

## INDIGENOUS HERBAL REMEDIES USED BY TRIBALS OF MADHYA PRADESH FOR IMPROVING THEIR SEXUAL PERFORMANCE AND PROBLEM ASSOCIATED WITH SEXUALITY

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### ABSTRACT

The present study was aimed to document medicinal plants included by various ethno botanists in their report prepared by survey on indigenous knowledge of tribes of Madhya Pradesh on traditional medicinal plants used by them for improving their sexual performance and problem associated with sexuality. A total of 42 medicinal plants mentioned by botanist in their survey reports based on their informal and formal discussions, field visits and focused semi-structured interviews with tribes of Madhya Pradesh. Medicinal plants having potential to influence components of male sexual response cycle and treating disease associated with them are compiled by their botanical name, family, common name, parts used and uses. Some of them are scientifically already explored while others clinical and pharmacological investigations are yet to be performed.

**KEYWORDS:** Indigenous knowledge, M.P., medicinal plants, sexual problems.

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### INTRODUCTION

Madhya Pradesh (usually abbreviated as MP) is located in the centre of India. Madhya Pradesh is endowed with rich and diverse forest resources. Lying between lat. 21°04'N and long. 74°02' and 82°49' E, it is a reservoir of biodiversity. The geographical area of the state is 3, 08, 252 sq. km which constitutes 9.38% of the land area of the country. The forest area of the state is 94689.38sq. km constituting 30.71% of the geographical area of the state and 12.44% of the forest area of the country. Madhya Pradesh has largest concentration for tribal population, about 28% of the total state's population<sup>1</sup>. In the state, about 1100 medicinal and aromatic plants are found, out of which 500 plants are in category of potential use. A large number of ethnic groups such as Baiga, Bhariya, Birhor, Gond, Korku, Pardhi inhabit in Satpura plateau in the state of Madhya Pradesh. They use wide range of wild plants for their health care<sup>2</sup>.

In present study, we referred different ethnobotanical survey conducted by ethno botanist<sup>3-15</sup> to congregate the medicinal plant used for improving male sexual performance.

### Male sexual problems

Male sexual performance is a phenomenon associated with male sexual response cycle components that are libido, erection, ejaculation and orgasm. Male sexual response cycle called as normal if all the steps are timely and sequentially if any one of the above components is delayed or not in sequence leads to male sexual dysfunction. Sexual problems are generally arises due to smoking, obesity, kidney problems, antidepressants and blood pressure medications, testosterone deficiency, depression, anxiety, alcoholism, surgery and some time due to problems in the relationship with the sexual partner. Disorders of male sexual performance are functionally classified into four types, disorder of sex desire (libido), problem in erection, ejaculation disorder and orgasm disorder. Libido refers to sexual need of individual and it is vary person to person. Erection means the firm and enlarged condition of a male reproductive organ. Ejaculation represent act of ejecting semen during sexual activity and orgasm is the moment of most intense pleasure in sexual intercourse, it is also called as climax of sexual response cycle. Disorder of

sex desire is generally due to psychological factors, chronic medicine intake, androgen deficiency, neurologic disease and abuse of drugs. Erection problem (Erectile dysfunction) is also associated with depression, endocrine, neurologic, vascular and systemic disorder. Ejaculation disorder will be premature to severely retarded or absent ejaculation. Premature ejaculation is generally associated with neurologic disease, anxiety, depression, low self-esteem, frustration, guilt, sexual fear and unrealistic expectations. Retarded or absent ejaculation is generally due to sympathetic denervation, androgen deficiency, or drug treatment side effects, chronic metabolic disturbances and surgical treatments. Treatment and management approaches for male sexual response cycle include one of them psychological and behavioral counseling, couple therapy, drug therapy, surgical treatment, nonsurgical devices, surgical treatment, hormonal therapy, complementary or alternative medicine and use of traditional medicines<sup>16-20</sup>.

#### **Medicinal plants and their possible mechanism to enhance male sexual performance**

Since time immemorial man has been using medicinal plant for the prevention and treatment of various acute and chronic ailments. Medicinal plant can be used directly or in other extracted forms for the management of various ailments because of the presence of many phytochemicals. They can also be used as agents or starting materials in the synthesis of drugs. The use of herbs is very common in developing countries, particularly in rural settings. The allopathic drugs used for enhancing sexual performance in male are believed to produce side effects and affect other physiological processes therefore the use of traditional medicine accepted world wide eg. Sildenafil is widely used for the treatment of erectile dysfunction but it causes headache, facial flush and indigestion. Herbal medicines have an important role to play in sexual performance of male by providing nutrition value, improving organ physiology and psychological changes. Some medicinal plants provided nutritional value or energy and improve the health, mental status which leads to increase in libido or sex seeking behavior of individual. They having potential to improve the stamina of individual modulate the mood and ultimately increase the performance during sex these plants also called aphrodisiac. An aphrodisiac is defined as any food or drug that arouses the sexual instinct induces veneral desire and increases pleasure and performance. This word is derived from 'Aphrodite' the Greek goddess of love. Some having potential to alter the physiology of male sexual phenomenon, by increasing blood flow in corpora cavernosa, making the

penis expand. Erection enables sexual intercourse and some other sexual activities, though it is not essential for all of them. Other group of medicinal plants having biologically active, they may increase the secretion of gonadotropin-releasing hormone (GnRH). This hormone in turn stimulates gonadotrophs in the anterior pituitary to increase their secretion of the two gonadotropins, luteinizing hormone (LH) and follicle-stimulating hormone (FSH). LH stimulates Leydig cells, which are located between seminiferous tubules, to secrete the hormone testosterone. Testosterone is an androgenic hormone that promotes the normal development and maintenance of male sex and reproductive organs. Testosterone levels facilitate spermatogenesis, promote the maturation of sperm, influence sexual desire, facilitate the development of male secondary sexual characteristics and maintained the male reproductive tract. Some medicinal plants also having potential to improve sperm count, quality and maintained the homeostasis of sexual organs<sup>16</sup>.

In **Table 1**, we enlisted the medicinal plants which are used by tribals of Madhya Pradesh to improve their sexual performance and problem associated with the same.

#### **DISCUSSION AND CONCLUSION**

In recent years, research on folklore medicinal plants is increasing and this field of research has become the focus of intense interest and efforts towards the identification of effective and safe drugs. The medicinal plants listed in table 1 is compiled from various ethnobotanical survey conducted by botanist on different tribal community of state of Madhya Pradesh. A tribal uses these plants for improving their sexual performance and treatment/management of associated problem only on the basis of traditional experience (indigenous knowledge) of their ancients. The indigenous knowledge is transferred from generation to generation in certain families without any scientific justifications. The efficacy of some medicinal plants like used by tribal of Madhya Pradesh has been proved by modern medicine like *Asparagus racemosus*<sup>21</sup>, *Mucuna pruriens*<sup>22</sup>, *Tribulus terrestris*<sup>23</sup>, *Withania somnifera*<sup>24</sup>, however, most remain largely unexamined. In view of the wide range of medicinal plant and their traditional claim related to the treatment and management of male sexual performance, it is imperative that more clinical and pharmacological studies should be conducted to investigate unexploited potential of this traditional knowledge.

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Table 1: List of medicinal plants used by tribes of M.P. for improving their sexual performance and problem associated with the sexuality

S.No.	Botanical Name	Family	Vernacular Name	Used as	Parts used
1.	<i>Abelmoschus moschatus</i> L.	Malvaceae	Kasturi bhindi	Aphrodisiac	Mucilage from plant
2.	<i>Abrus precatorius</i> L.	Fabaceae	Ratti	Aphrodisiac, improve sexual vigour	Whole plant
3.	<i>Abutilon indicum</i> L.	Malvaceae	Kanghi	Aphrodisiac	Root
4.	<i>Acacia nilotica</i> L.	Mimosaceae	Babul	Aphrodisiac	Bark
5.	<i>Allium cepa</i> L.	Alliaceae	Piaz	Aphrodisiac, Impotency	Bulb
6.	<i>Allium sativum</i> L.	Alliaceae	Lahsun	Aphrodisiac, Impotency	Bulb
7.	<i>Aloe vera</i> L.	Liliaceae	Dhritkumari	Aphrodisiac	Gel extracted from leaves
8.	<i>Alpinia galanga</i> L. (Willd.)	Zingiberaceae	Kulanjan	Aphrodisiac	Rhizome
9.	<i>Aristolochia indica</i> L.	Aristolochiaceae	Iswaramul	Aphrodisiac	Whole plant
10.	<i>Asparagus racemosus</i> Willd.	Liliaceae	Satavari	Increase the power of erection and number of coitus	Tuber
11.	<i>Atylosia scarabaeoitis</i> L.	Papilionaceae	Van tuvar	Spermatorrhoea	Whole plant
12.	<i>Bacopa monnieri</i> L.	Scrophulariaceae	Brahmi	Promote fertility	Whole plant
13.	<i>Bombax ceiba</i> L.	Bombacaceae	Semal	Impotency	Root
14.	<i>Bryonia laciniosa</i> Linn.	Cucurbitaceae	Shivlingi	Impotency	
15.	<i>Cassia mimosoides</i> L.	Caesalpinaceae	Patwa ghas	Aphrodisiac	Seeds, Root
16.	<i>Celastrus paniculatus</i> Willd.	Celastraceae	Vandangul	Aphrodisiac	Seeds
17.	<i>Chenopodium album</i> L.	Chenopodiaceae	Bathua	Aphrodisiac	Decoction of plant
18.	<i>Chlorophytum arundinaceum</i>	Liliaceae	Safed musli	Impotency	Root
19.	<i>Curcuma amada</i> Roxb.	Zingiberaceae	Amahaldi	Aphrodisiac	Rhizome
20.	<i>Curcuma angustifolia</i> Roxb.	Zingiberaceae	Tikhur	Aphrodisiac	Rhizome
21.	<i>Curcuma aromatica</i> Roxb.	Zingiberaceae	Jangli haldi	Aphrodisiac	Rhizome
22.	<i>Ficus religiosa</i> L.	Moraceae	Pipal	Spermatorrhoea	Latex
23.	<i>Hibiscus lobatus</i> Murr.	Malvaceae	Jungli Bhindi	Debility and Spermatorrhoea	Whole plant
24.	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Gurhal	Aphrodisiac	Flower
25.	<i>Hygrophila auriculata</i> Schum	Acanthaceae	Katathua	Aphrodisiac and Spermatorrhoea	Seeds
26.	<i>Jatropha curcas</i> L.	Euphorbiaceae	Bakarandah	Aphrodisiac	Seeds
27.	<i>Mallotus philippensis</i> Lam.	Euphorbiaceae	Rohini	Aphrodisiac	Glandular hair on frutsome
28.	<i>Mucuna pruriens</i> L.	Papilionaceae	Kiwach	Promoting the semen and sexual vigour	Seeds and hairs covering the pod
29.	<i>Murdannia edulis</i> Stokes	Commelinaceae	Siyamusli	Aphrodisiac, Spermatorrhoea	Dried Root
30.	<i>Ocimum gratissimum</i> L.	Lamiaceae	Ramtulsi	Seminal weakness	Decoction of leaves
31.	<i>Phyllanthus emblica</i> L.	Euphorbiaceae	Aonla	Aphrodisiac	Fruits
32.	<i>Psoralea corylifolia</i> L.	Papilionaceae	Bawchi	Promoting sexual vigour	Seeds
33.	<i>Saccharum spontaneum</i> L.	Poaceae	Kans	Aphrodisiac	Whole drug
34.	<i>Sida acuta</i> Burm	Malvaceae	Van methi	Impotency	Whole plant
35.	<i>Sida cordifolia</i> L.	Malvaceae	Kungyi	Aphrodisiac	Whole plant
36.	<i>Solanum americanum</i> L.	Solanaceae	Makoi	Promoting the semen	Whole plant
37.	<i>Sphaeranthus indicus</i> L.	Asteraceae	Gorakmundi	Impotency	Seeds
38.	<i>Strychnos nux-vomica</i> L.	Loganiaceae	Kuchla	Spermatorrhoea	Whole plant
39.	<i>Tinospora cordifolia</i> L.	Menispermaceae	Giloi	Aphrodisiac	Mature stem
40.	<i>Tribulus terrestris</i> L.	Zygophyllaceae	Chota gokhru	Aphrodisiac, Impotency	Fruits
41.	<i>Withania somnifera</i> L.	Solanaceae	Asgandh	Aphrodisiac, Impotency	Root
42.	<i>Wrightia tinctoria</i> Roxb.	Apocynaceae	Indrajau	Aphrodisiac	Seed