lipid	Seed oil Fruit Cotyledons	India PNew Guinea Not stated	Not stated Not stated 09.96%	M19217 M27944 T06928
Lutein	Carotenoid	Pericarp	USA-RI	Not stated	K03650
Lycopene	Carotenoid	Seed Fruit Pericarp	Taiwan Taiwan USA	Not stated 00.02310% Not stated	M12169 T06649 K03650
Lysine	Proteid	Seed	Nepal	00.0149%	T06653
Magnesium	Inorganic	Fruit	Not stated	195-3,800 ppm	ZZ1047
Manganese	Inorganic	Fruit	Not stated	10 ppm	ZZ1047
Map-30	Proteid	Seed	China	Not stated	M27144
Menthol, (-):	Monoterpene	Seed essential oil	Japan	Not stated	M13369
Momorcharaside A	Triterpene	Seed	China	Not stated	M27078
Momorcharaside B	Triterpene	Seed	China	Not stated	M27078

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Momorcharin I	Proteid	Seed	China	Not stated	K10925
Momorcharin II	Proteid	Seed	China	Not stated	K10925
Momorcharin, alpha:	Proteid	Seed Seed Seed Seed Seed Seed Seed Seed	Hong Kong Not stated Hong Kong Not stated China Hong Kong China Not stated	Not stated Not stated Not stated Not stated 00.10000% Not stated Not stated Not stated	K29357 T08079 T12146 T15210 T10072 T08376 T08662 T14056
Momorcharin, beta:	Proteid	Seed Seed Seed Seed Seed Seed Seed Seed	Not stated Hong Kong Not stated Hong Kong Hong Kong Not stated China China Not stated	Not stated O0.08000% Not stated Not stated	T08064 T08376 T08079 K29357 T12146 T15210 T10072 T08662 T14056
Momorcharin, delta:	Proteid	Seed	China	Not stated	H24792
Momorcharin, epsilon:	Proteid	Fruit	China	Not stated	H24792
Momorcharin, gamma:	Proteid	Seed	China	Not stated	K27541
Momordenol	Steroid	Fruit	Pakistan	00.00003%	H19648
Momordica agglutinin	Proteid	Seed	Taiwan	Not stated	M01395
Momordica anti-HIV protein map-30	Proteid	Seed	China	Not stated	K16937
Momordica charanthia inhibitor protein	Proteid	Seed	Not stated	Not stated	T03229
Momordica charantia cytostatic factor	Proteid	Fruit	USA	Not stated	T12489
Momordica charantia cytostatic factor 11000 daltons	Proteid	Fruit	USA	Not stated	T06213
Momordica charantia cytostatic factor 40000 daltons	Proteid	Fruit	USA	Not stated	T06213

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Momordica charantia lectin	Proteid	Seed Seed Seed Seed Seed	China Not stated India Not stated China	Not stated Not stated 00.016% Not stated Not stated	M22040 T03229 T03515 T01621 AM1020
Momordica charantia steroid glycoside	Steroid	Fruit	Thailand	Not stated	C00037
Momordica charantia triterpene glycoside	Triterpene	Cotyledons	India	Not stated	T08932
Momordica cucurbitane 3	Triterpene	Leaf	Nigeria	00.02047%	M26112
Momordica cucurbitane 6	Triterpene	Leaf	Nigeria	00.02%	M26112
Momordica elastase inhibitor mcei-l	Proteid	Seed	Japan	Not stated	H04816
Momordica lectin	Proteid	Seed	China	Not stated	H17847
Momordica protein (mw-34,000)	Proteid	Fruit	China	Not stated	J11634
Momordica protein map-30	Proteid	Fruit Seed	Not stated Not stated	Not stated Not stated	K08504 K08504
Momordica protein ms-1	Proteid	Seed	Australia	Not stated	K28076
Momordica protein ms-2	Proteid	Seed	Australia	Not stated	K28076
Momordica protein ms-3	Proteid	Seed	Australia	Not stated	K28076
Momordica protein ms-4	Proteid	Seed	Australia	Not stated	K28076
Momordica trypsin inhibitor mcti-l	Proteid	Seed	Japan	Not stated	H04816
Momordica trypsin inhibitor mcti-II	Proteid	Seed	Japan	Not stated	H04816
Momordicilin	Triterpene	Fruit	Pakistan	00.000015%	H19648
Momordicin	Triterpene	Fruit	Pakistan	00.000018%	H19648
Momordicin 8	Triterpene	Leaf	Nigeria	00.04404%	M26112
Momordicin I	Triterpene	Leaf	India	00.12%	L07241

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Momordicin II	Triterpene	Leaf Leaf	Nigeria India	00.1919% 00.15%	M26112 L07241
Momordicine	Alkaloid-misc	Leaf Part Not Specified	Brazil Not stated	00.008% Not stated	A00499 A05062
Momordicine I	Triterpene	Leaf + stem Fruit(unripe)	Japan Not stated	00.07% 00.05%	T08353 J17890
Momordicine II	Triterpene	Leaf Leaf + stem	India Japan	Not stated 00.07%	M27271 T08353
Mom ordicine III	Triterpene	Leaf + stem	Japan	00.12%	T08353
Momordicinin	Triterpene	Fruit	Pakistan	00.00002%	H19648
Momordicoside A	Triterpene	Part Not Specified Seed Fruit	China Japan Japan	Not stated 00.12874% 00.00128%	L18292 T09095 H27988
Momordicoside B	Triterpene	Seed	Japan	00.00898%	T09095
Momordicoside C	Triterpene	Seed Fruit	Japan Japan	00.01141% 00.00016%	T09094 H27988
Momordicoside D	Triterpene	Seed	Japan	00.00228%	T09094
Momordicoside E	Triterpene	Seed	Japan	00.00365%	T09094
Momordicoside E'	Triterpene	Fruit(unripe)	Japan	00.00104%	T05957
Momordicoside E-1	Triterpene	Fruit(unripe)	Japan	00.07560%	T05957
Momordicoside Ex	Triterpene	Fruit(unripe)	Japan	00.00126%	T05957
Momordicoside F	Triterpene	Fruit(unripe)	Japan	00.00720%	T05957
Momordicoside F	Triterpene	Fruit(unripe)	Japan	00.00060%	T05957
Momordicoside F-1	Triterpene	Fruit(unripe) Fruit	Japan Japan	00.04340% 00.00012%	T05957 H27988

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Momordicoside F-2	Triterpene	Fruit(unripe) Fruit(unripe)	Japan Japan	Not stated 00.00400%	T04513 T05957
Momordicoside G	Triterpene	Fruit(unripe) Fruit(unripe)	Japan Japan	Not stated 00.01236%	T04513 T05957
Momordicoside H	Triterpene	Fruit(unripe)	Japan	00.00740%	T05957
Momordicoside I	Triterpene	Fruit(unripe) Fruit(unripe) Fruit	Japan Japan Japan	Not stated 00.00818% 00.00006%	T04513 T05957 H27988
Momordicoside J	Triterpene	Fruit(unripe)	Japan	00.00080%	T05957
Momordicoside K	Triterpene	Fruit(unripe) Fruit(unripe) Fruit	Japan Japan Japan	Not stated Not stated 00.00002%	T05887 T04513 H27988
Momordicoside L	Triterpene	Fruit(unripe) Fruit(unripe) Fruit(unripe)	Japan Japan Japan	Not stated Not stated 00.00360%	T05887 T04513 T05957
Momordin	Proteid	Seed	Taiwan	Not stated	M01395
Momordin 2#	Proteid	Seed	China	Not stated	H12613
Momordin A	Proteid	Seed Seed Seed	Japan Not stated Japan	Not stated Not stated Not stated	K12780 M27569 H09788
Momordin B	Proteid	Seed	Japan	Not stated	H09788
Momordin II#	Proteid	Seed	India	Not stated	H24720
Momordol	Triterpene	Fruit	Pakistan	00.00004%	H19648
Multiflorenol	Triterpene	Seed oil	Japan	Not stated	M15045
Mutatochrome	Carotenoid	Pericarp	USA	Not stated	K03650
Mycose	Carbohydrate	Seed	China	Not stated	M27078

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Myristic acid	Lipid	Fruit Seed oil Entire plant	PNew Guinea India Bangladesh	Not stated Not stated Not stated	M27944 M19217 L13425
Nerolidol	Sesquiterpene	Seed essential oil	Japan	Not stated	M13369
Nia cin	Inorganic	Fruit Leaf	Not stated Not stated	3-50 ppm 15-103 ppm	ZZ1047
Nitrogen	Inorganic	Fruit	Not stated	33,800 ppm	ZZ1047
Oleanolic acid	Triterpene	Part Not Specified	Egypt	Not stated	J12384
Oleic acid	Lipid	Entire plant Fruit Cotyledons	Bangladesh PNew Guinea Not stated	Not stated Not stated 15.58%	L13425 M27944 T06928
Ornithine	Proteid	Seed	Nepal	00.00632%	T06653
Oxalate		Fruit	Not stated	185-1,444 ppm	ZZ1047
Oxalic-acid		Fruit	Not stated	5 ppm	ZZ1047
P-insulin	Proteid	Fruit Seed	India India	Not stated Not stated	M21799 M21799
Palmitic acid	Lipid	Entire plant Fruit Seed oil Cotyledons Cotyledons	Bangladesh PNew Guinea India Not stated Not stated	Not stated Not stated Not stated 02.71% 51.95%	L13425 M27944 M19217 T06928 T06928
Palmitoleic acid	Lipid	Fruit	PNew Guinea	Not stated	M27944
Pectin	Carbohydrate	Fruit	Not stated	Not stated	ZZ1047
Pentadecan-1-ol	Alkanol c5 or more	Seed essential oil	Japan	Not stated	M13369
Peptide mc-6	Proteid	Fruit	USA	Not stated	L18395
Peptide mc6.1	Proteid	Fruit	USA	Not stated	L18395

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Peptide mc6.2	Proteid	Fruit	USA	Not stated	L18395
Peptide mc6.3	Proteid	Fruit	USA	Not stated	L18395
Peroxidase		Fruit	Not stated	Not stated	ZZ1047
Petroselinic acid	Lipid	Seed oil	India	Not stated	M19217
Phosphorus	Inorganic	Fruit Leaf	Not stated Not stated	320-8,333 ppm 540-33,467 ppm	ZZ1047
Phytofluene	Carotenoid	Pericarp	USA	Not stated	K03650
Pipecolic acid		Fruit	Not stated	Not stated	ZZ1047
Polypeptide-p		Fruit	Not stated	Not stated	ZZ1047
Potassium	Inorganic	Fruit Leaf	Not stated Not stated	2,700-45,000 ppm 5,100-33,117 ppm	ZZ1047
Proline	Proteid	Fruit	India	Not stated	A00487
Protein	Protein	Fruit Leaf	Not stated Not stated	9,000-181,000 ppm 51,000-371,000 ppm	ZZ1047
Riboflavin	Inorganic	Fruit Leaf	Not stated Not stated	0.4-9 ppm 4.6-31 ppm	ZZ1047
Ribonuclease MC1		Seed	Japan	Not Stated	AM1006
Ribosome-inactivating protein 1	Proteid	Seed	Not stated	Not stated	T14056
Ribosome-inactivating protein 2	Proteid	Seed	Not stated	Not stated	T14056
Ribosome-inactivating protein 3	Proteid	Seed	Not stated	Not stated	T14056
Ribosome-inactivating protein 4	Proteid	Seed	Not stated	Not stated	T14056
Rosmarinic acid	Phenylpropanoid	Aerial parts	Peru	Not stated	M28611
Rubixanthin	Carotenoid	Pericarp	USA	Not stated	K03650
Serine	Proteid	Seed	Nepal	00.00399%	T06653

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Sitosterol, beta:	Steroid	Fruit Fruit Fruit(unripe) Fruit Fruit Suspension	Thailand China India Not stated Not stated Not stated	Not stated Not stated Not stated Not stated Not stated Not stated	P00001 L14446 A00475 A00670 A00671 A00475
Sitosterol, beta: D-glucoside	Ste roid Ste roid	Fruit	Not stated	Not stated	ZZ1047
Sodium	Inorganic	Fruit Leaf	Not stated Not stated	20-333 ppm 190-1,234 ppm	ZZ1047
Soya cerebroside I	Lipid	Fruit	China	Not stated	L14446
Spinasterol, alpha:	Ste roid Ste roid	Fruit	Not stated	Not stated	A00631
Squalene	Triterpene	Seed	Japan	Not stated	M13369
Stearic acid	Lipid	Entire plant Seed oil Fruit Cotyledons Cotyledons	Bangladesh India PNew Guinea Not stated Not stated	Not stated Not stated Not stated 24.18% 12.12%	L13425 M19217 M27944 T06928 T06928
Stigmasta-5-ene-3-beta-25-diol	Ste roid .	Fruit	Not stated	Not stated	A00671
Stigmasta-5-25(27)-dien-3-beta-ol,3-o-(6'-o-palmitoyl-beta-d-glucosyl)	Steroid	Fruit Fruit	Philippines Philippines	Not stated Not stated	M24272 M24272
Stigmasta-5-25-dien-3-beta-ol	Ste roid	Fruit(unripe) Fruit Fruit	Not stated Not stated Thailand	00.15% Not stated Not stated	J17890 A00671 P00001
Stigmasta-5-25-diene-3-beta-d-glucoside	Ste roid	Fruit Fruit	Not stated Not stated	Not stated Not stated	A00670 A00671
Stigmasta-7-22-25-trien-3-beta-ol	Steroid	Fruit	Not stated	Not stated	A00631
Stigmasta-7-22-dien-3-beta-ol	Steroid	Fruit	Not stated	Not stated	A00631

Compound	Chemical type	Plant Part	Plant Origin	Quantity	Ref #
Stigmasterol	Steroid	Fruit(unripe) Suspension	India Not stated	Not stated Not stated	A00475 A00475
Taraxerol	Triterpene	Seed oil	Japan	Not stated	M15045
Thiamin	Inorganic	Fruit Leaf	Not stated Not stated	0.2-12 ppm 1.3-8 ppm	ZZ1047
Threonine	Proteid	Seed	Nepal	00.00178%	T06653
Trehalose	Carbohydrate	Seed	Nepal	00.39600%	T06653
Trehalose, alpha-alpha:	Carbohydrate	Seed	Japan	Not stated	M16315
Trypsin inhibitor mci-3	Proteid	Seed	China	Not stated	M17147
Tryptamine, 5-hydroxy:	Indole alkaloid	Fruit	India	Not stated	A00487
Tyrosine	Proteid	Seed	Nepal	00.0517%	T06653
Uracil	Non-alkaloid nitrogen heterocy	Fruit	China	Not stated	L14446
Ureas		Seed	Not stated	Not stated	ZZ1047
Vacine	Not Stated	Seed	China	Not stated	AM1034
V-insulin	Proteid	Fruit	India	Not stated	M27533
Verbascoside	Phenylpropanoid	Aerial parts	Peru	Not stated	M28611
Vicine	Non-alkaloid nitrogen heterocy	Seed Seed Seed Seed Seed	India Nepal Egypt India China	00.05000% 00.40000% Not stated Not stated Not stated	T05754 T06653 H16247 J11478 M27078
Zeatin	Alkaloid	Seed	India	Not stated	T05741
Zeatin riboside	Alkaloid	Seed	India	Not stated	T05741
Zeaxanthin	Carotenoid	Pericarp	USA	Not stated	K03650
Zeinoxanthin	Carotenoid	Pericarp	USA	Not stated	K03650

## Literature Cited - Bitter Melon (Momordica charantia)

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A00503	AMINO ACIDS IN PLANTS. I. ISOLATION OF CITRULLINE FROM CUCURBITACEAE. INUKAI,F: SUYAMA,Y: SATO,I: INATOMI,H: MEIJI DAIGAKU NOGAKUBU KENKYU HOKOKU 20 : 29- (1966) (NO ADDRESS GIVEN)
A00631	CONSTITUENTS OF MOMORDICA CHARANTIA. II. TWO NEW DELTA-7-STEROLS FROM MOMORDICA CHARANTIA. SCROW, W: CHEM BER 99: 3559-(1966) (ORG-CHEM INST TECH UNIV BERLIN BERLIN D-1000 GERMANY)
A00637	PRELIMINARY CHEMICAL AND PHARMACOLOGICAL STUDIES ON "CUNDEAMOR", MOMORDICA CHARANTIA. II. RIVERA,G: AMER J PHARM 114 : 72-(1942) (NO ADDRESS GIVEN)
A00670	STEROL GLUCOSIDE AND A NEW STIGMASTADIENOL FROM MOMORDICA CHARANTIA. SUCROW, W: TETRAHEDRON LETT 1965 : 2217- (1965) ( ORE-CHEM INST TECH UNIV BERLIN BERLIN D-1000 GERMANY)
A00671	CONSTITUENTS OF MOMORDICA CHARANTIA. I. DELTA 5,25-STIGMASTADIEN-3BETA-OL AND ITS BETA-D-GLUCOSIDE. SUCROW,W: CHEM BER 99: 2765- (1966) (ORG-CHEM INST TECH UNIV BERLIN BERLIN D-1000 GERMANY)
A01947	EFFECT OF MOMORDICA CHARANTIA (CUNDEAMOR) IN DIABETES MELLITUS. I. A TEST FOR HYPOGLYCEMIC ACTIVITY IN AN ALCOHOLIC EXTRACT. PONS, JA: STEVENSON, DS: PUERTO RICO J PUB HEALTH TROP MED 19: 196- (1943) (NO ADDRESS GIVEN)
A04179	THE BALSAM PEAR-AN EDIBLE, MEDICINAL AND TOXIC PLANT. MORTON, JF: ECON BOT 21: 57- (1967) (MORTON COLLECTANEA UNIV MIAMI CORAL GABLES FL 33124 USA)
A04780	THE SURFACE STRUCTURE OF MURINE ASCITES TUMORS II. DIFFERENCE IN CYTOTOXICITY OF VARIOUS PHYTOAGGLUTININS TOWARD YOSHIDA SARCOMA CELLS IN VITRO. TOMITA,M: KUROKAWA,T: ONOZAKI,K: OSAWA,T: SAKURAI,Y: UKITA,T: INT J CANCER 10 : 602- (1972) ( FAC PHARM SCI UNIV TOKYO TOKYO JAPAN)

A04902	STUDY OF ANTIFERTILITY ACTIVITY OF THE LEAVES OF MOMORDICA (KARELA). SAKSENA,SK: INDIAN J PHYSIOL PHARMACOL 15 : 79-80 (1971) (DEPT PHARMACOL POST GRAD INST MED ED RES CHANDIGARH UT INDIA)
A05062	ALKALOID BEARING PLANTS AND THEIR CONTAINED ALKALOIDS. WILLAMAN, JJ: SCHUBERT, BG: ARS, USDA, TECH BULL 1234, SUPT DOCUMENTS, GOVT PRINT OFF, WASHINGTON DC, 1961: - (1961) (NO ADDRESS GIVEN)
A05449	FOLK-REMEDY PLANTS AND ESOPHAGEAL CANCER IN CORO, VENEZUELA. MORTON, JF: MORRIS ARBORETUM BULL 25 : 24-34 (1974) (MORTON COLLECTANEA UNIV MIAMI CORAL GABLES FL USA)
A05825	THE MEDICINAL AND POISONOUS PLANTS OF SOUTHERN AND EASTERN AFRICA. 2ND ED, E.+S. LIVINGSTONE,LTD.,LONDON. WATT,JM: BREYER-BRANDWIJK,MG: BOOK: - (1962) (SOUTH AFRICAN INST MED RES JOHANNESBURG SOUTH AFRICA)
A06027	ETHNOBOTANICAL NOTES FROM PUERTO RICO. STIMSON,WR: LLOYDIA 34 1: 165- (1971) (DEPT BIOL SCI COLUMBIA UNIV NEW YORK NY USA)
A06190	ON THE DISTRIBUTION OF GENTISIC ACID IN GREEN PLANTS. GRIFFITHS,LA:J EXP BIOL 10: 437- (1959)( REG RES CENT IMPERIAL COLL TROP AGR TRINIDAD/TOBAGO)
A07232	PITUITARY DIABETES. III. EFFECT OF INDIGENOUS ANTIDIABETIC-DRUGS AGAINST THE ACUTE HYPERGLYCEMIC RESPONSE OF ANTERIOR PITUITARY EXTRACT IN GLUCOSE FED ALBINO RATS. GUPTA,SS: INDIAN J MED RES 51 : 716- (1963) (DEPT PHARMACOL GANDHI MED COLL BHOPAL MP INDIA)
A07281	ON THE PRESENCE OF AN ANTIDIABETIC PRINCIPLE IN MOMORDICA CHARANTIA. CHATTERJEE,KP: INDIAN J PHYSIOL PHARMACOL 7 : 240- (1964) ( RES DIV EAST INDIA PHARM WORKS LTD CALCUTTA WEST BENGAL INDIA)
A14280	PRELIMINARY CHEMICAL AND PHARMACOLOGICAL STUDIES ON "CUNDEAMOR," MOMORDICA CHARANTIA L. (PART I). RIVERA,G: AMER J PHARM 113 7: 281-297 (1941) ( USA PHILADELPHIA COLL PHARM SCI PHILADELPHIA PA USA)
A14310	POTENTIATION OF TOLBUTAMIDE ACTION BY JASAD BHASMA AND KARELA (MOMORDICA CHARANTIA). KULKARNI,RD: GAITONDE,BB: INDIAN J MED RES 50 5: 715-719 (1962) (DEPT PHARMACOL GRANT MED COLL BOMBAY MAHARASTRA INDIA)
A14328	SOME OBSERVATIONS ON HYPOGLYCAEMIC ACTIVITY OF MOMORDICA CHARANTIA. SHARMA, VN: SOGANI, RK: ARORA, RB: INDIAN J MED RES 48 4: 471-477 (1960) (DEPT PHARMACOL EXP THERAP SMS MED COLL JAIPUR RAJASTHAN INDIA)
A14379	HYPOGLYCAEMIC DRUGS OF INDIAN INDIGENOUS ORIGIN. JAIN,SR: SHARMA,SN: PLANTA MED 15 4: 439-442 (1967) ( MP UNIV SAGAR SAGAR MP INDIA)
A14458	A PRELIMINARY STUDY OF THE HYPOGLYCAEMIC PROPERTIES OF INDIGENOUS PLANTS. KHAN,AH: BURNEY,A: PAK J MED RES 2: 100-116 (1962) ( K E MED COLL LAHORE PAKISTAN)
A14461	KARELA AND DIABETES. RAM,S: J INDIAN MED ASS 19:181 (1956) ( NEW DELHI UT INDIA)
A14525	EFFECT OF MOMORDICA CHIRANTIA LINN (KARELA) ON GLUCOSE TOLERANCE IN ALBINO RATS. GUPTA,SS: SETH,CB: J INDIAN MED ASS 39: 581-584 (1962) (DEPT PHARMACOL GANDHI MED COLL BHOPAL MP INDIA)
C00034	MOMORDICA CHARANTIA L. THE ANTIDIABETIC SUBSTANCES. KORPSATEPOTH,C: WANGMEESRI,S: UNDERGRADUATE SPECIAL PROJECT REPORT, FACULTY OF PHARMACY, MAHIDOL UNIVERSITY, BANGKOK, THAILAND : 32-, (1982) ( FAC PHARM MAHIDOL UNIV BANGKOK THAILAND)
C00037	CHEMICAL STUDY IN MOMORDICA CHARANTIA L. ANANSAKUNWATT,W: THANAKUNRUNGSANK,W: LARKRUNGSAP,S: UNDERGRADUATE SPECIAL PROJECT REPORT, FACULTY OF PHARMACY, MAHIDOL UNIVERSITY, BANGKOK, THAILAND : 29 (1981) ( FAC PHARM MAHIDOL UNIV BANGKOK THAILAND)

H04816	AMINO ACID SEQUENCES AND DISULFIDE BRIDGES OF SERINE PROTEINASE INHIBITORS FROM BITTER GOURD (MOMORDICA CHARANTIA LINN.) SEEDS. HARA,S: MAKINO,J: IKENAKA,T: J BIOCHEM(TOKYO) 105 1: 88-92 (1989) (DEPT CHEM OSAKA UNIV COLL SCI OSAKA 560 JAPAN)
H08562	PURIFICATION AND AMINO ACID SEQUENCE OF A BITTER GOURD INHIBITOR AGAINST AN ACIDIC AMINO ACID-SPECIFIC ENDOPEPTIDASE OF STREPTOMYCES GRISEUS. OGATA,F: MIYATA,T: FUJII,N: YOSHIDA,KN: MAKISUMI,S: ITO,A: J BIOL CHEM 266 25: 16715-16721 (1991) (DEPT CHEM BIOL FAC SCI KYUSHU UNIV FUKUOKA 812 JAPAN)
H09788	ISOLATION AND CHARACTERIZATION OF TWO MOMORDINS, RIBOSOME-INACTIVATING PROTEINS FROM THE SEEDS OF BITTER GOURD (MOMORDICA CHARANTIA). MINAMI,Y: NAKAHARA,Y: FUNATSU,G: BIOSCI BIOTECH BIOCHEM 56 9: 1470-1471 (1992) ( FAC AGR KYUSHU UNIV FUKUOKA 812 JAPAN)
H12613	IMMUNOTOXINS COMPOSED OF MONOCLONAL ANTHIHUMAN T LYMPHOCYTE ANTIBODY AND SINGLE CHAIN RIBOSOME-INACTIVATING PROTEINS: ANTITUMOR EFFECTS IN VITRO AND IN VIVO. WANG,RH: CHEN,X: LI,Y: SHEN,PF: ZHONGHUA MAZUIXUE ZAZHI 8 6: 356-360 (1992) (INST BASIC MED SCI ACAD MIL MED SCI BEIJING 100850 CHINA)
H16247	A NOVEL PYRIMIDINE GLYCOSIDE FROM MOMORDICA CHARANTIA L. EL-GENGAIHI,S: KARAWYA,MS: SELIM,MA: MOTAWE,HM: IBRAHIM,N: FADDAH,LM: PHARMAZIE 50 5: 361-362 (1995) (DEPT PHARMACOG FAC PHARM CAIRO UNIV CAIRO 11562 EGYPT)
H17847	PURIFICATION AND PROPERTIES OF MOMORDICA CHARANTIA LECTIN. WANG,HR: SUN,XY: WANG,QH: XU,YT: TIAN,SM: SHENGWU HUAXUE ZAZHI 11 6: 737-739 (1995) (DEPT BIOL SHANDONG UNIV JINAN 250100 CHINA)
H19648	TRITERPENES, A STEROL AND A MONOCYCLIC ALCOHOL FROM MOMORDICA CHARANTIA. BEGUM,S: AHMED,M: SIDDIQUI,BS: KHAN,A: SAIFY,ZS: ARIF,M: PHYTOCHEMISTRY 44 7: 1313-1320 (1997) ( H E J INST CHEM UNIV KARACHI KARACHI 32 PAKISTAN)
H24172	PURIFICATION OF THREE ORALLY ACTIVE HYPOGLYCEMIC COMPOUNDS KAKARA IB,IIIB FROM THE UNRIPE FRUITS OF MOMORIDICA CHARANTIA LINN 9BITTER GOURD). PUGAZHENTHI,S: MURTHY,PS: INDIAN J CLIN BIOCHEM 11 2: 115-119 (1996) (DEPT BIOCHEM UNIV COLL MED SCI DELHI 110095 INDIA)
H24527	7-OXODIHYDROKAROUNIDIOL-3-BENZOATE AND OTHER TRITERPENES FROM THE SEEDS OF CUCURBITACEAE. AKIHISA,T: KIMURA,Y: KASAHARA,Y: KUMAKI,K: THAKUR,S: TAMURA,T: PHYTOCHEMISTRY 46 7: 1261-1266 (1997) ( COLL SCI TECHNOL NIHON UNIV TOKYO 101 JAPAN)
H24720	PREPARATION OF HIGHLY PURIFIED MOMORDIN II WITHOUT RIBONUCLEASE ACTIVITY. VALBONESI,P: BARBIERI,L: BOLOGNESI,A: BONORA,E: POLITO,L: STIRPE,F: LIFE SCI 65 14: 1485-1491 (1999) (DIPT PATOL SPERIMEN UNIV BOLOGNA BOLOGNA I-40126 ITALY)
H24792	NEW RIBOSOME-INACTIVATING PROTEINS FROM SEEDS AND FRUITS OF THE BITTER GOURD MOMORDICA CHARANTIA. TSE,PMF: NG,TB: FONG,WP: WONG,RNS: WAN,CC: MAK,NK: YEUNG,HW: INT J BIOCHEM CELL BIOL 31 9: 895-901 (1999) (DEPT BIOCHEM FAC MED CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
H2798	MEDICINAL FOODSTUFFS. XXI. STRUCTURES OF NEW CUCURBITANE-TYPE TRITERPENE GLYCOSIDES, GOYAGLYCOSIDES-A, -B, -C, -D, -E, -F, -G, AND -H, AND NEW OLEANANE-TYPE TRITERPENE SAPONINS, GOYASAPONINS I, II, AND III, FROM THE FRESH FRUIT OF JAPANESE MOMORDICA MURAKAMI,T: EMOTO,A: MATSUDA,H: YOSHIKAWA,M: CHEM PHARM BULL 49 1: 54-63 (2001) ( KYOTO PHARM UNIV KYOTO 607 JAPAN)
H28024	HIV INHIBITOR FROM THAI BITTER GOURD. JIRATCHARIYAKUL,W: WIWAT,C: VONQSAKUL,M: SOMANABANDHU,A: LEELAMAIT,W: FUJII,I: SUWANNAROI,N: EBIZUKA,Y: PLANTA MED 67 4: 350-353 (2001) ( FAC PHARM MAHIDOL UNIV BANGKOK THAILAND)
J00209	INVESTIGATIONS INTO THE ANTIBACTERIAL ACTIVITIES OF LOCAL PLANTS. OGUNLANA, EO: RAMSTAD, E: PLANTA MED 27: 354- (1975) (FAC PHARM UNIV IFE ILE-IFE NIGERIA)
J03769	A NEUTRAL CONSTITUENT OF MOMORDICA FOETIDA. OLANIYI,AA: LLOYDIA 38 4: 361-362 (1975) ( SCH PHARM UNIV IFE ILE-IFE NIGERIA)
03769	A NEUTRAL CONSTITUENT OF MOMORDICA FOETIDA. OLANIYI,AA: LLOYDIA 38 4: 361-362 (1975) ( SCH PHARM UNIV IFE ILE-IFE NIGERIA)

J10963	CHEMICAL AND BIOLOGICAL INVESTIGATION OF POLYPEPTIDES OF MOMORDICA AND LUFFA SSP. FAM. CUCURBITACEAE. EL-GENGAIHI,S: KARAWYA,MS: SELIM,MA: MOTAWE,HM: IBRAHIM,NA: BULL NATL RES CENT(EGYPT) 21 3: 269-276 (1996) (PHARMAC SCI DEP CAIRO UNIV CAIRO EGYPT)
J10986	SCREENING OF MEDICINAL PLANTS FROM SURINAME FOR 5-HT 1A LIGANDS: BIOACTIVE ISOQUINOLINE ALKALOIDS FROM THE FRUIT OF ANNONA MURICATA. HASRAT,JA: PIETERS,L: DE BACKER,JP: VAUQUELIN,G: VLIETINCK,AJ: PHYTOMEDICINE 4 2: 133-140 (1997) (DEPT PHARM SCI UNIV ANTWERP ANTWERP B-2610 BELGIUM)
J11388	HYPOGLYCEMIC EFFECTS OF SIAMESE MOMORDICA CHARANTIA AND PHYLLANTHUS URINARIA EXTRACTS IN STREPTOZOTOCIN-INDUCED DIABETIC RATS. HIGASHINO,HD: SUZUKI,AT: TANAKA,YS: POOTAKHAM,K: NIPPON YAKURIGAKU ZASSHI 100 : 415-421 (1992) (DEPT PHARMACO KINKI UNIV SCH MEDICINE OSAKA JAPAN)
J11478	ANTI-DIABETIC PROPERTIES AND PHYTOCHEMISTRY OF MOMORDICA CHARANTIA L. (CURCUBITACEAE). RAMAN,A: LAU,C: PHYTOMEDICINE 2 4: 349-362 (1996) (PHARMACOG RES LAB KING'S COLLEGE UNIV LONDON LONDON SW3 6LX ENGLAND)
J11634	STUDIES ON THE ANTIFERTILITY CHEMICAL CONSTITUENTS OF BALSAM PEAR (MOMORDICA CHARANTIA). CHANG,FG: LI,JM: CHUNG TS'AO YAO 26 6: 281-284 (1995) (DEPT MED CHEM GUIYANG MED COLL GUIYANG 550004 CHINA)
J11857	SCREENING OF THE ANTIMALARIAL ACTIVITY OF PLANTS OF CUCURBITACEAE FAMILY. AMORIM, CZ: MARQUES, AD: BALAO, RS: MEM INST OSWALDO CRUZ RIO DE JANEIRO 86: 177-180 (1991) (DEPT FISOL FARMACOD INST OSWALDO CRUZ RIO JANEIRO BRAZIL)
J12034	PLANTS WITH HYPOGLYCEMIC ACTIVITY IN HUMANS. ERNST,E: PHYTOMEDICINE 4 1: 73-78 (1997) (DEPT COMPLEMETNARY MED POSTGRAD MED SCH UNIV EXETER EXETER ENGLAND)
J12384	COMPARATIVE STUDIES ON SAPONIN CONTENTS OF MOMORDICA AND LUFFA SPP. FAM. CUCURBITACEAE. KARAWYA,MS: EL-GENGAIHI,S: SELIM,MA: MOTAWE,HM: IBRAHIM,NA: BULL NATL RES CENT(EGYPT) 21 3: 265-268 (1996) (PHARMACOGNOSY DEP CAIRO UNIV PHARMACUTICAL SCI CAIRO EGYPT)
J12388	INVESTIGATION OF RIBOSOME INACTIVATING PROTEIN-LIKE ACTIVITY IN TISSUES OF CUCURBITACEAE PLANTS. NG,TB: FENG,Z: LI,WW: CHAN,SH: YEUNG,HH: INT J BIOCHEM 21 12: 1353-1358 (1989) (DEPT BIOCHEM FAC MED CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
J12451	MEDICINAL PLANTS IN SURINAME: SCREENING OF PLANT EXTRACTS FOR RECEPTORBINDING ACTIVITY. HASRAT, JA: DE BACKER, JP: VAUQUELIN, G: VLIETINCK, AJ: PHYTOMEDICINE 4 1: 59-65 (1997) (DEPT PHARM SCI UNIV ANTWERP ANTWERP B-2610 BELGIUM)
J12465	ANTIDIABETIC PROFILE OF MOMORDICA CHARANTIA LINN. (BITTER GOURD). KHAN,RA: SINGH,O: HAMDARD 35 1: 76-79 (1992) (NO ADDRESS GIVEN)
J13276	EFFECT OF MOMORDICA CHARANTIA L. IN MICE INFECTED WITH PLASMODIUM BERGHEI. UENO,HM: DOYAMA,JT: PADOVANI E SALATA,CR: REV SOC BRASIL MED TROP 29 5: 455-460 (1996) (DEPT PARASITOLOGIA QUIMICA UNIV ESTADUAL PAULISTA BOTUCATU BRAZIL)
J13964	NATURE'S OWN PHARMACY: THE DIABETES PERSPECTIVE. GRAY, AM: FLATT, PR: PROC NUTR SOC 56 1B: 507-517 (1997) ( SCH BIOMED SCI UNIV ULSTER COLERAINE COLERAINE BT52 1SA IRELAND)
J14375	IMMUNODODULATORY ACTIVITIES OF SOME TURKISH MEDICINAL PLANTS. BASARAN,AA: CERITOGLU,I: UNDEGER,U: BASARAN,N: PHYTOTHER RES 11 8: 609-611 (1997) (DEPT PHARAMCOGNOSY FAC PHARM HACETTEPE UNIV ANKARA TURKEY)
J14512	MALARIA AND ANTIMALARIAL PLANTS IN RORAIMA, BRAZIL. MILLIKEN,W: TROP DOCTOR SUPPL 1997 : 20-25 (1997) ( ROYAL BOT GARDENS CENT ECONOMIC BOT SURREY TW9 3AE ENGLAND)
J14657	EFFECT OF D-400, AN AYURVEDIC HERBAL FORMULATION ON EXPERIMENTALLY INDUCED DIABETES MELLITUS. MITRA,SK: GOPUMADHAVAN,S: MURALIDHAR,TS: PHYTOTHER RES 10 5: 433-435 (1996) (R D CENTRE HIMALAYA DRUG CO BANGALORE 562 123 INDIA)

J14866	MOMORDICA CHARANTIA (BITTER GOURD) PEEL, PULP, SEED AND WHOLE FRUIT EXTRACT INHIBITS MOUSE SKIN PAPILLOMAGENESIS. SINGH,A: SINGH,SP: BAMEZAI,R: TOXICOL LETT 94 1: 37-46 (1998) (HUMAN GEN LAB SCH LIFE SCI JAWAHARLAL NEHRU UNIV NEW DELHI 110067 INDIA)
J16266	SCREENING OF PLANT CONSTITUENTS FOR EFFECT ON GLUCOSE TRANSPORT ACTIVITY IN EHRLICH ASCITES TUMOUR CELLS. MURAKAMI,C: MYOGA,K: KASAI,R: OHTANI,K: KUROKAWA,T: ISHIBASHI,S: DAYRIT,F: PADOLINA,WG: YAMASAKI,K: CHEM PHARM BULL 41 12: 2129-2131 (1993) ( INST PHARMACEUT SCI HIROSHIMA UNIV SCH MED HIROSHIMA 734 JAPAN)
J16660	POSTNATAL EFFICACY OF MOMORDICA CHARANTIA PEEL, PULP, SEED AND WHOLE FRUIT EXTRACT IN THE DETOXICATION PATHWAY OF SUCKLING NEONATES AND LACTATING MICE. SINGH,A: SINGH,SP: BAMEZAI,R: CANCER LETT 122 1/2: 121-126 (1998) (HUMAN GEN LAB SCH LIFE SCI JAWAHARLAL NEHRU UNIV NEW DELHI INDIA)
J17272	EFFECT ON SOME SAPONINS ON GLUCOSE TRANSPORT SYSTEM. YAMASAKI,K: ADV EXP MED BIOL 404: 195-206 (1996) ( HIROSHIMA UNIV HIROSHIMA 734 JAPAN)
J17491	HYPOGLYCEMIC STUDY OF PLANT INSULIN FROM THE BALSAM PEAR. QUAN, JX: HAO, XH: ZHANG, ZQ: CAO, YX: DENG, XS: SI, LS: SHAANXI YIXUE ZAZHI 20 11: 691-693 (1991) (DEP PATHOL XIAN MED UNIV XIAN CHINA)
J17890	PHYTOCHEMICALS ISOLATED FROM THE ANTI-HYPERGLYCAEMIC HEXANE EXTRACT OF THE UNRIPE FRUIT OF MOMORIDCA CHARANTIA L. LAU,C: RAMAN,A: NOEL,M: KERGOAT,M: AUTIER,V: J PHARM PHARMACOL SUPPL 50: 84 (1998) (PHARMACOG RES LAB KING'S COLLEGE UNIV LONDON LONDON SW3 6LX ENGLAND)
J18457	EFFECTS OF NEEM FLOWERS, THAI AND CHINESE BITTER GOURD FRUITS AND SWEET BASIL LEAVES ON HEPATIC MONOOXYGENASES AND GLUTATHIONE S-TRANSFERASE ACTIVITIES, AND IN VITRO MEBATOLIC ACTIVATION OF CHEMICAL CARCINOGENS IN RATS. KUSAMRAN,WR: RATANAVILA,A: TEPSUWAN,A: FOOD CHEM TOXICOL 36 6: 475-484 (1998) (BIOCHEM CHEM CARCIOGENES SEC RESEARCH DIV NCI BANGKOK THAILAND)
J18701	USE OF MEDICINAL PLANTS FOR DIABETES IN TRINIDAD AND TOBAGO. MAHABIR,D: GULLIFORD,MC: PAN AM J PUBLIC HEALTH 1 3: 174-178 (1997) ( NUTR METABOL DIV MINISTRY HEALTH TRINIDAD & TOBAGO SPAIN)
J18799	NUTRITIONAL CHARACTERISTICS OF OIL CONTAINING CONJUGATED OCTADECATRIENOIC FATTY ACID. DHAR,P: BHATTACHARYYA,DK: NUTR METAB 42 5: 290-296 (1998) (DEPT CHEM UNIV COLL SCI CALCUTTA WEST BENGAL 700 009 INDIA)
J19078	USE OF MEDICINAL PLANTS FOR DIABETES IN TRINIDAD AND TOBAGO. MAHABIR,D: GULLIFORD,MC: REV PANAM SALUD PUBL/PAN AM J PUBL HEALTH 1 3: 174-179 (1997) ( NUTR METABOL DIV MINISTRY HEALTH TRINIDAD TOBAGO SPAIN)
J19353	MOMORDICA CHARANTIA AND ALLIUM SATIVUM: BROAD SPECTRUM ANTIBACTERIAL ACTIVITY. KHAN,MR: OMOLOSO,AD: KOREAN J PHARMACOG 29 3: 155-158 (1998) (DEPT APPL SCI PAPUA NEW GUINEA UNIV TECHNOL LAE PAPUA-NEW GUINEA)
J19694	ANTISPERMATOGENIC AND ANDROGENIC ACTIVITIES OF MOMORDICA CHARANTIA (KARELA) IN ALBINO RATS. NASEEM,MZ: PATIL,SR: RAVINDRA: PATIL,SB: J ETHNOPHARMACOL 61 1: 9-16 (1998) (DEPT ZOOL GULBARGA UNIV GULBARGA 585 106 INDIA)
K00778	RECOVERING INULIN FROM PLANT SOURCES. KHANNA,P: NAG,TN: JAIN,SC: MOHAN,S: PATENT-GER OFFEN-2,432,334 : 17PP (1976) (NO ADDRESS GIVEN)
K01330	IMPROVED PROCESS FOR ISOLATION OF INSULIN. KHANNA,P: NAG,TN: JAIN,SC: MOHAN,S: PATENT-BRIT-1,435,664 :- (1976) (NO ADDRESS GIVEN)
K03348	INSULIN FROM MEMORDICA CHANANTIA. KANNA,B: PATENT-JAPAN KOKAI-76 07,111 :- (1976) (NO ADDRESS GIVEN)
K03520	IN VITRO ANTHELMINTIC ACTION OF SOME INDIGENOUS MEDICINAL PLANTS ON ASCARDIA GALLI WORMS. LAL,J: CHANDRA,S: RAVIPRAKASH,V: SABIR,M: INDIAN J PHYSIOL PHARMACOL 20: 64- (1976) ( DIV PHYSIOL PHARMACOL INDIAN VET RES INST IZATNAGAR UP INDIA)

K03650	CAROTENOID PIGMENT CHANGES IN RIPENING MONORDICA CHARANTIA FRUITS. RODRIGUEZ,DB: RAYMUNDO,LC: LEE,TC: SIMPSON,KL: CHICHESTER,CO: ANN BOT(LONDON) 40: 615- (1976) (DEPT FOOD RESOUR CHEM UNIV RHODE ISLAND KINGSTON RI USA)
K07977	ANTIMALARIAL EXPERIMENTAL CHEMOTHERAPY USING NATURAL PRODUCTS. BRANDAO,M: BOTELHO,M: KRETTLI,E: CIENC CULT 37 7: 1152-1163 (1985) ( DEPT PARASITOL INST CIEN BIOL BRAZIL)
K07998	ANTIMALARIAL ACTIVITY OF CRUDE EXTRACTS FROM BRAZILIAN PLANTS STUDIES IN VIVO IN PLASMODIUM BERGHEI-INFECTED MICE AND IN VITRO AGAINST PLASMODIUM-FALCIPARUM IN CULTURE. CARVALHO,LH: BRANDAO,MGL: SANTOS-FILHO,D: LOPES,JLC: KRETTLI,AU: BRAZ J MED BIOL RES 24 11: 1113-1123 (1991) (DEPT PARASIT INST CIENCIAS BIOL UNIV FED MINAS GERAS BELO HORIZONTE BRAZIL)
K08504	A PLANT PROTEIN USEFUL FOR TREATING TUMORS AND HIV INFECTION. LEE-HUANG,S: HUANG,PL: NARA,PL: CHEN,HC: KUNG,HF: HUANG,P: HUANG,HI: HUANG,PL: PATENT-PCT INT APPL-92 06,106 : 58PP (1992) (AMERICAN BIOSCIENCES INC NEW YORK UNIV NEW YORK NY USA)
K08933	ETHNOBOTANICAL STUDIES FROM CENTRAL NIGERIA. BHAT,RB: ETERJERE,EO: OLADIPO,VT: ECON BOT 44 3: 382-390 (1990) (DEPT BOTANY RANGE SCI BRIGHAM YOUNG UNIV PROVO UT 84602 USA)
K09153	SCREENING OF INDIAN PLANTS FOR BIOLOGICAL ACTIVITY: PART XIII. BHAKUNI,DS: GOEL,AK: JAIN,S: MEHROTRA,BN: PATNAIK,GK: PRAKASH,V:INDIAN J EXP BIOL 26 11: 883RY-904 (1988) ( CENTRAL DRUG RESEARCH INST LUCKNOW UP 226 001 INDIA)
K10925	PURIFICATION AND CHARACTERIZATION OF THE ANALOGS OF MOMORCHARIN. ZHENG,S: LI,G: YANG,SM: SHENGWU HUAXUE ZAZHI 8 4: 429-433 (1992) ( BEJING INST PHARM CHEM BEIJING 102205 CHINA)
K11282	A SURVEY OF PLANT CRUDE DRUGS OF ANANTAPUR DISTRICT, ANDHRA PRADESH, INDIA. REDDY,MB: REDDY,KR: REDDY,MN: INT J CRUDE DRUG RES 27 3: 145-155 (1989) (DEPT BOTANY SRI VENKATESWARA UNIV TIRUPATI 517 502 INDIA)
K11849	HYPOGLYCAEMIC ACTIVITY OF COCCINIA INDICA AND MOMORDICA CHARANTIA IN DIABETIC RATS: DEPRESSION OF THE HEPATIC GLUCONEOGENIC ENZYMES GLUCOSE-6-PHOSPHATASE AND FRUCTOSE-1,6-BISPHOSPHATASE AND ELEVATION OF BOTH LIVER AND RED-CELL SHUNT ENZYME GLUCOSE-6- SHIBIB,BA: KHAN,LA: RAHMAN,R: BIOCHEM J 292 1: 267-270 (1993) (DEPT BIOCHEM UNIV DHAKA DHAKA 100003 BANGLADESH)
K11898	INVESTIGATION OF THE ANTIULCER EFFECT OF THE FRUITS OF MOMORDICA CHARANTIA IN RATS. YILKIRIM,OF: UYDES,BS: ARK,M: KANZIK,I: AKAR,F: ABSTR 3RD INTERN SYMP PHARM SCI, ANKARA UNIV, 15-18 JUNE 1993, ANKARA, TURKEY 1993 : ABSTR-P85 (1993) (DEPT PHARMACOLOGY FAC PHARM GAZI UNIV ANKARA TR-06330 TURKEY)
K12780	THE COMPLETE AMINO ACID SEQUENCE OF MOMORDIN-A, A RIBOSOME-INACTIVATING PROTEIN FROM THE SEEDS OF BITTER GOURD (MOMORDICA CHARANTIA). MINAMI,YJ: FUNATSU,JK: BIOSCI BIOTECH BIOCHEM 57 7: 1141-1144 (1993) (FAC AGR KYUSHU UNIV FUKUOKA 812 JAPAN)
K12995	ANTIDIABETIC AND ADAPTOGENIC PROPERTIES OF MOMORDICA CHARANTIA EXTRACT: AN EXPERIMENTAL AND CLINICAL EVALUATION. SRIVASTAVA,Y: VENKATAKRISHNA-BHATT,H: VERMA,Y: VENKAIAH,K: PHYTOTHER RES 7 4: 285-289 (1993) (B.J.MED COLL AHMEDABAD 380016 INDIA)
K13947	STUDIES ON HYPOGLYCEMIC EFFECTS OF FRUIT PULP, SEED, AND WHOLE PLANT OF MOMORDICA CHARANTIA ON NORMAL AND DIABETIC MODEL RATS. ALI,L: KHAN,AKA: MAMUN,MIR: MOSIHUZZAMAN,M: NAHAR,N: NUR-E-ALAM,M: ROKEYA,B: PLANTA MED 59 5: 408-412 (1993) ( RES DIV BANGLADESH INST RES REHAB DIAB DHAKA 1000 BANGLADESH)
K16937	PLANT PROTEINS WITH ANTIVIRAL ACTIVITY AGAINST HUMAN IMMUNODEFICIENCY VIRUS. LEE-HUANG,S: CHEN,HC: KUNG,HF: HUANG,PL: NARA,PL: LI,LB: QUN,HP: HUANG,HI: HUANG,PL: NAT PROD ANTIVIRAL AGENTS [PROC AM CHEM SOC AGR FOOD CHEM DIV SYMP] 1991 : 153-170 (1991) (SCH MED NEW YORK UNIV NEW YORK NY 10016 USA)

K16948	MEDICINAL PLANTS USED IN SOME RURAL POPULATIONS OF OAXACA, PUEBLA AND VERACRUZ, MEXICO. ZAMORA-MARTINEZ,MC: POLA,CNP: J ETHNOPHARMACOL 35 3: 229-257 (1992) (CENT INV FOREST AGROP DIS FED MEXICO 04110 MEXICO)
K17561	ANTIMUTAGENIC EFFECTS OF EXPRESSIONS FROM TWELVE MEDICINAL PLANTS. LIM-SYLIANCO, CY: CONCHA, JA: JOCANO, AP: LIM, CM: PHILIPPINE J SCI 115 1: 23-30 (1986) (DEPT CHEM COLL SCI UNIV PHILIPPINES DILIMAN PHILIPPINES)
K17876	ANTIGENOTOXIC EFFECTS OF DRUG PREPARATIONS AKAPULKO AND AMPALAYA. BALBOA, JG: LIM-SYLIANCO, CY: PHILIPP J SCI 121 4: 399-411 (1992) (INST CHEM UNIV PHILIPPINES QUEZON PHILIPPINES)
K17959	EFFECT OF MOMORDICA CHARANTIA ON KEY HEPATIC ENZYMES. TENNEKOON,KH: JEEVATHAYAPARAN,S: ANGUNAWALA,P: KARUNANAYAKE,EH: JAYASINGHE,KSA: J ETHNOPHARMACOL 44 2: 93-97 (1994) (DEPT PHYSIOL FAC MED UNIV COLOMBO COLOMBO 8 SRI LANKA)
K18219	HYPOGLYCAEMIC EFFECT OF MOMORDICA CHARANTIA EXTRACTS IN NORMOGLYCAEMIC OR CYPROHEPTADINE-INDUCED HYPERGLYCAEMIC MICE. CAKICI,I: HURMOGLU,C: TUNCTAN,B: ABACIOGLU,N: KANZIK,I: SENER,B: J ETHNOPHARMACOL 44 2: 117-121 (1994) (DEPT PHARMACOL GAZI UNIV ANKARA TURKEY)
K18765	A SCREENING METHOD FOR NATURAL PRODUCTS ON TRIATOMINE BUGS. SCHMEDA-HIRSCHMANN,G: ROJAS DE ARIAS,A: PHYTOTHER RES 6 2: 68-73 (1992)( INSTIT INVEST CIEN SALUD ASUNCION PARAGUAY)
K19538	PHYTOCHEMICAL, ANTIBACTERIAL AND PHARMACOLOGICAL INVESTIGATIONS ON MOMORDICA CHARANTIA LINN., EMBLICA OFFICINALIS GAERTN. AND CURCUMA LONGA LINN. SANKARANARAYANAN,J: JOLLY,CI: INDIAN J PHARM SCI 55 1: 6-13 (1993) (DEPT PHARMACOG PHYTOCHEM PRINCIPAL KUNDNANI COLL PHARM BOMBAY 400 018 INDIA)
K19563	BITTER MELON (MOMORDICA CHARANTIA).CUNNICK,J: TAKEMOTO,D: J NATUROPATHIC MED 4 1: 16-21 (1993)(DEPT MICROBIOL IMMUNOL PREV MED IOWA STATE UNIV IA USA)
K20280	LOCAL REMEDIESYEH OR NAY? MORRISON,E: JAMAICA,UWI: WEST INDIAN MED J SUPPL 2 43 : 9PP (1994) (NO ADDRESS GIVEN)
K21690	RIBOSOME INACTIVATING PROTEIN-LIKE ACTIVITY IN SEEDS OF DIVERSE CUCURBITACEAE PLANTS. DONG,TX: NG,TB: WONG,RNS: YEUNG,HW: XU,GJ: INT J BIOCHEM 25 3: 415-419 (1993) (DEPT PHARMACOGN CHINA PHARM UNIV NANJING CHINA)
K23019	SCREENING OF ANTIRADICAL, ANTILIPOPEROXIDANT AND HEPATOPROTECTIVE EFFECTS OF NINE PLANT EXTRACTS USED IN CARIBBEAN FOLK MEDICINE. JOYEUX,M: MORTIER,F: FLEURENTIN,J: PHYTOTHER RES 9 3: 228-230 (1995) ( CENT ESSAIS REC EVIRON PHARM METZ 57000 FRANCE)
K25144	SCREENING FOR IN VITRO ANTI-TUMOR PROMOTING ACTIVITIES OF EDIBLE PLANTS FROM THAILAND. MURAKAMI,A: JIWAJIINDA,S: KOSHIMIZU,K: OHIGASHI,H: CANCER LETT 95 1/2: 137-146 (1995) (DEPT FOOD SCI TECHNOL FAC AGRICULT KYOTO UNIV KYOTO 606 01 JAPAN)
K25290	HERBAL FOLK MEDICINE OF TIRUMALA AND TIRUPATI REGION OF CHITTOOR DISTRICT, ANDHRA PRADESH. VEDAVATHYK,S: RAO,DN: FITOTERAPIA 66 2: 167-171 (1995) (DEPT BOTANY SRI VENKATESWARA ARTS COLL TIRUPATI 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)
K26492	MEDICINAL PLANTS OF NICARAGUA'S ATLANTIC COAST. BARRETT,B: ECON BOT 48 1: 8-20 (1994) (JOHNS HOPKINS UNIV HEALTH CHILD SURVIVAL FELLOW INCAP GUATEMALA GUATEMALA)
K26851	MEDICINAL PLANTS OF RODRIGUES. GURIB-FAKIM,A: SWERAJ,MD: GUEHO,J: DULLOO,E: INT J PHARMACOG 34 1: 2-14 (1996) (CHEM DEPT FAC SCI UNIV MAURITIUS REDUIT MAURITIUS)

K27017	SCREENING OF MEDICINAL PLANTS FOR INDUCTION OF SOMATIC SEGREGATION ACTIVITY IN ASPERGILLUS NIDULANS. RUIZ,AR: DE LA TORRE,RA: ALONSO,N: VILLAESCUSA,A: BETANCOURT,J: VIZOSO,A: J ETHNOPHARMACOL 52 3: 123-127 (1996) (CENTRO INV DESARROLLO MED IND MED FARM LA HABANA CUBA)
K27039	MEDICINAL PLANTS USED BY THE FANG TRADITIONAL HEALERS IN EQUATORIAL GUINEA. AKENDENGUE,B: J ETHNOPHARMACOL 37 2: 165-173 (1992) (DEPT TRAD MED PHARM FAC MED HEALTH SCI LIBREVILLE GABON)
K27070	ETHNOBOTANY OF THE GARIFUNA OF EASTERN NICARAGUA. COEE,FG: ANDERSON,GJ: ECON BOT 50 1: 71-107 (1996) ( SCH PHARM UNIV CONNECTICUT STORRS CT 06268 USA)
K27156	DEMONSTRATION OF THE HYPOGLYCEMIC ACTION OF MOMORDICA CHARANTIA IN A VALIDATED ANIMAL MODEL OF DIABETES. SARKAR,S: PRANAVA,M: MARITA,R: PHARMACOL RES 33 1: 1-4 (1996) (BIOCHEM DIV PATEL PHARM EDUC RES AHMEDABAD INDIA)
K27541	CHARACTERIZATION OF THE ENZYMATIC MECHANISM OF GAMMA-MOMORCHARIN, A NOVEL RIBOSOME-INACTIVATING PROTEIN WITH LOWER MOLECULAR WEIGHT OF 11,500 PURIFIED FROM THE SEEDS OF BITTER GOURD (MOMORDICA CHARANTIA). PU,Z: LU,BY: LIU,WY: JIN,SW: BIOCHEM BIOPHYS RES COMMUN 229 1: 287-294 (1996) ( INSTITUTE OF BIOCHEMISTRY ACADEMIA SINICA SHANGHAI CHINA)
K27792	AN INVESTIGATION OF SOME TURKISH HERBAL MEDICINES IN SALMONELLA TYPHIMURIUM AND IN THE COMET ASSAY IN HUMAN LYMPHOCYTES. BASARAN,AA: YU,TW: PLEWA,MJ: ANDERSON,D: TERATOGEN CARCINOGEN MUTAGEN 16 2: 125-138 (1996) ( PHARM FAC UNIV ANKARA ANKARA TURKEY)
K27939	ANTIOXIDANT PROPERTY OF FRUCTUS MOMORDICAE EXTRACT. SHI,H: HIRAMATSU,M: KOMATSU,M: KAYAMA,T: BIOCHEM MOL BIOL INT 40 6: 1111-1121 (1996) (DEPT NEUROSURGERY YAMAGATA UNIV SCH MED YAMAGATA 990 JAPAN)
K28076	PURIFICATION AND SEQUENCING OF NAPIN-LIKE PROTEIN SMALL AND LARGE CHAINS FROM MOMORDICA CHARANTIA AND RICINUS COMMUNIS SEEDS AND DETERMINATION OF SITES PHOSPHORYLATED PLANT CA2+-DEPENDENT PROTEIN KINASE. NEUMANN,GM: CONDRON,R: POLYA,GM: BIOCHIM BIOPHYS ACTA 1298 2: 223-240 (1996) ( SCH BIOCHEM LA ROBE UNIV BUNDOORA 3083 AUSTRALIA)
K28434	MEDICINAL PLANTS OF TWO MAYAN HEALERS FROM SAN ANDRES, PETEN, GUATEMALA. COMERFORD,SC: ECON BOT 50 3: 327-336 (1996) (DEPT ECOL EVOLUTION ORG BIOL TULANE UNIV NEW ORLEANS LA 70118 USA)
K29113	MEDICINAL PLANTS OF CHINA. REFERENCE PUBLICATIONS, INC. ALGONAC, MICHIGAN, 1985. DUKE, JA: AYENSU, ES: BOOK 1 4: 52-361 (1985) (NO ADDRESS GIVEN)
K29357	A HIGHLY EFFICIENT PROCEDURE FOR PURIFYING THE RIBOSOME-INACTIVATING PROTEINS ALPHA-AND BETA-MOMORCHARINS FROM MOMORDICA CHARANTIA SEEDS, N-TERMINAL SEQUENCE COMPARISON AND ESTABLISHMENT OF THEIR N-GLYCOSIDASE ACTIVITY. FONG, WP: POON, YT: WONG, TM: MOCK, JWY: NG, TB: WONG, RNS: YAO, QZ: YEUNG, HW: LIFE SCI 59 11: 901-909 (1996) (DEPT BIOCHEM CHIN UNIV HONG KONG SHATIN CHINA)
K29851	EFFECT OF DIETARY INTAKE OF FREEZE DRIED BITTER GOURD (MOMORDICA CHARANTIA) IN STREPTOZOTOCIN INDUCED DIABETIC RATS. PLATEL,K: SRINIVASAN,K: NAHRUNG 39 4: 262-268 (1995) (DEPT BIOCHEM NUTRITION CENTRAL FOOD TECHNOL RES INST MYSORE INDIA)
L00734	THE CUCURBITACINS-A REVIEW. GUHA, J: SEN, SP: PLANT BIOCHEM J 2 : 127 (1975) (BOTANY DEPT SURENDRANATH COLL CALCUTTA WEST BENGAL 700009 INDIA)
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)
L03902	EFFECTS OF MOMORDICA CHARANTIA FRUIT JUICE ON ISLET MORPHOLOGY IN THE PANCREAS OF THE STREPTOZOTOCIN-DIABETIC RAT. AHMED,I: ADEGHATE,E: SHARMA,AK: PALLOT,DJ: SINGH,J: DIABETES RES CLIN PRACT 40 3: 145-151 (1998) (DEPT HUMAN ANAT FAC MED HEALTH SCI UNIT ARAB EMIRATES UNIV AL AIN UNITED ARAB EMIRATES)

1.04004	ANTIMUTA CENIC AND ANTICA DOING CENIC DOTENTIAL COE COME THAT VEGETA DEC. MICAMBAN W.D. TERCHWAN A MURRA DEC.
L04084	ANTIMUTAGENIC AND ANTICARCINOGENIC POTENTIALS OF SOME THAI VEGETABLES. KUSAMRAN,WR: TEPSUWAN,A: KUPRADINUN,P: MUTAT RES 402 1/2: 247-258 (1998) (BIOCHEM CHEM CARCINOGEN SECT RES DIV NCI BANGKOK 10400 THAILAND)
L04137	AMAZONIAN ETHNOBOTANICAL DICTIONARY. DUKE, JA: BOOK : 181- (1994) ( USA)
L04280	ANALYSIS OF SOME HERBAL PLANTS FROM INDIA USED IN THE CONTROL OF DIABETES MELLITUS BY NAA AND AAS TECHNIQUES. RAJURKAR,NS: PARDESHI,BM: APPL RADIAT ISOT 48 8: 1059-1062 (1997) (DEPT CHEM UNIV PUNE PUNE 411007 INDIA)
L05182	A DIABETOLOGIST'S HERBAL. DAY,C: BAILEY,C: CURR MED LIT DIABETES ROYAL SOC MED 5: 31-35 (1988) (BIOL DIV ASTON UNIV BIRMINGHAM ENGLAND)
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)
L06960	A STUDY OF KARELA (MOMORDICA CHARANTIA LINN.) ON BLOOD GLUCOSE. KHAN,RA: HAMDARD MED 42 2: 56-61 (1999) (DEPT PHARM JN MED COLL ALIGARH MUSLIM UNIV ALIGARH 202 002 INDIA)
L07241	ANTIFUNGAL ACTIVITY OF MOMORDICINES FROM MOMORDICA CHARANTIA. CHANDRAVADANA,MV: NIDIRY,ESJ: VENKATESHWARLU,G: FITOTERAPIA 68 4: 383-384 (1997) ( IND INST HORTICULT RES BANGALORE 560 089 INDIA)
L07607	6-METHYLSULFINYLHEXYL ISOTHIOCYANATE AND ITS HOMOLOGUES AS FOOD-ORIGINATED COMPOUNDS WITH ANTIBACTERIAL ACTIVITY AGAINST ESCHERICHIA COLI AND STAPHYLOCOCCUS AUREUS. ONO,H: TESAKI,S: TANABE,S: WATANABE,M: BIOSCI BIOTECH BIOCHEM 62 2: 363-365 (1998) (FOOD SCI LAB FAC EDU TOKYO GAKUGEI UNIV TOKYO 184 JAPAN)
L07663	ANTIMICROBIAL ACTIVITY OF SOME MEDICINAL PLANTS EXTRACTS ON ESCHERICHIA COLI, SALMONELLA PARATYPHI AND SHIGELLA DYSENTERIAE.OMOREGBE,RE: IKUEBE,OM: IHIMIRE,IG: AFR J MED MED SCI 25 4: 373-375 (1996) (DEPT MICROBIOL EDO STATE UNIV EKPOMA NIGERIA)
L07721	ANTIBACTERIAL ACTIVITY OBSERVED IN THE SEEDS OF SOME COPROPHILOUS PLANTS. KUMAR,S: BAGCHI,GD: DAROKAR,MP: INT J PHARMACOG 35 3: 179-184 (1997) ( CENTRAL INST MED & AROMATIC PL LUCKNOW UP 226 016 INDIA)
L09878	ANTI-ULCEROGENIC EFFECT OF MOMORDICA CHARANTIA L. FRUITS ON VARIOUS ULCER MODELS IN RATS. GURBUZ,I: AKYUZ,C: YESILADA,E: SENER,B: J ETHNOPHARMACOL 71 1/2: 77-82 (2000) ( FAC PHARMACY GAZI UNIVERSITY ANKARA 06330 TURKEY)
L09986	INHIBITORY EFFECTS OF ALPINIA SPECIOSA K. SCHUM ON THE PORPHYRIN PHOTOOXIDATIVE REACTION. LIAO,MC: ARAKAKI,H: LI,YP: TAKAMIYAGI,A: TAWATA,S: ANIYA,Y: SAKURAI,H: NONAKA,S: J DERMATOL 27 5: 312-317 (2000) (DEP DERMATOL FAC MED UNIV RYUKYUS OKINAWA JAPAN)
L10141	EXCESS USE OF MOMORDICA CHARANTIA EXTRACT MAY BE SAFE WITH RESPECT T THYROID FUNCTION AND LIPID PEROXIDATION. PANDA,S: KAR,A: CURR SCI 79 2: 222-224 (2000) (THYROID RES UNIT SCH LIFE SCI D A UNIV INDORE 452 017 INDIA)
L10622	HYPOGLYCEMIC ACTIVITY OF THE FRUIT OF THE MOMORDICA CHARANTIA IN TYPE 2 DIABETIC MICE. MIURA,T: ITOH,C: IWAMOTO,N: KATO,M: KAWAI,M: PARK,SR: SUZUKI,I: J NUTR SCI VITAMINOL 47 5: 340-344 (2001) (DEPT CLIN NUTRITION SUZUKA UNIV MED SCI MIE 510-0293 JAPAN)
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)

L11054	EFFECTS OF MOMORDICA CHARANTIA POWDER ON SERUM GLUCOSE LEVELS AND VARIOUS LIPID PARAMETERS IN RATS FED WITH CHOLESTEROL-FREE AND CHOLESTEROL-ENRICHED DIETS. JAYASOORIYA,AP: SAKONO,M: YUKIZAKI,C: KAWANO,M: YAMAMOTO,K: FUKUDA,N: JETHNOPHARMACOL 72 1/2: 331-336 (2000) (DEPT BIOCHEM APPL BIOSCI FAC AGRICULTURE MIYAZAKI UNIV MIYAZAKI 889-2192 JAPAN)
L11141	BIOLOGICAL EVALUATION OF SOME MEDICINAL PLANT EXTRACTS FOR CONTR4ACEPTIVE EFFICACY IN FEMALES. RUNNEBAUM,B: RABE,T: KIESEL,L: PRAKASH,AO: FUTURE ASPECTS IN CONTRACEPTION. PART 2. FEMALE CONTRACEPTION, MTP PRESS, LTD, BOSTON, USA: 115-128 (1984) (INDIA)
L11358	ANTIPLASMODIAL AND ANTIAMOEBIC ACTIVITIES OF MEDICINAL PLANTS FROM SIERRA LEONE. MARSHALL,SJ: RUSSELL,PF: PHILLIPSON,JD: KIRBY,GC: WARHURST,DC: WRIGHT,CW: PROSTATE 14 5: 356-358 (2000) (PHARMA SCI RES GROUP DEPT PHARM UNIV BRIGHTON BRIGHTON ENGLAND)
L11725	ANTIBACTERIAL ABILITY OF EXTRACTS FROM ARBUSCULAR MYCORRHIZAL ROOTS OF ALLIUM SATIVUM L. AND MOMORDICA CHARANTIA. ANWAR,Z: AYUB,N: KHAN,AG: HAMDARD MED 43 1: 29-33 (2000) (DEPT BIOLOG SCI QUAID-E-AZAM UNIV ISLAMABAD PAKISTAN)
L12020	ROLE OF BITTERGOURD FRUIT JUICE IN STZ-INDUCED DIABETIC STATE IN VIVO AND IN VITRO. SITASAWAD,SL: SHEWADE,Y: BHONDE,R: J ETHNOPHARMACOL 73 1/2: 71-79 (2000) (NATL CNTR CELL SCI UNIV PUNE CAMPUS PUNE INDIA)
L12140	MOMORDICA CHARANTIA: WHAT DO WE REALLY KNOW ABOUT ITS HYPOGLYCAEMIC ACTIVITY? BASNET,P: NAMBA,T: KOMATSU,K: PHYTOMEDICINE SUPPL 7 2: SL131 (2000) (INST NAT MED TOYAMA MED PHARM UNIV TOYAMA JAPAN)
L12243	CANCER CHEMOPREVENTIVE POTENTIALS OF EDIBLE THAI PLANTS AND SOME OF THEIR ACTIVE CONSTITUENTS. MAURAKAMI,A: NAKAMURA,Y: OHIGASHI,H: KOSHIMIZU,K: MEM SCH BIOL ORIENTED SCI TECHNOL KINKI UNIV 1997 1: 1-23 (1997) (DEPT BIOTECH SCI KINKI UNIV WAKAYAMA 649 64 JAPAN)
L12432	PLANTS FROM PUERTO RICO WITH ANTI-MYCOBACTERIUM TUBERCULOSIS PROPERTIES. FRAME, AD: RIOSOLIVARES, E: DE JESUS, L: ORTIZ, D: PAGAN, J: MENDEZ, S: P R HEALTH SCI J 17 3: 243-253 (1998) (DIV SCI INTER AMER UNIV PUERTO RICO SAN JUAN PUERTO RICO)
L12839	BENEFICIAL EFFECTS OF FLAVONOIDS FROM SESAMUM INDICUM, EMBLICA OFFICINALIS AND MOMORDICA. ANILA,L: VIJAYALAKSHMI,NR: PHYTOTHER RES 14 8: 592-595 (2000) (DEPT BIOCHEMISTRY UNIV KERALA KARIAVATTOM THIRUVANANANTHAPURAM INDIA)
L13363	EVALUATION OF CHINESE HERBS THAT AFFECT THE CELL-MEDIATED IMMUNITY (II). KUO, YCH: QU, JCH: TSAI, WJ: WU, CHL: SUN, CHM: J CHIN MED 7 2: 119-131 (1996) ( NATION RES INST CHINESE MED TAIPEI TAIWAN)
L13425	ANALYSIS OF FATTY ACID IN MOMORDICA CHARANTIA WHOLE PLANT. SULTANA,N: BANGLADESH J SCI IND RES 33 2: 321-322 (1998) (DEPT CHEM UNIV DHAKA DHADA 1000 BANGLADESH)
L14446	CHEMICAL CONSTITUENTS OF MOMORDICA CHARANTIA. XIAO,Z: CHEN,D: SI,J: ZHONGCAOYAO 31 8: 571-573 (2000) ( INST MED PLANT DEVELOPMENT CHINESE ACAD MED SCI BEIJING 100094 CHINA)
L14935	INHIBITORY EFFECTS OF BITTER MELON (MOMORDICA CHARANTIA LINN.) ON BACTERIAL MUTAGENESIS AND ABERRANT CRYPT FOCUS FORMATION IN THE RAT COLON. CHIAMPANICHAYAKUL,S: KATAOKA,K: ARIMOCHI,H: THUMVIJIT,S: KUWAHARA,T: NAKAYAMA,H: VINITKETKUMNUEN,U: OHNISHI,Y: J MED INVEST 48 1/2: 88-96 (2001)(DEPT BACTERIOLOGY UNIV TOKUSHIMA SCH MED TOKUSHIMA JAPAN)
L14997	STIMULATION OF PROTEIN BIOSYNTHESIS IN RAT HEPATOCYTES BY EXTRACTS OF MOMORDICA CHARANTIA. OYEDAPO,OO: ARABA,BG: PHARMACEUT RES 15 2: 95-98 (2001) (DEPT BIOCHEM OBAFEMI AWOLOWO UNIV ILE IFE NIGERIA)
L15207	TREATMENT WITH EXTRACTS OF MOMORDICA CHARANTIA AND EUGENIA JAMBOLANA PREVENTS HYPERGLYCEMIA AND HYPERINSULINEMIA IN FRUCTOSE FED RATS. VIKRANT,V: GROVER,JK: TANDON,N: RATHI,SS: GUPTA,N: J ETHNOPHARMACOL 76 2: 139-143 (2001) (DEPT PHARMACOL ALL INDIA INST MED SCI NEW DELHI UT 110 016 INDIA)

L15570	TRADITIONAL ANTI-MALARIAL MEDICINE IN RORAIMA, BRAZIL. MILLIKEN,W: ECON BOT 51 3: 212-237 (1997) (CENTRE ECONOMIC BOTANY ROYAL BOTANIC GARDENS SURREY ENGLAND)
L15573	TRADITIONAL INDIAN ANTI-DIABETIC PLANTS ATTENUATE PROGRESSION OF RENAL DAMAGE IN STREPTOZOTOCIN INDUCED DIABETIC MICE. GROVER, JK: VATS, V: RATHI, SS: DAWAR, R: JETHNOPHARMACOL 76 3: 233-238 (2001) (DEPT PHARMACOL ALL INDIA INST MED SCI NEW DELHI UT 110 016 INDIA)
L15991	SNAKEBITES AND ETHNOBOTANY IN THE NORTHWEST REGION OF COLOMBIA. PART III: NEUTRALIZATION OF THE HAEMORRHAGIC EFFECT OF BOTHROPS ATROX VENOM. OTERO,R: NUNEZ,V: BARONA,J: FONNEGRA,R: JIMENEZ,SL: OSORIO,RG: SALDARRIAGA,M: DIAZ,A: J ETHNOPHARMACOL 73 1/2: 233-241 (2000) (PROGRAMA OFIDISMO FACULTAD MED UNIV ANTIOQUIA MEDELLIN COLOMBIA)
L15996	A FOLKLORE SURVEY OF SOME PLANTS OF BHOPAL DISTRICT FORESTS, MADHYA PRADESH, INDIA, DESCRIBED AS ANTIDIABETICS. KHAN,MA: SINGH,VK: FITOTERAPIA 67 5: 416-421 (1996) (DEPT BOTANY ALIGARH MUSLIM UNIV ALIGARH 202002 INDIA)
L16047	SCREENING OF MEDICINAL PLANTS USED BY THE GARIFUNA OF EASTERN NICARAGUA FOR BIOACTIVE COMPOUNDS. COE,FG: ANDERSON,GJ: J ETHNOPHARMACOL 53: 29-50 (1996) (DEPT ECOL EVOLUNT BIOL UNIV CONNECTICUT STORRS CT 06269 USA)
L16527	A CURCURBITANE TRITERPENOID ISOLATED FROM MOMORDICA CHARANTIA (KARELA) WHOLE PLANT. SULTANA,N: MOSHIUZZAMAN,M: NAHAR,N: DHAKA UNIV J SCI 49 1: 21-25 (2001)m(DEPT CHEM UNIV DHAKA DHAKA 1000 BANGLADESH)
L16798	USE OF MEDICINAL PLANTS DURING THE PUERERAL GRAVID CYCLE. ANDRADE, AABD: ARAUJO, AL: DINIZ, MFFM: OLIVEIRA, RAG: MENDONCA, F: MENDONCA, D: J BRAS GINECOL 106 5: 177-185 (1996) (DEPT MATERNO INFANTIL BRAZIL)
L18181	BIOLOGICAL SCREENING OF SELECTED MEDICINAL PANAMANIAN PLANTS BY RADIOLIGAND-BINDING TECHNIQUES. CABALLERO-GEORGE,C: VANDERHEYDEN,PML: SOLIS,PN: PIETERS,L: SHAHAT,AA: GUPTA,MP: VAUQUELIN,G: VLIETINCK,AJ: PHYTOMEDICINE 8 1: 59-70 (2001) (DEPT PHARM SCI UNIV ANTWERP ANTWERP B-2610 BELGIUM)
L18292	DETERMINATION OF MOMORDICOSIDE A IN BITTER MELON BY HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY AFTER SOLID-PHASE EXTRACTION. WANG,S: TANG,L: GUO,Y: YAN,F: CHEN,F: CHROMATOGRAPHIA 53 7/8: 372-374 (2001) (COLL LIFE SCI SICHUAN UNIV CHENGDU 610064 CHINA)
L18395	ORALLY ACTIVE FRACTION OF MOMORDICA CHARANTIA, ACTIVE PEPTIDES THEREOF, AND THEIR USE IN THE TREATMENT OF DIABETES. NAG,B: PATENT-US-6,127,338 : 1-11 (2000) ( CALYX THERAPEUTICS INC HAYWARD USA)
L18419	HYPOTRIGLYCERIDEMIC AND HYPOCHOLESTEROLEMIC EFFECTS OF ANTI-DIABETIC MOMORDICA CHARANTIA (KARELA) FRUIT EXTRACT IN STREPTOZOTOCIN-INDUCED DIABETIC RATS. AHMED,I: LAKHANI,MS: GILLETT,M: JOHN,A: RAZA,H: DIABETES RES CLIN PRACT 51 3: 155-161 (2001) (DEPT ANATOMY BIOCHEM FACULTY MED HEALTH SCI UAE UNIV AL AIN UNITED ARAB EMIRATES)
L19093	COMPARATIVE STUDIES ON HYPOGLYCEMIC ACTIVITY OF DIFFERENT SECTIONS OF MOMORDICA CHARANTIA L. FAN,YL: GUI,FD: SHENYANG YAOKE DAXUE XUEBAO 18 1: 50-53 (2001) (DEPT PHARMACY SHENYANG PHARMACEU UNIV SHENYANG 11006 CHINA)
L19726	MOMORDICA CHARANTIA EXTRACT; ANTIOXIDANT, ANTIBACTERIAL, AND ANTIHYPERGLYCEMIC PROPERTIES. FU,MH: CHEN,JH: ZHUANG,DH: SHIPIN KEXUE(BEIJING) 22 4: 88-90 (2001) (BIOLOGICAL DEPT SHANTOU UNIV SHANTOU 515063 CHINA)
M00425	ISOLATION OF A GUANYLATE CYCLASE INHIBITION FROM THE BALSAM PEAR (MOMORDICA CHARANTIA ABREVIATA). VESELY,DL: GRAVES,WR: LO,TM: FLETCHER,MA: LEVEY,GS: BIOCHEM BIOPHYS RES COMMUN 77 : 1294- (1977) (DEPT MED SCH MED UNIV MIAMI MIAMI FL 33152 USA)
M01152	EFFECTS OF MOMORDICA CHARANTIA FRUIT EXTRACT ON THE TESTICULAR FUNCTION OF DOG. DIXIT, VP: KHANNA, P: BHARGAVA, SK: PLANTA MED 34: 280-286 (1978) (DEPT ZOOLOGY REPRODUCTIVE BIOL SECT UNIV RAJASTHAN JAIPUR RAJASTHAN 302004 INDIA)

M01395	ISOLATION OF TOXIC AND NON-TOXIC LECTINS FROM THE BITTER PEAR MELON MOMORDICA CHARANTIA. LIN, JY: HOU, MJ: CHEN, YC: TOXICON 16: 653- (1978) (INST BIOCHEM COLL MED NATL TAIWAN UNIV TAIPEI TAIWAN)
M11890	INSULIN-LIKE MOLECULES IN MOMORDICA CHARANTIA SEEDS. NG,TB: WONG,CM: LI,WW: YEUNG,HW: J ETHNOPHARMACOL 15 1: 107-117 (1986) (DEPT BIOCHEM CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
M12169	LYCOPENE FROM THE SEEDS OF RIPE BITTER MELON (MOMORDICA CHARANTIA) AS A POTENTIAL RED FOOD COLOR. II. STORAGE STABILITY, PREPARATION OF POWDERED LYCOPENE AND FOOD APPLICATIONS. YEN,GC: HWANG,LS: CHUNG-KUO NUNG YEH HUA HSUEH HUI CHIH 23 1/2: 151-161 (1985) (DEP FOOD SCI NATL CHUNG HSING UNIV TAICHUNG TAIWAN)
M13369	STEAM VOLATILE CONSTITUENTS FROM SEED OILS OF MOMORDICA CHARANTIA L. ISHIKAWA,T: KIKUCHI,M: IIDA,T: SETO,S: TAMURA,T: MATSUMOTO,T: NIHON DAIGAKU KOGAKUBU KIYO BUNRUI 26 : 165-173 (1985) ( GRAD SCH ENG NIHON UNIV JAPAN)
M14755	CHEMICAL STUDIES OF CRUDE VEGETABLE DRUGS. I. MOMORDICA CHARANTIA L. GARCIA,LL: CAPAL,TV: VILLANUEVA,BA: SALUDARES,EP: PHILIPPINE J SCI 114 3/4: 139-150 (1985) (NATL INST SCI TECHNOL MANILA PHILIPPINES)
M15045	TRITERPENE ALCOHOLS IN THE SEED OILS OF MOMORDICA CHARANTIA L. KIKUCHI,M: ISHIKAWA,T: IIDA,T: SETO,S: TAMURA,T: MATSUMOTO,T: AGR BIOL CHEM 50 11: 2921-2922 (1986) (DEPT INDUST CHEM COLL ENGINEER NIHON UNIV FUKUSHIMA 963 11 JAPAN)
M16315	CARBOHYDRATES IN THE SEEDS OF MOMORDICA CHARANTIA L. ISHIKAWA,T: KIKUCHI,M: IIDA,T: SETO,S: TAMURA,T: MATSUMOTO,T: NIHON DAIGAKU KOGAKUBU KIYO BUNRUI 28 : 165-170 (1987) ( COLL ENG NIHON UNIV KORIYAMA 693 11 JAPAN)
M17147	THE AMINO ACID SEQUENCE OF A TRYPSIN INHIBITOR FROM THE SEEDS OF MOMORDICA CHARANTIA LINN. CUCURBITACEAE. ZENG,FY: QIAN,RQ: WANG,Y: FEBS LETT 234 1: 35-38 (1988) ( INST ORG CHEM ACADEMIA SINICA SHANGHAI CHINA)
M17655	ORAL HYPOGLYCAEMIC MEDICINAL PLANTS OF SRI LANKA. KARUNANAYAKE,EH: WELIHINDA,J: ABSTR PRINCESS CONGRESS I BANGKOK THAILAND 10-13 DECEMBER 1987: ABSTR-BP-37 (1987) (DEPT BIOCHEM UNIV COLOMBO COLOMBO SRI LANKA)
M19217	CHARACTERISTICS AND COMPOSITION OF SEEDS AND OIL OF WILD VARIETY OF MOMARDICA CHARANTIA L. FROM GUJARAT, INDIA. DAVE, GR: PATEL, RM: PATEL, RJ: FETTE SEIFEN ANSTRICHM 87 8: 326-327 (1985) m( SCI COLL ANAND GUJURAT 388001 INDIA)
M21799	HYPOGLYCEMIC ACTIVITY OF POLYPEPTIDE-P FROM A PLANT SOURCE. KHANNA,P: JAIN,SC: PANAGARIYA,A: DIXIT,VP: J NAT PROD 44 6: 648-655 (1981) (DEPT BOT LAB PLANT PHYSIOL & BIOCHEM UNIV RAJASTHAN JAIPUR RAJASTHAN 302 004 INDIA)
M21802	THE INSULIN-RELEASING ACTIVITY OF THE TROPICAL PLANT MOMORDICA CHARANTIA. WELIHINDA, J: ARVIDSON, G: GYLFE, E: HELLMAN, B: KARLSSON, E: ACTA BIOL MED GER 41 12: 1229-1240 (1982) (DEPT MED CELL BIOL MED CHEM BIOCHEM UNIV UPPSALA UPPSALA S-751 23 SWEDEN)
M22015	INFLUENCE OF BALSAM PEAR (THE FRUIT OF MOMORDICA CHARANTIA) ON BLOOD SUGAR LEVEL. LEI,QJ: JIANG,XM: LUO,AC: LIU,ZF: HE,XC: WANG,XD: CUI,FY: CHEN,PI: CHUNG I TSA CHIH(ENGL ED) 5 2: 99-106 (1985) ( GUANGZHOU MILITARY MED SCH GUANGZHOU CHINA)
M22028	EFFECT OF MOMORDICA CHARANTIA ON BLOOD GLUCOSE LEVEL OF NORMAL AND ALLOXAN-DIABETIC RABBITS. AKHTAR,MS: ATHAR,MA: YAQUB,M: PLANTA MED 42 3: 205-212 (1981) (DEPT PHYSIOL PHARMACOL UNIV AGR FAISALABAD PAKISTAN)
M22031	INTERACTION BETWEEN CURRY INGREDIENT (KARELA) AND DRUG (CHLORPROPAMIDE). ASLAM,M: STOCKLEY,IH: LANCET 1979 : 607 (1979) (DEPT PHARM UNIV NOTTINGHAM NOTTINGHAM NG7 2RD ENGLAND)
M22040	ISOLATION AND CHARACTERIZATION OF A GALACTOSE BINDING LECTIN WITH INSULINOMIMETIC ACTIVITIES: FROM THE SEEDS OF THE BITTER GOURD MOMORDICA CHARANTIA (FAMILY CUCURBITACEAE). NG,TB: WONG,CM: LI,WW: YEUNG,HW: INT J PEPTIDE PROTEIN RES 28 2: 163-172 (1986) (DEPT BIOCHEM CHINESE UNIV HONG KONG SHATIN N.T. CHINA)

M22131	ALLOXAN RECOVERED RABBITS AS ANIMAL MODEL FOR SCREENING FOR HYPOGLYCAEMIC ACTIVITY OF COMPOUNDS. VENKANNA BABU,B: MOORTI,R: PUGAZHENTHI,S: PRABHU,KM: SURYANARAYANA MURTHY,P: INDIAN J BIOCHEM BIOPHYS 25 6: 714-718 (1988) (DEPT BIOCHEM UNIV COLL MED SCI DELHI UT 110 032 INDIA)
M22670	BLOOD SUGAR LOWERING POTENTIALITY OF SELECTED CUCURBITACEAE PLANTS OF INDIAN ORIGIN. CHANDRASEKAR,B: MUKHERJEE,B: MUKHERJEE,SK: INDIAN J MED RES 90 4: 300-305 (1989) ( CENT DRUG RES INST LUCKNOW UP INDIA)
M22671	EFFECTS OF LONG TERM FEEDING OF ACETONE EXTRACT OF MOMORDICA CHARANTIA (WHOLE FRUIT POWDER) ON ALLOXAN DIABETIC ALBINO RATS. SINGH,N: TYAGI,SD: AGARWAL,SC: INDIAN J PHYSIOL PHARMACOL 33 2: 97-100 (1989) (DEPT ZOOL MEERUT COLL MEERUT UP 250 001 INDIA)
M22673	A STUDY ON THE CRUDE ANTIDIABETIC DRUGS USED IN ARABIAN FOLK MEDICINE. MOSSA,JS: INT J CRUDE DRUG RES 23 3: 137-145 (1985) ( COLL PHARM KING SAUD UNIV RIYADH 11451 SAUDI ARABIA)
M23109	TRADITIONAL PLANT REMEDIES FOR DIABETES. BAILEY,CJ: DAY,C: LEATHERDALE,BA: DIABETIC MED 3 2: 185-186 (1986) (DEPT MOL SCI ASTON UNIV BIRMINGHAM B4 7ET ENGLAND)
M23178	EFFECT OF MOMORDICA CHARANTIA LINN. POMOUS AQUEOUS EXTRACT ON CATARACTOGENESIS IN MURRIN ALLOXAN DIABETICS. SRIVASTAVA,Y: VENKATAKRISHNA-BHATT,H: VERMA,Y: PHARMACOL RES COMMUN 20 3: 201-209 (1988) ( DEPT BIOCHEM AHMEDABAD GUJURAT 380016 INDIA)
M23219	A SURVEY OF MEDICINAL PLANTS OF CHENCHU TRIBES OF ANDHRA PRADESH, INDIA. REDDY,MB: REDDY,KR: REDDY,MN: INT J CRUDE DRUG RES 26 4: 189-196 (1988) (DEPT BOT SRI VENKATESWARA UNIV TIRUPATI AP 517 502 INDIA)
M23556	IN VITRO ANTIMALARIAL ACTIVITY OF SIX MEDICINAL PLANTS. GBEASSOR,M: KEDJAGNI,AY: KOUMAGLO,K: DE SOUZA,C: AGBO,K: AKLIKOKOU,K: AMEGBO,KA: PHYTOTHER RES 4 3: 115-117 (1990) (DEPT PHYSIOL FAC SCI UNIV BENIN LOME TOGO)
M23565	CERASEE, A TRADITIONAL TREATMENT FOR DIABETES. STUDIES IN NORMAL AND STREPTOZOTOCIN DUABETIC MICE. BAILEY,CJ: DAY,C: TURNER,SL: LEATHERDALE,BA: DIABETES RES 2 : 81-84 (1985) (DEPT BIOL SCI UNIV ASTON BIRMINGHAM B4 7ET ENGLAND)
M24272	ANTIMUTAGENS FROM MOMORDICA CHARANTIA. GUEVARA, AP: LIM-SYLIANCO, C: DAYRIT, F: FINCH, P: MUTAT RES 230 2: 121-126 (1990) ( INST CHEM UNIV PHILIPPINES QUEZON CITY 1101 PHILIPPINES)
M25031	HYPOGLYCAEMIC EFFECT OF MOMORDICA CHARANTIA EXTRACTS. DAY,C: CARTWRIGHT,T: PROVOST,J: BAILEY,CJ: PLANTA MED 56 5: 426-429 (1990) (DEPT PHARM SCI BIOL DIV ASTON UNIV BIRMINGHAM B47ET ENGLAND)
M25317	NEW METHOD OF DETECTING THE LECTIN ACTIVITY OF MOMORDICA CHARANTIA. KAMESAKI,T: OMI,T: KAJII,E: IKEMOTO,S: VOX SANG 58 4: 307-308 (1990) (DEPT LEGAL MED HUMAN GEN JICHI MED SCH TOCHIGI-KEN JAPAN)
M25712	ANALGESIC EFFECT OF MOMORDICA CHARANTIA SEED EXTRACT IN MICE AND RATS. BISW AS,AR: RAMASW AMY,S: BAPNA,JS: J ETHNOPHARMACOL 31 1: 115-118 (1991) (DEPT PHARMACOL JAWAHARAL INST POSTGRAD MED EDUC & RES PONDICHERRY UT 605 006 INDIA)
M26112	NEW CUCURBITANE TRITERPENOIDS FROM MOMORDICA CHARANTIA. FATOPE,MO: TAKEDA,Y: YAMASHITA,H: OKABE,H: YAMAUCHI,T: J NAT PROD 53 6: 1491-1497 (1990) (DEPT CHEM BAYERO UNIV KANO NIGERIA)
M27078	STUDIES ON THE ACTIVE CONSTITUENTS OF MOMORDICA CHARANTIA L. ZHU,ZJ: ZHONG,ZC: LUO,ZY: XIAO,ZY: YAO HSUEH HSUEH PAO 25 12: 898-903 (1990) ( SICHUAN INST CHIN MAT MED CHONGQING 630065 CHINA)
M27144	MAP-30: A NEW INHIBITOR OF HIV-1 INFECTION AND REPLICATION. LEE-HUANG,S: HUANG,PL: NARA,PL: CHEN,HC: KUNG,HF: HUANG,P: HUANG,HI: HUANG,PL: FEBS LETT 272 1/2: 12-18 (1990) (DEPT BIOCHEM SCH MED NEW YORK UNIV NEW YORK NY 10016 USA)

M27151	PLANTS USED IN GUATEMALA FOR THE TREATMENT OF DERMATOPHYTIC INFECTIONS. 1. SCREENING FOR ANTIMYCOTIC ACTIVITY OF 44 PLANT EXTRACTS. CACERES,A: LOPEZ,BR: GIRON,MA: LOGEMANN,H: J ETHNOPHARMACOL 31 3: 263-276 (1991) (FAC CHEM SCI UNIV SAN CARLOS GUATEMALA 01012 GUATEMALA)
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)
M27271	SUBCELLULAR DISTRIBUTION OF MOMORDICINE-II IN MOMORDICA CHARANTIA LEAVES. CHANDRAVADANA,MV: CHANDER,MS: INDIAN J EXP BIOL 28 2: 185-186 (1990)( IND INST HORTICUL RES BANGALORE KARNATAKA 560089 INDIA)
M27532	EFFECT OF KARELA AS HYPOGLYCEMIC AND HYPOCHOLESTEROLEMIC AGENT. UPADHYAYA,GL: KUMAR,A: PANT,MC: J DIABET ASS INDIA 25 1: 12-15 (1983) (DEPT BIOCHEM SN MED COLL AGRA UP INDIA)
M27533	CLINICAL TRIAL IN PATIENTS WITH DIABETES MELLITUS OF AN INSULIN-LIKE COMPOUND OBTAINED FROM PLANT SOURCE. BALDWA,VS: BHANDARI,CM: PANGARIA,A: GOYAL,RK: UPSALA J MED SCI 82 1: 39-41 (1977) (DEPT MED SMS MED COLL HOSP JAIPUR RAJASTHAN INDIA)
M27569	PRIMARY STRUCTURES OF N-LINKED OLIGOSACCHARIDES OF MOMORDIN-A, A RIBOSOME-INACTIVATING PROTEIN FROM MOMORDICA CHARANTIA SEEDS. KIMURA,Y: MINAMI,Y: TOKUDA,T: NAKAJIMA,S: TAKAGI,S: FUNATSU,G: AGR BIOL CHEM 55 8: 2031-2036 (1991) (DEPT AGR SCI FAC AGR OKAYAMA UNIV OKAYAMA 700 JAPAN)
M27767	PLANTS IN KANO ETHOMEDICINE; SCREENING FOR ANTIMICROBIAL ACTIVITY AND ALKALOIDS. HUSSAIN, HSN: DEENI, YY: INT J PHARMACOG 29 1: 51-56 (1991) (DEPT BIOL SCI BAYERO UNIV KANO NIGERIA)
M27944	CHEMICAL COMPOSITION OF MOMORDICA CHARANTIA L. FRUITS. YUWAI,KE: RAO,KS: KALUWIN,C: JONES,GP: RIVETT,DE: J AGR FOOD CHEM 39 10: 1762-1763 (1991) (DEPT CHEM UNIV PAPUA NEW GUINEA PAPUA PAPUA-NEW GUINEA)
M28611	PHENYLPROPANOID GLYCOSIDES AND ROSMARINIC ACID FROM MOMORDICA BALSAMINA. DE TOMMASI,N: DE SIMONE,F: DE FEO,V: PIZZA,C: PLANTA MED 57 2: 201 (1991) (DIPT CHIM SOST NAT UNIV STUDI NAPOLI NAPLES 1-80131 ITALY)
M29299	PHARMACEUTICAL COMPOSITION CONTANING EXTRACTS OF FRUITS AND VEGETABLES FOR TREATING AND PREVENTING DIABETES. LIU,Y: PATENT-US-4,985-248:6PP (1991) (NO ADDRESS GIVEN)
M29966	ANTI-BACTERIAL, ANTI-FUNGAL AND ANTHELMINTIC INVESTIGATIONS ON INDIAN MEDICINAL PLANTS. NAOVI,SAH: KHAN,MSY: VOHORA,SB: FITOTERAPIA 62 3: 221-228 (1991) (DEPT MICROBIOL FAC SCI PHARM HAMDARD UNIV NEW DELHI UT 110 062 INDIA)
N00138	ANTIFERTILITY STUDIES OF SOME INDIGENOUS PLANTS. DHAR,SK: GUPTA,S: CHANDHOKE,N: PROC XI ANN CONF INDIAN PHARMACOL SOC,NEW DELHI,1978 1978 : 1- (1978) (DEPT PHARMACOL REGIONAL RES LAB JAMMU TAWI J & K 180001 INDIA)
N04644	INHIBITOR OF PROTEIN SYNTHESIS IN VITRO BY PROTEINS FROM THE SEEDS OF MOMORDICA CHARANTIA (BITTER PEAR MELON). BARBIERI,L: ZAMBONI,M: LORENZONI,E: MONTANARO,L: SPERTI,S: STIRPE,F: BIOCHEM J 186: 443-452 (1980) (INST PATHOL GENERALE UNIV BOLOGNA BOLOGNA I-40126 ITALY)
P00001	STUDIES OF INSECTICIDAL ACTIVITY OF ORGANIC COMPOUNDS IN MOMORDICA CINARANTIA LINN. TUNTIVANICH,U: TIWAKORNPUNNARAI,S: DEJSUPA,C: SCI THAILAND 38 3: 750-754 (1981) (NO ADDRESS GIVEN)
P00050	HYPOGLYCEMIC EFFECT OF MOMORDICA CHARANTIA IN RABBITS. PRAPHAPRADITCHOTE,K: NOOKHWAN,C: MEKMANEE,R: ABSTR 6TH CONGRESS OF THE PHARMACOLOGICAL AND THERAPEUTIC SOCIETY OF THAILAND BANGKOK THAILAND 1984 1984 : 75 (1984) (DEPT PHARMACOL FAC PHARM MAHIDOL UNIV BANGKOK THAILAND)
P00093	ANTIMICROBIAL ACTIVITY OF MOMORDICA CHARANTIA. MANEELRT,S: SATTHAMPONGSA,A: UNDERGRADUATE SPECIAL PROJECT REPORT 1978 : 18PP (1978)( FAC PHARM MAHIDOL UNIV BANGKOK THAILAND)

P00096	HYPOGLYCEMIC EFFECT OF MOMORDICA CHARANTIA LINN. IN RABBITS. PRAPHADITCHOTE,K: THESIS-MASTER 1984 : 59PP (1984) (DEPT PHARMACOL FAC PHARM MAHIDOL UNIV BANGKOK THAILAND)
R00001	STUDY ON TOXICITY OF THAI MEDICINAL PLANTS. MOKKHASMIT,M: SWATDIMONGKOL,K: SATRAWAHA,P: BULL DEPT MED SCI 12 2/4: 36-65 (1971) (THAILAND)
T00359	TRADITIONAL MEDICAL PRACTICES AND MEDICINAL PLANT USAGE ON A BAHAMIAN ISLAND. HALBERSTEIN, RA: SAUNDERS, AB: CUL MED PSYCHIAT 2:177-203 (1978) ( USA)
T00398	EFFECTS OF MOMORDICA CHARANTIA SEED EXTRACT ON THE RAT MID-TERM PLACENTA. SHUM,LKW: COI,VEC: YEUNG,HW: ABSTR INTERNATIONAL SYMPOSIUM ON CHINESE MEDICINAL MATERIALS RESEARCH HONG KONG JUNE 12-14 1984 : ABSTR-78 (1984) (DEPT BIOCHEM CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
T00436	INDUCTION OF RIPENING IN THE FRUITS OF MOMORDICA CHARANTIA BY EHTYLENE. KAYS,SJ: HAYES,MJ: TROP AGR(TRINIDAD) 55 : 167- (1978) (DEPT HORT COASTAL PLAIN EXP STA TIFTON GA USA)
T00701	MEDICINAL PLANTS OF THE WEST INDIES. AYENSU,ES: UNPUBLISHED MANUSCRIPT : 110 P- (1978) ( OFFICE OF BIOLOGICAL CONSERVAT SMITHSONIAN INSTITUTION WASHINGTON DC 20560 USA)
T01287	ETHNOPHARMACOGNOSITC OBSERVATIONS ON PANAMANIAN MEDICINAL PLANTS. PART I. GUPTA,MP: ARIAS,TD: CORREA,M: LAMBA,SS: Q J CRUDE DRUG RES 17 3/4: 115-130 (1979) (ORG AMER ST PHARMACOG RES UNIT FAC CIENC NAT Y FARM UNIV PANAMA PANAMA CITY 10767 PANAMA)
T01575	PARTIAL PURIFICATION AND CHARACTERIZATION OF A GUANYLATE CYCLASE INHIBITION WITH CYTOTOXIC PROPERTIES FROM THE BITTER MELON (MOMORDICA CHARANTIA). TAKEMOTO,DJ: KRESIE,R: VAUGHN,D: BIOCHEM BIOPHYS RES COMMUN 94: 332-339 (1980) (DEPT BIOCHEM KANSAS STATE UNIV MANHATTAN KS 66506 USA)
T01621	INHIBITION OF PROTEIN SYNTHESIS IN VITRO BY A LECTIN FROM MOMORDICA CHARANTIA. BARBIERI,L: LORENZONI,E: STIRPE,F: BIOCHEM J 182: 633-635 (1979) ( IST PATOL GEN UNIV BOLOGNA BOLOGNA I-40126 ITALY)
T01769	SEED EXTRACTS INHIBITING PROTEIN SYNTHESIS IN VITRO. GASPERI-CAMPANI,A: BARBIERI,L: MORELLI,P: STIRPE,F: BIOCHEM J 186 : 439-441 (1980) (INST PATOL GENERALE UNIV BOLOGNA BOLOGNA I-40126 ITALY)
T02106	ORAL HYPOGLYCAEMIC PLANTS IN WEST AFRICA. OLIVER-BEVER,B: J ETHNOPHARMACOL 2 2: 119-127 (1980) ( 19 CREST DE VAULX GAILLARD I-74240 FRANCE)
T02416	FATTY ACID CHANGES DURING MATURATION OF MOMORDICA CHARANTIA AND TRICHOSANTHES ANGUINA SEEDS. LAKSHMINARAYANA,G: KAIMAL,TNB: MANI,VVS: DEVI,KS: RAO,TC: PHYTOCHEMISTRY 21 : 301-303 (1982) ( REGIONAL RES LAB HYDERABAD AP 500 009 INDIA)
T02487	NOTES ON THE ETHNOBOTANY OF LAHUL, A PROVINCE OF THE PUNJAB. KOELZ,WN: Q J CRUDE DRUG RES 17 : 1-56 (1979) ( MUSEUM OF ZOOLOGY UNIV MICHIGAN ANN ARBOR MI USA)
T02572	STUDIES ON THE ANTIFEEDING AND INSECTICIDAL PROPERTIES OF BITTER GOURD (MOMORDICA CHARANTIA L.) AGAINST MUSTARD SAWFLY ATHALIA PROXIMA KLUG. KUMAR,A: TIWARI,GD: PANDEY,ND: PESTOLOGY 3 5: 23-25 (1979) ( CHANDRA SHEKHAR AZAD UNIV KANPUR INDIA)
T02678	SCREENING OF INDIAN PLANTS FOR BIOLOGICAL ACTIVITY. PART IX. DHAWAN,BN: DUBEY,MP: MEHROTRA,BN: RASTOGI,RP: TANDON,JS: INDIAN J EXP BIOL 18: 594-606 (1980) ( CENTRAL DRUG RESEARCH INST LUCKNOW UP 226 001 INDIA)
T03229	TOXICITY OF MOMORDICA CHARANTIA LECTIN AND INHIBITOR FOR HUMAN NORMAL AND LEUKEMIC LYMPHOCYTES. LICASTRO,F: FRANCESCHI,C: BARBIERI,L: STIRPE,F: VIRCHOWS ARCH B 33 : 257-265 (1980) ( IST PATOL GEN UNIV BOLOGNA BOLOGNA I-40126 ITALY)

ES ON LECTINS. XLVII. SOME PROPERTIES OF D-GALACTOSIDE BINDING LECTINS ISOLATED FROM THE SEEDS OF BUTEA FRONDOSA, HRINA INDICA AND MORMORDICA CHARANTIA. HOREJSI,V: TICHA,M: NOVOTNY,J: KOCOUREK,J: BIOCHIM BIOPHYS ACTA 623 : 439-448 (1980) ( MOL GENET CZECH ACAD SCI VIDENSKA CZECHOSLOVAKIA
R PRINCIPLES AND THEIR RELATED COMPOUNDS IN THE FRUITS OF MOMORDICA CHARANTIA L. OKABE,H: MIYAHARA,Y: YAMAUCHI,T: OSIUM ON THE CHEMISTRY OF NATURAL PRODUCTS,OSAKA,1981 24 : 95-102 (1981) ( FAC PHARM SCI FUKUOKA UNIV FUKUOKA 814-01 I)
ESTRIAL PLANTS MOLLUSCICIDAL TO LYMNAEID HOSTS OF FASCILIASIS HEPATICA IN PUERTO RICO. MEDINA,FR: WOODBURY,R: J AGR UNIV TO RICO 63 : 366-376 (1979) ( PUERTO RICO JUNIOR COLLEGE RIO PIEDRAS PUERTO RICO)
'S OF HAITI USED AS ANTIFERTILITY AGENTS. WENINGER,B: HAAG-BERRURIER,M: ANTON,R: J ETHNOPHARMACOL 6 1: 67-84 (1982) ( LAB FAC MED PORT-AU-PRINCE HAITI)
TS IN AID OF FAMILY PLANNING PROGRAMME. OOMMACHAN,M: KHAN,SS: SCI LIFE 1 : 64-66 (1981) (DEPT BOTANY SAIFIA COLLEGE BHOPAL IDIA)
ACTS FROM MOMORDICA CHARANTIA L. VISARATA,N: UNGSURUNGSIE,M: Q J CRUDE DRUG RES 19 : 75-80 (1981) (DEPT MICROBIOL FAC M MAHIDOL UNIV BANGKOK THAILAND)
YTOTOXIC AND CYTOSTATIC EFFECTS OF THE BITTER MELON (MOMORDICA CHARANTIA) ON HUMAN LYMPHOCYTES. TAKEMOTO,DJ: DRD,C: MC MURRAY,MM: TOXICON 20 : 593-599 (1982) (DEPT BIOCHEM KANSAS STATE UNIV MANHATTAN KS 66506 USA)
MEDICINAL PLANTS OF SAN JOSE SUCCOTZ, BELIZE. ARNASON,T: UCK,F: LAMBERT,J: HEBDA,R: J ETHNOPHARMACOL 2 4: 345-364 (1980) DEPT UNIV OTTAWA OTTAWA CANADA)
PECTIVES OF MALE CONTRACEPTION WITH REGARDS TO INDONESIAN TRADITIONAL DRUGS. KOENTJORO-SOEHADI,T: SANTA,IGP: PROC ND NATIONAL CONGRESS OF INDONESIAN SOCIETY OF ANDROLOGY BALI INDONESIA AUGUST 2-6 1982 1982 : 12PP (1982) (DEPT BIOL MED IRLANGGA UNIV SURABAYA INDONESIA)
BEAN AND LATIN AMERICAN FOLK MEDICINE AND ITS INFLUENCE IN THE UNITED STATES. MORTON,JF: Q J CRUDE DRUG RES 18 2: 57-75 (MORTON COLLECTANEA UNIV MIAMI CORAL GABLES FL USA)
CTS OF BITTERGOURD (MOMORDICA CHARANTIA) SEED & GLIBENCLAMIDE IN STREPTOZOTOCIN INDUCED DIABETES MELLITUS. KEDAR,P: RABARTI,CH: INDIAN J EXP BIOL 20 : 232-235 (1982) (DEPT BIOCHEM NAGPUR UNIV NAGPUR MAHARASTRA 440 010 INDIA)
ITRIBUTION TO THE THAI PHYTOCHEMICAL SURVEY. CANNON, JR: DAMPAWAN, P: LOJANAPIWATNA, V: PHURIYAKORN, B: SINCHAI, W: JGSA, P: SUVATABHANDHU, K: WIRIYACHITRA, P: J SCI SOC THAILAND 6: 46-53 (1980) (DEPT CHEM FAC SCI PRINCE OF SONGKLA UNIV HAT YAI AND)
GENOUS CYTOKININS IN SEEDS OF BITTERGOURD MOMORDICA CHARANTIA L. IYER,RI: NAGAR,PK: SIRCAR,PK: INDIAN J EXP BIOL 19 : i7 (1981) (DEPT BOTANY PLANT PHYSIOL LAB UNIV CALCUTTA CALCUTTA WEST BENGAL 700 019 INDIA)
ES ON INDIAN MEDICINAL PLANTS. PART 64. VICINE, A FAVISM-INDUCING TOXIN FROM MOMORDICA CHARANTIA LINN. SEEDS. DUTTA,PK: RAVARTY,AK: CHOWDHURY,US: PAKRASHI,SC: INDIAN J CHEM 20B : 669-671 (1981) ( INDIAN INST OF CHEM BIOLOGY CALCUTTA WEST AL 700 032 INDIA)
ES ON THE CONSTITUENTS OF MOMORDICA CHARANTIA L. 4. CHARACTERIZATION OF THE NEW CUCURBITACIN GLYCOSIDES OF THE FURE FRUITS. (2). STRUCTURES OF THE BITTER GLYCOSIDES, MOMORDICOSIDES K AND L.mOKABE,H: MIYAHARA,Y: YAMAUCHI,T: CHEM W BULL 30: 4334-4340 (1982) (FAC PHARM SCI FUKUOKA UNIV FUKUOKA 812 JAPAN)
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T05957	STUDIES ON THE CONSTITUENTS OF MOMORDICA CHARANTIA. 3. CHARACTERIZATION OF NEW CUCURBITACIN GLYCOSIDES OF THE IMMATURE FRUITS. (1). STRUCTURES OF MOMORDICOSIDES G, F1, F2 AND I. OKABE,H: MIYAHARA,Y: YAMAUCHI,T: CHEM PHARM BULL 30 : 3977-3986 (1982) (FAC PHARM SCI FUKUOKA UNIV FUKUOKA 812 JAPAN)
T06213	PURIFICATION AND CHARACTERIZATION OF A CYTOSTATIC FACTOR FROM THE BITTER MELON MOMORDICA CHARANTIA. TAKEMOTO,DJ: JILKA,C: KRESIE,R: PREP BIOCHEM 12: 355-375 (1982) (DEPT BIOCHEM KANSAS STATE UNIV MANHATTAN KS 66506 USA)
T06311	EFFECT OF MOMORDICA CHARANTIA (KARELA) EXTRACT ON BLOOD AND URINE SUGAR IN DIABETES MELLITUS. STUDY FROM A DIABETIC CLINIC. KIRTI,S: VINOD,K: NIGAM,P: SRIVASTAVA,P: CLINICIAN 46 1: 26-29 (1982) ( MLB MED COLL JHANSI UP H INDIA)
T06510	STUDIES ON SOME PLANTS USED AS ANTICONVULSANTS IN AMERINDIAN AND AFRICAN TRADITIONAL MEDICINE. ADESINA,SK: FITOTERAPIA 53: 147-162 (1982)(DRUG RES UNIT FAC PHARM UNIV IFE ILE-IFE NIGERIA)
T06649	LYCOPENE FROM THE SEEDS OF RIPE BITTER MELON (MOMORDICA CHARANTIA) AS A POTENTIAL RED FOOD COLORANT. 1. IDENTIFICATION, SURVEY OF LYCOPENE CONTENT AND RIPENING TEST. YEN, GC: HWANG, LS: LEE, TC: CHUNG-KUO NUNG YEH HUA HSUEH HUI CHIH 19: 227-235 (1981) ( GRAD INST FOOD SCI NATL TAIWAN UNIV TAIPEI TAIWAN)
T06653	COMPARATIVE STUDY OF TWO MEDICINAL CUCURBITACEAE. 1. SEEDS METABOLISM AND AMINO ACID COMPOSITION. BARRON,D: KAOUADJI,M: MARIOTTE,AM: PLANTA MED 46: 184-186 (1982) (LAB PHARMACOGNOSY U.E.R.PHARMACIE DE GRENOBLE LA TRONCHE FRANCE)
T06928	FATTY ACIDS OF CALLUS TISSUES OF SIX SPECIES OF CUCURBITACEAE. HALDER, T: GADGIL, VN: PHYTOCHEMISTRY 22 9: 1965-1967 (1983) (TISSUE CULTURE LABORATORY BOSE INSTITUTE CALCUTTA WEST BENGAL 700 009 INDIA)
T07075	BACTERIAL GROWTH INHIBITION OF UNSAPONIFIABLE MATTER OF FIXED OIL FROM MOMORDICA CHARANTIA. SHARMA,AK: INDIAN DRUGS PHARM IND 16: 29-30 (1981) (DEPT PHARM SCI UNIV SAUGER SAGAR MP INDIA)
T07170	A PRELIMINARY STUDY OF THE EFFECTS OF SOME WEST INDIAN MEDICINAL PLANTS ON BLOOD SUGAR LEVELS IN THE DOG. MORRISON, EYSA: WEST, M: WEST INDIAN MED J 31: 194-197 (1982) (DEPT BIOCHEM & PHARMACOLOGY UNIV WEST INDIES JAMAICA
T07660	PHYTOTHERAPY IN DOMESTIC TRADITIONAL MEDICINE IN MATOUBA-PAPAYE(GUADELOUPE). VITALYOS,D: DISSERTATION-PH.DUNIV PARIS 1979: 110PP (1979) ( UNIV PARIS PARIS FRANCE)
T07722	WILD AND CULTIVATED CUCURBITS IN NIGERIA. OKOLI,BE: ECON BOT 38 3: 350-357 (1984) ( SCHOOL OF BIOLOGICAL SCIENCES UNIV OF PORT HARCOURT PORT HARCOURT 5323 NIGERIA)
T08064	BIOLOGICAL EFFECTS OF BETA-MOMORCHARIN ON EARLY MOUSE EMBRYOS AND ENDOMETRIAL CELLS. CHAN,WY: TAM,PPL: YEUNG,HW: ABSTR INTERNATIONAL SYMPOSIUM ON CHINESE MEDICINAL MATERIALS RESEARCH HONG KONG JUNE 12-14 1984 : ABSTR-59 (1984) (DEPT BIOCHEM CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
T08079	PURIFICATION AND CHARACTERIZATION OF MOMORCHARINS, ABORTIFACIENT PROTEINS FROM THE CRUDE DRUG KUGUAZI(MOMORDICA CHARANTIA SEEDS). YEUNG, HW: LI, WW: CHAN, WY: ABSTR INTERNATIONAL SYMPOSIUM ON CHINESE MEDICINAL MATERIALS RESEARCH HONG KONG JUNE 12-14 1984 : ABSTR-17 (1984) (DEPT BIOCHEM CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
T08353	STRUCTURES OF MOMORDICINES I,II AND III,THE BITTER PRINCIPLES IN THE LEAVES AND VINES OF MOMORDICA CHARANTIA L. YASUDA,M: IWAMOTO,M: OKABE,H: YAMAUCHI,T: CHEM PHARM BULL 32 5: 2044-2047 (1984) (FAC PHARM SCI FUKUOKA UNIV FUKUOKA 812 JAPAN)
T08376	THE TERMINATION OF EARLY PREGNANCY IN THE MOUSE BY BETA-MOMORCHARIN. CHAN, WY: TAM, PPL: YEUNG, HW: CONTRACEPTION 29 1: 91-100 (1984) (DEPT CHEM UNIV HONG KONG HONG KONG CHINA)
T08396	ORAL HYPOGLYCAEMIC ACTIVITY OF SOME MEDICINAL PLANTS OF SRI LANKA. KARUNANAYAKE,EH: WELIHINDA,J: SIRIMANNE,SR: SINNADORAI,G: J ETHNOPHARMACOL 11 2: 223-231 (1984) (DEPT BIOCHEM FAC MED UNIV COLOMBO COLOMBO SRI LANKA)

T08662	BIOACTIVE CONSTITUENTS OF CUCURBITACEAE PLANTS WITH SPECIAL EMPHASIS ON MOMORDICA CHARANTIA AND TRICHOSANTHES KIRILOW II. NG,TB: YEUNG,HW: PROC FIFTH ASIAN SYMPOSIUM ON MEDICINAL PLANTS AND SPICES SEOUL KOREA AUGUST 20-24 1984 BH HAN DS HAN YN HAN AND WS WOO(EDS) 5: 183-196 (1984) (DEPT BIOCHEM CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
T08932	TRITERPENOID FEEDING DETERRENT OF RAPHIDOPALPA FOVEICOLLIS L. (RED PUMPKIN BEETLES) FROM MOMORDICA CHARANTIA L. CHANDRAVADANA,MV: PAL,AB: CURR SCI 52 2: 87-89 (1983) ( INDIAN INST HORTICUL RESER BANGALORE KARNATAKA 560 080 INDIA)
T08985	PURIFICATION AND CHARACTERIZATION OF A CYTOSTATIC FACTOR WITH ANTI-VIRAL ACTIVITY FROM THE BITTER MELON. TAKEMOTO,DJ: JILKA,C: ROCKENBACH,S: HUGHES,JV: PREP BIOCHEM 13 5: 397-421 (1983) (DEPT BIOCHEM WILLARD HALL KANSAS STATE UNIV MANHATTAN KS 66506 USA)
T09094	STUDIES ON THE CONSTITUENTS OF MOMORDICA CHARANTIA L. II ISOLATION AND CHARACTERIZATION OF MINOR SEED GLYCOSIDES, MOMORDICOSIDES C, D AND E. MIYAHARA,Y: OKABE,H: YAMAUCHI,T: CHEM PHARM BULL 29: 1561-1566 (1981) ( FAC PHARM SCI FUKUOKA UNIV FUKUOKA 812 JAPAN)
T09095	STUDIES ON THE CONSTITUENTS OF MOMORDICA CHARANTIA L. I. ISOLATION AND CHARACTERIZATION OF MOMORDICOSIDES A AND B, GLYCOSIDES OF A PENTAHYDROXY-CUCURBITANE TRITERPENE. OKABE,H: MIYAHARA,Y: YAMAUCHI,T: MIYAHARA,K: KAWASAKI,T: CHEM PHARM BULL 28 9: 2753-2762 (1980) (FAC PHARM SCI FUKUOKA UNIV FUKUOKA 812 JAPAN)
T09137	IN VIVO ANTITUMOR ACTIVITY OF THE BITTER MELON (MOMORDICA CHARANTIA). JILKA,C: STRIFLER,B: FORTNER,GW: HAYS,EF: TAKEMOTO,DJ: CANCER RES 43 11: 5151-5155 (1983) (DEPT BIOCHEM DIV BIOL KANSAS STATE UNIV MANHATTAN KS 66506 USA)
T09739	ANTIMICROBIAL ACTIVITY OF SOME MEDICINAL SPECIES OF DAKAR MARKETS. LAURENS,A: MBOUP,S: TIGNOKPA,M: SYLLA,O: MASQUELIER,J PHARMAZIE 40 7: 482-485 (1985) (LAB CHIM SUB NATUR FAC MIX MED PHARM DAKAR SENEGAL)
T10072	PURIFICATION AND PARTIAL CHARACTERIZATION OF MOMORCHARINS, ABORTIFACIENT PROTEINS FROM THE CHINESE DRUG, KUGUAZI (MOMORDICA CHARANTIA SEEDS). YEUNG,HW: LI,WW: LAW,LK: CHAN,WY: ADVANCES IN CHINESE MEDICINAL MATERIALS RESEARCH H M CHANG H W YEUNG W W TSO AND A KOO(EDS) WORLD SCIENTIFIC PRESS PHILADELPHIA PA: 311-318 (1984) (DEPT BIOCHEM CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
T10116	HERBAL AND TRADITIONAL PRACTICES RELATED TO MATERNAL AND CHILD HEALTH CARE. VELAZCO, EA: RURAL RECONSTRUCTION REVIEW: 35-39 (1980) (NO ADDRESS GIVEN)
T10126	SCREENING OF INDIAN PLANTS FOR BIOLOGICAL ACTIVITY: PART X. ASWAL,BS: BHAKUNI,DS: GOEL,AK: KAR,K: MEHROTRA,BN: MUKHERJEE,KC: INDIAN J EXP BIOL 22 6: 312-332 (1984) ( CENTRAL DRUG RESEARCH INST LUCKNOW UP 226 001 INDIA)
T10348	A STUDY ON THE CRUDE ANTIDIABETIC DRUGS USED IN ARABIAN FOLK MEDICINE. MOSSA,JS: INT J CRUDE DRUG RES 23 3: 137-145 (1985) (DEPT PHARMACOG COLL PHARM KING SAUD UNIV RIYADH 11451 SAUDI ARABIA)
T10632	TRADITIONAL MEDICINE IN FIJI: SOME HERBAL FOLK CURES USED BY FIJI INDIANS. SINGH,YN: J ETHNOPHARMACOL 15 1: 57-88 (1986) (SCH NAT RES UNIV SOUTH PACIFIC SUVA FIJI)
T11178	SCREENING OF TRICHOSANTHES KIRILOWII, MOMORDICA CHARANTIA AND CUCURBITA MAXIMA (FAMILY CUCURBITACEAE) FOR COMPOUNDS WITH ANTILIPOLYTIC ACTIVITY. WONG,CM: NG,TB: YEUNG,HW: J ETHNOPHARMACOL 13 3: 313-321 (1985) (DEPT BIOCHEM CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
T11569	INDIAN PLANTS WITH ORAL HYPOGLYCAEMIC ACTIVITY. JAIN,HC: ABSTR INTERNAT RES CONG NAT PROD COLL PHARM UNIV N CAROLINA CHAPEL HILL NC JULY 7-12 1985: ABSTR-152 (1985) (PUBLICATIONS & INFO DIRECT (CSIR) NEW DELHI UT 110012 INDIA)
T12135	AN IN VITRO STUDY ON THE EFFECT OF MOMORDICA CHARANTIA GLUCOSE UPTAKE AND GLUCOSE METABOLISM IN RATS. MEIR,P: YANIV,Z: PLANTA MED 51 1: 12-16 (1985) (DEPT MED & SPICE CROPS AGR RES ORG VOLCANI CENTER BET DAGAN 50250 ISRAEL)

T12145	POPULAR MEDICINAL PLANTS OF THE MARKETS OF DAKAR (SENEGAL). TIGNOKPA,M: LAURENS,A: MBOUP,S: SYLLA,O: INT J CRUDE DRUG RES 24 2: 75-80 (1986) (LAB CHIM SUB NATUR FAC MED PHARM DAKAR SENEGAL)
T12146	EFFECTS OF MOMORCHARINS ON THE MOUSE EMBRYO AT THE EARLY ORGANOGENESIS STAGE. CHAN,WY: TAM,PPL: CHOI,HL: NG,TB: YEUNG,HW: CONTRACEPTION 34 5: 537-544 (1986) (DEPT ANATOMY CHINESE UNIV HONG KONG HONG KONG CHINA)
T12220	HERBAL DRUGS IN DIABETES - PART I: HYPOGLYCAEMIC ACTIVITY OF INDIGENOUS PLANTS IN STREPTOZOTOCIN (STZ) INDUCED DIABETIC RATS. CHAKRABORTY,T: PODDAR,G: J INST CHEM(INDIA) 56 1: 20-22 (1984) (DEPT CHEM CALCUTTA SCH TROP MED CALCUTTA WEST BENGAL 700 073 INDIA)
T12489	PURIFICATION AND CHARACTERIZATION OF A CYTOSTATIC FACTOR WITH ANTI-VIRAL ACTIVITY FROM THE BITTER MELON. TAKEMOTO,DJ: JILKA,C: ROCKENBACH,S: HUGHES,JV: PREP BIOCHEM 13 4: 371-393 (1983) (DEPT BIOCHEM WILLARD HALL KANSAS STATE UNIV MANHATTAN KS 66506 USA)
T12686	IMPROVEMENT IN GLUCOSE TOLERANCE DUE TO MOMORDICA CHARANTIA (KARELA). LEATHERDALE,BA: PANESAR,RK: SINGH,G: ATKINS,TW: BAILEY,CJ: BIGNELL,AHC: BRIT MED J 282 6279: 1823-1824 (1981) (DEPT DIABETES & ENDOCRINOL CLIN INVEST UNIT DUDLEY ROAD HOSP BIRMINGHAM ENGLAND)
T12703	EXTRA-PANCREATIC EFFECTS OF MOMORDICA CHARANTIA IN RATS. WELIHINDA, J: KARUNANAYAKE, EH: J ETHNOPHARMACOL 17 3: 247-255 (1986) (DEPT BIOCHEM FAC MED UNIV COLOMBO COLOMBO 8 SRI LANKA)
T12706	EFFECT OF MOMORDICA CHARANTIA ON THE GLUCOSE TOLERANCE IN MATURITY ONSET DIABETES. WELIHINDA, J: KARUNANAYAKE, EH: SHERIFF, MHR: JAYASINGHE, KSA: J ETHNOPHARMACOL 17 3: 277-282 (1986) (DEPT BIOCHEM FAC MED UNIV COLOMBO COLOMBO 8 SRI LANKA)
T12861	CHANYLATE CYCLASE ACTIVITY IN HUMAN LEUKEMIC AND NORMAL LYMPHOCYTES. TAKEMOTO,DJ: DUNFORD,C: VAUGHN,D: KRAMER,KJ: SMITH,A: POWELL,RG: ENZYME 27: 179-188 (1982) (DEPT BIOCHEM KANSAS STATE UNIV MANHATTAN KS USA)
T13846	POPULAR MEDICINE OF THE CENTRAL PLATEAU OF HAITI. 2. ETHNOPHARMACOLOGICAL INVENTORY. WENIGER,B: ROUZIER,M: DAGUILH,R: HENRYS,D: HENRYS,JH: ANTON,R: J ETHNOPHARMACOL 17 1: 13-30 (1986) (LAB PHARMACOG FAC PHARM STRASBOURG 67048 FRANCE)
T13893	A PRELIMINARY CLINICAL TRIAL OF VIJAYASARA COMPOUND IN CASES OF INSULIN-INDEPENDENT DIABETES. OJHA,JH: PRASAD,VV: SINGH,B: NAGARJUN 27 2: 37-39 (1983) (DEP DRAVYAGUNA IMS BANARAS HINDU UNIV VARANASI UP INDIA)
T13897	ACID-ETHANOL EXTRACTABLE COMPOUNDS FROM FRUITS AND SEEDS OF THE BITTER GOURD MOMORDICA CHARANTIA: EFFECTS ON LIPID METABOLISM IN ISOLATED RAT ADIPOCYTES. NG,TB: WONG,CM: LI,WW: YEUNG,HW: AMER J CHINESE MED 15 1/2: 31-42 (1987) (DEPT BIOCHEM CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
T14056	TRICHOSANTHIN, ALPHA-MOMORCHARIN AND BETA-MOMORCHARIN: IDENTITY OF ABORTIFACIENT AND RIBOSOME-INACTIVATING PROTEINS. YEUNG,HW: LI,WW: FENG,Z: BARBIERI,L: STIRPE,F: INT J PEPTIDE PROTEIN RES 31 3: 265-268 (1988) (DEPT BIOCHEM CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
T14891	A REVIEW OF INDIAN MEDICINAL PLANTS WITH INTERCEPTIVE ACTIVITY. KAMBOJ, VP: INDIAN J MED RES 1988 4: 336-355 (1988) ( CENTRAL DRUG RESEARCH INST LUCKNOW UP 226 001 INDIA)
T14959	RETARDATION OF RETINOPATHY BY MOMORDICA CHARANTIA L. (BITTER GOURD) FRUIT EXTRACT IN ALLOXAN DIABETIC RATS. SRIVASTAVA,Y: VENKATAKRISHNA-BHATT,H: VERMA,Y: PERM,AS: INDIAN J EXP BIOL 25 8: 571-572 (1987) (DEPT BIOCHEM BJ MED COLL AHMEDABAD GUJURAT 380 016 INDIA)
T14966	HYPOGLYCAEMIC AND ANTIHYPERGLYCAEMIC EFFECTS OF MOMORDICA CHARANTIA SEED EXTRACTS IN ALBINO RATS. DUBEY,DK: BISWAS,AR: BAPNA,JS: PRADHAN,SC: FITOTERAPIA 58 6: 387-394 (1987) (DEPT PHARMACOL JAWAHARAL INST POSTGRAD MED EDUC + RES PONDICHERRY UT 605 006 INDIA)

T15210	THE IMMUNOSUPPRESSIVE ACTIVITIES OF TWO ABORTIFACIENT PROTEINS ISOLATED FROM THE SEEDS OF BITTER MELON (MOMORDICA CHARANTIA). LEUNG,SO: YEUNG,HW: LEUNG,KN: IMMUNOPHARMACOLOGY 13 3: 159-171 (1987) (DEPT BIOCHEM CHINESE UNIV HONG KONG SHATIN N.T. CHINA)
T15279	SCREENING OF EDIBLE PLANTS AGAINST POSSIBLE ANTI-TUMOR PROMOTING ACTIVITY. KOSHIMIZU,K: OHIGASHI,H: TOKUDA,H: KONDO,A: YAMAGUCHI,K: CANCER LETT 39 3: 247-257 (1988) (DEPT FOOD SCI TECHN FAC AGR KYOTO UNIV KYOTO 606 JAPAN)
T15323	VEGETALES EMPLEADOS EN MEDICINA TRADICIONAL NORPERUANA. RAMIREZ,VR: MOSTACERO,LJ: GARCIA,AE: MEJIA,CF: PELAEZ,PF: MEDINA,CD: MIRANDA,CH: BANCO AGRARIO DEL PERU & NACL UNIV TRUJILLO, TRUJILLO, PERU, JUNE, 1988 : 54PP- (1988) ( UNIV TRUJILLO TRUJILLO PERU)
T15975	A SURVEY OF MEDICINAL PLANTS OF MINAS GERAIS, BRAZIL. HIRSCHMANN,GS: ROJAS DE ARIAS,A: J ETHNOPHARMACOL 29 2: 159-172 (1990) (INST INVEST CIENCIAS SALUD FAC CIENCIAS QUIM ASUNCION PARAGUAY)
T16092	EFFECT OF MOMORDICA CHARANTIA FRUIT JUICE ON STREPTOZOTOCIN-INDUCED DIABETES IN RATS. KARUNANAYAKE,EH: JEEVATHAYAPARAN,S: TENNEKOON,KH: J ETHNOPHARMACOL 30 2: 199-204 (1990) (DEPT BIOCHEM FAC MED UNIV COLOMBO COLOMBO 8 SRI LANKA)
T16158	STUDIES ON ANTIMALARIAL ACTION OF CRYPTOLEPIS SANGUINOLENTA EXTRACT. BOYE,GL: PROC INT SYMP ON EAST-WEST MED, SEOUL, KOREA, OCTOBER 10-11 1989 : 243-251 (1990) ( CENT SCI RES PLANT MED MAMPONG-AKWAPIM GHANA)
T16453	OXYGEN FREE RADICAL SCAVENGING ACTIVITY OF THE JUICE OF MOMORDICA CHARANTIA FRUITS. SREEJAYAN: RAO,MNA: FITOTERAPIA 62 4: 344-346 (1991) (DEPT PHARM CHEM COLL PHARM SCI MANIPAL KARNATAKA 576119 INDIA)
T16711	ETHNOBOTANICAL REVIEW OF MEDICINAL PLANTS FROM THAI TRADITIONAL BOOKS, PART 1: PLANTS WITH ANTIINFLAMMATORY, ANTI-ASTHMATIC AND ANTIHYPERTENSIVE PROPERTIES. PANTHONG,A: KANJANAPOTHI,D: TAYLOR,WC: J ETHNOPHARMACOL 18 3: 213-228 (1986) (DEPT PHARMACOL FAC MED CHIANG MAI UNIV CHIANG MAI 50002 THAILAND)
W00002	POISONOUS PLANTS OF INDIA. MANAGER OF PUBLICATIONS, GOVERNMENT OF INDIA PRESS, CALCUTT. VOLUME 1. CHOPRA, RN: BADHWAR, RL: GHOSH, S: BOOK: (1949) (DRUG RES LAB JAMMU TAWI J&K INDIA)
W00113	MEDICINAL PLANTS OF WEST AFRICA. REFERENCE PUBLICATIONS, INC. ALGONAC, MICHIGAN, U.S.A. AYENSU, ES: BOOK: - (1978) (BOTANY DEPT SMITHSONIAN INSTITUTION WASHINGTON DC USA)
W00276	POTENTIATION OF TOLBUTAMIDE ACTION BY JASAD BHASMA AND KARELA (MOMORDICA CHARANTIA). KULKARNI,RD: GAITONDE,BB: INDIAN J MED RES 50 : 715-719 (1962) (DEPT PHARMACOL GRANT MED COLL BOMBAY MAHARASTRA INDIA)
W00384	IN VITRO ANTHELMINTIC SCREENING OF INDIGENOUS MEDICINAL PLANTS AGAINST HAEMONCHUS CONTORTUS (RUDOLPHI,1803) COBBOLD, 1898 OF SHEEP AND GOATS. SHARMA,LD: BAHGA,HS: SRIVASTAVA,PS: INDIAN J ANIM RES 5 1: 33-38 (1971) ( COLL VET MED U.P.AGR UNIV PANTNAGAR UP INDIA)
W00408	CERTAIN LITTLE-KNOWN ANTHELMINTICS FROM BRAZIL. FRIESE,FW: APOTH ZTG 44: 180- (1929) (NO ADDRESS GIVEN)
W00678	PHARMACOLOGY OF A HYPOGLYCEMIC PRINCIPLE ISOLATED FROM THE FRUITS OF MOMORDICA CHARANTIA. LOTLIKAR,MM: RAJARAMA RAO,MR: INDIAN J PHARMACY 28: 129- (1966) (DEPT CHEM TECHNOL UNIV BOMBAY BOMBAY MAHARASTRA 19 INDIA)
W00903	THE WEST INDIAN WEEDWOMAN OF THE UNITED STATES VIRGIN ISLANDS. OAKES,AJ: MORRIS,MP: BULL HIST MED 32: 164- (1958) (NO ADDRESS GIVEN)
W01362	SCREENING OF INDIAN PLANTS FOR ANTIFERTILITY ACTIVITY. PRAKASH,AO: MATHUR,R: INDIAN J EXP BIOL 14 : 623-626 (1976) ( SCH STUDIES ZOOLOGY JIWAJI UNIV GWALIOR MP 474 002 INDIA)
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W01792	INVESTIGATION INTO THAI MEDICINAL PLANTS SAID TO CURE DIABETES. MUELLER-OERLINGHAUSEN,B: NGAMWATHANA,W: KANCHANAPEE,P: J MED ASS THAILAND 54: 105-111 (1971) (DEPT MED SCI DIV MED RES MINISTRY PUBLIC HEALTH BANGKOK THAILAND)
W 02108	ANTIFERTILITY INVESTIGATION ON MOMORDICA. STEPKA,W: WILSON,KE: MADGE,GE: LLOYDIA 37 4: 645C (1974) (DEPT PHARMACY & PHARMACEUTICS COLL PHARMACY MEDICAL COLL OF VIRGINIA RICHMOND VA USA)
W 02855	PLANTAS MEDICINALES, AROMATICAS O VENENOSAS DE CUBA. MINISTERIO DE AGRICULTURA, REPUBLICA DE CUBA, HAVANA. ROIG Y MESA,JT: BOOK 1945 : 872PP- (1945) ( CUBA)
W02949	MOLLUSCICIDAL ACTIVITY OF PLANTS FROM NORTHEAST BRAZIL. PINHEIRO DE SOUSA,M: ROUQUAYROL,MZ: REV BRASIL PESQ MED BIOL 7 4: 389-394 (1974) (DEPT FARMACOL EXP CENT CIENC SAUDE UNIV FED CEARA CEARA BRAZIL)
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W03693	INVESTIGATIONS ON PLANT ANTIBIOTICS. PART IV. FURTHER SEARCH FOR ANTIBIOTIC SUBSTANCES IN INDIAN MEDICINAL PLANTS. GEORGE,M: PANDALAI,KM: INDIAN J MED RES 37: 169-181 (1949) (DEPT BIOCHEM INDIAN INST SCI BANGALORE KARNATAKA INDIA)
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AM1040	TOXICITY OF MOMORDICA CHARANTIA LECTIN AND INHIBITOR FOR HUMAN NORMAL AND LEUKAEMIC LYMPHOCYTES. LICASTRO,F: FRANCESCHI,C: BARBIERI,L: STIRPE,F. VIRCHOWS ARCH CELL PATHOL INCL MOL PATHOL 33 3: 257-65 (1980)

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AM1042	CLONING OF THE CDNA OF ALPHA-MOMORCHARIN: A RIBOSOME INACTIVATING PROTEIN. HO,WK: LIU,SC: SHAW,PC: YEUNG,HW; NG,TB: CHAN,WY: BIOCHIM BIOPHYS ACTA 1088 2: 311-4 (1991)(DEPT OF BIOCHEMISTRY, CHINESE UNIVERSITY OF HONG KONG, SHATIN, N.T.)
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AM1051	PLANT ANTICANCER AGENTS. XXX: CUCURBITACINS FROM IPOMOPSIS AGGREGATA (POLEMONIACEAE). ARISAWA,M: PEZZUTO,JM: KINGHORN,AD: CORDELL,GA: FARNSWORTH,NR: J PHARM SCI. 73 3:411-3 (1984)
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