USEFUL PLANTS IN PEST CONTROL

GARLIC

Scientific name: Allium sativum

Hindi:लहसन

Lehsan

Lahsun, लहसन Lahsan, लस्सन Lassan • Telugu: velluli • Urdu: लहसन

Plant parts used : Whole plant, bulbs, leaves, flower

Mode of Action: Repellent, insecticidal, nematicidal, fungicidal, antibiotic

Alkaloid present: Allicin



GLIRICIDIA

Common Names: Kakawate, Madriado, Madredecacao

Telugu: Madri, Bengali: Saranga

Scientific name: Gliricidia sepium

Family: Leguminosae

Plant part used: Leaves and bark

Mode of Action: :Insecticidal, repellent, and rodenticidal



ONION

Common names: Onion, Shallot

Scientific name: *Allium sepa* Family: Alliaceae

Plant parts used: :Bulbs

Mode of Action: :Insecticidal and repellent

It contains polyphenols



PAPAYA

Scientific name: *Carica papaya*

Family: Caricaceae

Plant parts used: :Leaves, seeds, unripe fruit

Mode of Action : Repellent,insecticidal,rodenticidal,fungicidal(Sridhar;et.al.,2002:p. 34)

Phytochemicals present:

Papaya skin, pulp, leaves and seeds contain a variety of <u>phytochemicals</u>, including <u>carotenoids</u> and <u>polyphenols</u>, as well as <u>benzyl isothiocyanates</u> and benzyl glucosinates, with skin and pulp levels that increase during ripening. Papaya seeds also contain the <u>cyanogenic</u> substance <u>prunasin</u>



PONGAMIA

Commonnames:Pongam,Pongamia,Punaoiltree

Scientific name: Pongamia pinnata, P. labra Family:Leguminiceae

Plant parts used: :Roots, leaf, flower, seeds, fruit

Mode of Action: :Insecticidal, antifeedant, repellent

Phytochemicals;

due to bitter <u>flavonoid</u> constituents including <u>karanjin</u>, pongamol, <u>tannin</u> and <u>karanja chrome</u>

Pongamia

TURMERIC

Common names: Indian saffron, Tumeric, Yellow ginger

Scientific name: Curcuma domestica

Family: Zingiberaceae

Plant parts used: Rhizome

Mode of Action: Repellent, insecticidal, antifungal

Alkaloid present: Curcumin



VITEX

Common names: Chinese chaste tree, Indian privet tree, Lagundi

Scientific name: Vitex negundo

Family: Verbenaceae

Plant parts used: Leaves

Mode of Action: Antifeedant, repellent, anti fungal and anti bacterial



GINGER

Telugu–Allam–Hindi- अदरक Adrak Bengali-আদ Ada

PARTS USED: Tubers

USE: Fragrant oils extracted are used in controlling pest

Alkaloid present;

Gingeberin



SOAPNUT

Hindi—ररठ ःः⊤ ritha Telugu kunkudu chettu Bengali:औRitha

PARTS USED: Fruits

USE: Resins present in the fruits are used in concoctions and decoction



Phytochemical present:

Saponins

INDIAN BUTTER TREE (MADHUCA INDICA)

Telugu:Ippa Hindi:Mahua महुआ Bengali:Maul Marathi:Kat-illipi

PARTS USED: Seed ,oil

USE: Saponin's present in the oils are used in controlling

pests

Phytochemicals:

The main chemical constituents in *madhuca indica* are tannins, saponins steroids, β -amyrin, β -amyrin acetate, β -amyrincinamate, β -amyrindecanate, betullic acid, ursolic acid, stigma sterol, β - carotene, quercetin are present



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VEPA OR NEEM (AZADIRACHTA INDICA)

Hindi: नीम Neem Marathi: Nimbay

PARTS USED: Leaves, Seed

USE: Meliacin, Azidirachtin, present helps in controlling pests and

pathogens

MODUGA OR FLAME OF THE FOREST (BUTEA MONOSPERMA)

PARTS USED: Flowers

USE: Chalcones and Mopanols present controls termites



PARTS USED: Leaves, roots **USE:** Alkaloids controls pests

CHRYSANTHEMUM (CHRYSANTHEMUM INDICUM)

ARTS USED: Flowers

USE: Alkaloids (pyrethrums) controls pests

EUCALYPTUS (EUCALYPTUS OCCIDENTALIS)

PARTS USED: Leaves

USE: Essential oils present controls pests

GUAVA (PSIDIUM GUAJAVA)



PARTS USED: Leaves

USE: Beta–Sitosterol and Maslinic acid controls pathogens

THANGEDU (CASSIA AURICULATA)

PARTS USED: Leaves, Seeds

USE: Emodin and Quinol Tannins' present controls pests and root ro

BEAL (Aegle Marelos)

PARTS USED: Leaves

USE: Beta-Sitosterol present in leaves controls pests

MUSTARD (BRASSICA JUNCEA)

PARTS USED: Leaves, Seeds

USE: Ninhydrin, present in leaves controls pests

CASTOR (RICINUS COMMUNIS)

PARTS USED: LEAVES

USE: Alkaloid Ricin present in leaves controls pests

OLEANDER (Nerium Oleander)

PARTS USED: Leaves

USE: Oleandrin and Niriodin present controls pests and pathogen

LANTANA (LANTANA CAMARA)

PARTS USED: Leaves

USE: Alkaloids present controls pest and pathogens

MARIGOLD (TAGETES ERECTA)

PARTS USED: Flowers

USE: Alkaloids present controls pathogens

DATURA (DATURA STRAMONIUM)

PARTS USED: Leaves

USE: Alkaloids, Hyoscyamine, atropine present control pests

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