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## Potential Aphrodisiac Plants in Malaysia: A Mini Review.

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### ABSTRACT

The use of plant material to treat sexual dysfunction is commonly known among traditional practitioners in Malaysia. These treatments have been applied and practiced for many generations. Despite this, little scientific research has been carried out to elucidate the substances that contribute to these aphrodisiac effects. In this review, we highlight the ten commonly available Malaysian plants with potential aphrodisiac effects for the treatment of sexual dysfunction. This includes *Eurycomalongifolia* Jack., *Orthosiphon stamineus* Benth., *Stemonatuberosa* Lour., *Smilax myosotiflora*, *Acalypha indica* Linn., *Andrographis paniculata* (Burm. F.) Wall. Ex Ness., *Quercus infectoria* G. Olivier., *Lubisapumila* Benth. & Hook f., *Moringa oleifera* Lam. and *Helminthostachys zeylanica* (L.) Hook. Further investigation on the substances, pharmacology and toxicology should be performed to explore and discover the true potential of these plants as aphrodisiac herbal drugs.

**Keywords:** Aphrodisiac; Medicinal Plant; Malaysia; Alternative Medicine.

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## INTRODUCTION

As one of the only mega-biodiversity countries in the world, Malaysia has got one of the world's biggest natural heritages that can be exploited for alternative medicine. Several plants such as *Ficusdeltoidea* Jack. as an anti-diabetic, *Polygonum minus* Huds. as an aromatic and flavouring additive and *Mitragynaspeciosa* (Korth.) Havil. for the management of chronic pain have been used and exploited by the industrial and pharmaceutical industries [1-3]. In addition to this, Malaysia is also known to have a variety of plants with high aphrodisiac potential.

The word "aphrodisiac" is derived from name of Greek goddess of love Aphrodite. People's desire to improve their sexual performance is not new; it is in fact thousands of years old. It is known to have occurred in the cultures of ancient Rome, Egypt, India, China and Greece where people searched for these products in order to enhance their sex lives, cure erectile dysfunction and also to support procreation [4-5]. The modern definition of an aphrodisiac is a substance that promotes the proper function of both male and female sexual organs [6-7].

Natural aphrodisiacs can be divided into two groups – plant and non-plant. Herbs have traditionally been used as alternative medicines in the treatment of sexual problems and to enhance sex lives. In this review will present several Malaysian plants with potential uses as aphrodisiacs.

### MALAYSIAN PLANTS WITH APHRODISIAC POTENTIAL

*Eurycomalongifolia* Jack.

Family: Simaroubaceae

Vernacular name: Tongkat Ali, Tongkat Ali Hitam, Tongkat Baginda, Long Jack, Malaysian Ginseng, Ian-don, Jelaih, Natural Viagra and Payung Ali.

Description:

*Eurycomalongifolia* is a Southeast Asian plant that can grow to up to 18 meters in height. Various parts of this plant are used for its anti-malarial, aphrodisiac, anti-diabetic, anti-pyretic and other activities [8]. There is a large variety of bioactive compounds present in this plant such as eurycolactone or pasakbumin-B [9]. Almost all parts of this plant are used in medicine; in particular, root extracts are often used to increase testosterone levels in traditional medicine.

*Orthosiphonstamineus* Benth.

Family: Lambiaceae

Vernacular name: Misai Kucing and Kumis Kucing,

Description:

*Orthosiphonstamineus* is a perennial herb widely distributed in Africa and Southeast Asia. It normally reaches no more than one meter high and its blossoms are white or lilac in colour. The leaves of this herb are also known in Europe and Japan as a tea supporting good health. The diuretic effect of this plant is stronger than most other natural diuretics. This herb is traditionally used to treat a wide variety of diseases including, diabetes, hypertension, tonsillitis, influenza and hepatitis [10-11].

*Stemonatuberosa* Lour.

Family: Stemonaceae

Vernacular name: Galak Tua, Pecah Kelambu, Ubi Kemili and Janggut Adam.

Description:

*Stemonatuberosa* is a slender stem herb. It has heart-shaped leaves and it grows to heights of up to ten meters. It is very bitter and has very long tuberous roots. It usually grows in low altitudes. The tuber is believed to have aphrodisiac properties and it is commonly used for this purpose. Roots are traditionally used to treat coughs and chest pains, vermifuge and skin diseases; they are also known to deter lice [12].

*Smilax myosotiflora*

Family: Smilacaceae

Vernacular name: UbiJaga

Description:

This herb is used in traditional Malay medicine to improve male sexual function. This fact was not scientifically proven before; Hilmi et al. [13] conducted an experiment using Sprague Dawley male rats. Methanolic extracts from the tubers of this plant were administered to the rats in various dosages and it was concluded that *S. myosotiflora* significantly helps to increase sexual fertility in male rats. This fact, therefore, confirmed the traditional use of this herb by Malaysian men. Malaysians also use its fruit and leaves internally to treat syphilis. The rhizome of this herb is also believed to have aphrodisiac effect among natives. It is traditionally chewed with betel.

*Acalypha indica* Linn.

Family: Euphorbiaceae

Vernacular name: Kucing Galak, Poonamayakki, Indian Acalypha and Indian Nettle.

Description:

*Acalypha indica* is a weed known to be useful in the treatment of asthma, rheumatism, pneumoniae and other related pulmonary illnesses. Leaves of this herb are known for its contraceptive activities, in their dried form they are used to produce cures to treat wounds and bedsores. Further, leaf juice is commonly used against various skin diseases [14].

*Andrographis paniculata* (Burm. F.) Wall. Ex Ness.

Family: Acanthaceae

Vernacular name: Hempedu Bumi, Sambiloto, Fa Thalai Chon, Nilavembu Chuan Xin Lian, Quasabhuva, La-Sa-Bee, Andrographis, Naine-Havandi.

Description:

*Andrographis paniculata* has been traditionally known in Asian medicine for centuries. Folk medicine maintains that it helps purify the blood. It is therefore used commonly to treat diseases which are considered to be a result of blood problems, such as skin eruptions, scabies or chronic undetermined fevers, leprosy or gonorrhoea. More recently the most common use of this herb is in the treatment of the common cold. The plant itself normally grows in hedge rows and it is called 'king of bitters' in English [15].

*Quercus infectoria* G. Olivier.

Family: Fagaceae

Vernacular name: Manjakani, Eik Soort, Tinditamm, Ben Ka Nee, Encina De La Agalla, Majuphal and Gall-Eiche.

Description:

Oak galls, also known as Turkish galls or Mazu appear on young twigs of *Quercus infectoria*. These appear because wasps (*Adleria gallae-tinctoriae* Oliver) lay their eggs on young twigs of Dyer's Oak. They are oval, measuring 10-25 mm in diameter. They are harvested and used for medicinal purposes before the insect develops and escapes. The galls are widely used to treat diseases connected to teeth and gums, it is also used for its antglycaemic, analgesic, sedative, hypnotic, wound-healing and other activities [16].

*Lubisiapumila* Benth. & Hook f.

Family: Primulaceae

Vernacular name: Kacip Fatimah, Bunga Belangkas Hutan, Mata Pelanduk Rimba, Tadah Matahari, Selusuh Fatimah, Akar Fatimah, Pokok Pinggang and Rumpun Palis.

Description:

*Lubisiapumila* is widely recognized as 'queen of herbs' in Malaysia. It is a small leafy and woody plant and there are eight varieties of this herb in Malaysia. It is mostly known for its antimicrobial, antioxidant and anti-estrogenic effects against various diseases [17]. Its herbal extracts positively affect collagen synthesis in human body and so the plant is widely known for its cosmetic uses [17]. *Lubisiapumila* is also known to be a natural aphrodisiac.

*Moringaoleifera*Lam.

Family:Moringaceae

Vernacular name: KacangKelo, Murunggai, Lembungai andKachang Kelang.

Description:

*Moringaoleifera* is a plant that can be found in tropical and subtropical areas. Besides its importance in medicine, it is also great for nutrition as it contains beta-carotene, phenolics, protein, vitamins and amino acids. This plant is a well-known particularly in South East Asia where various part of the plant are used for a large variety of medicine such as anti-tumour, anti-epileptic, antidiabetic and many others [18]. It is also known for its water purifying effect.

*Helminthostachyszeylanica* (L.) Hook

Family: Ophioglossaceae

Vernacular name: TunjukLangit, Kamraj, Di Wu Gong and TukodLangit.

Description:

*Helminthostachyszeylanica* is a fern-like plant that native to the Indo-malesian region and the Polynesians Islands. This plant has been used traditionally for various medicinal purposes such as for brain tonic and vitality. Experiments have shown that this plant has positive effect on sexual activity and reproductive performance in mice [5].

## CONCLUSION

Malaysia is a country with some of the richest biodiversity in the world. One of many potentials of herbs found in this region are various aphrodisiac properties which are known to improve sexual performance of humans. The idea is not new, people have searched for sexual enhancement cures for millennia. This article listed few of many plants with this potential known to date. Some of them are used only traditionally while some have already been used to develop sexual enhancement products. The global market for these potential products is huge. Further research on plants not yet used and potential industrial exploitation could bring big benefits to both sellers and customers around the world.

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