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A REVIEW ON ANTIFERTILITY ACTIVITY OF MEDICINAL PLANTS

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ABSTRACT

Medicinal plants are regular word which would everyone be able to mouth that is useful in treating numerous maladies which doesn't done by even allopathic medication. Among those the birth control at the same time increasing the fertility of human being are both become major problems in nowadays. This audit articles some short introduced refreshed data accumulated on logically demonstrated therapeutic plants utilized for against richness movement. This study provide information on name of the plants, family, parts used and therapeutic effects of medicinal plants have been reviewed for thorough research inclusive of *Amaranthus*, *Acacia concinna*, *Adhatoda vasica*, *Alangium*, *Barleria prionitis*, *Butea monosperma*, *Cassis fistula*, *Carica papaya*, *Celastrus paniculatus*, *Daucus Carota*, *Flagellaria indica*, *Franseria artemisiodes*, *Hibiscus rosa-sinensis*, *Indigofera linnaei*, *Laurus nobilis*, *Nigella sativa*, *Olea europea*, *Papaver*, *Piper longum*, *Portulaca oleracea*, *Ricinus communis*, *Ruta graveolens*, *Salvia fruticosa*, *Taxus baccata*, *Trigonella foenum graecum*, *Valeriana Montana*, *Vitex negundo*, *Xanthium spinosum*, *Ziziphora tenuior*, *Zizyphus jujube*, etc. This overview in reality demonstrates that it's time to make bigger upon experimental studies to source medicinal plants, plant extracts and their lively elements ought to be in addition investigated for their mechanisms. This review creates a strong foundation upon which to similarly examine the efficacy of plants which are both presently utilized by Female as traditional antifertility medicines, however also could be efficacious as an antifertility agent with extra research.

KEYWORDS

Anti-Fertility, Anti-implantation, Anti-Spermatogenic Activity and Contraceptive.

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INTRODUCTION

Antifertility agents are those which are capable of stopping ovulation or fertilization and able to result in termination of being pregnant¹. Overpopulation is turning into one of the worldwide problems causing plenty have an impact on financial, social and natural assets². The growth in population is alarming the growing world in the want for effective beginning control measures³. One of the

serious issues in the growing nations like India is over populace and which might be extended approximately 9.2 billion by means of the year 2050⁴. Although a several synthetic contraceptive retailers are available these days, their use is related to intense aspect effects, inclusive of hormonal imbalance, high blood pressure, improved threat of most cancers and weight advantage⁵. Hence people are looking forward to the subculture of the use of herbal drug treatments, which have minimal and much less aspect results⁶. Medicinal plants are been the usage of form many centuries to treat each intellectual and physical contamination and to improve fitness of individuals, and about 80% of medical remedies are practicing with the aid of the growing nations⁷. However within the recent past tons interest has been shown to control regulation of fertility with the aid of the usage of medicinal flower⁸. Fertility regulation Despite of many medicinal flowers have been claimed to save you fertility, simplest few vegetation had been to this point been investigated for their antifertility pastime. Moreover the World Health Organization (WHO) has installation a venture force on plant research to discover new orally active non-steroidal contraceptive compounds¹⁰. Comprising birth control and management of infertility paperwork an important element of reproductive health⁹. Several plant extracts inhibit male and female fertility and may be evolved into contraceptives¹⁰.

REPRODUCTIVE SYSTEMS

The conceptive framework is a sex organ inside life form which works with the end goal of sexual propagation. Numerous non-living substances, for example, liquids, hormones, and pheromones are most significant types of gear for regenerative framework¹¹.

Male Reproductive System

The male conceptive framework comprises of various sex organs that assume a significant job during the time spent human generation. These organs are situated outwardly of the body and inside the pelvis. The primary male sex organs are the penis and the gonads which produce semen and sperm, which, as a major aspect of sexual intercourse, fertilize an ovum in the female's body; the fertilized ovum develops into a fetus, which is later born as an infant¹¹.

Female Reproductive System

The female conceptive framework is comprised of inner and outside sex organ. It is working on the proliferation of new posterity. When the human female reproductive system is immature at birth and develops to maturity. Via puberty is able to produce gametes, and carry a fetus to full term. The internal sex organs are uterus, Fallopian tubes, and ovaries. The uterus or belly obliges are undeveloped organism which forms into fetus. Uterus additionally delivers vaginal and uterine discharges which help to travel of sperm to the Fallopian tubes. The ovaries produce the egg cells. The external sex organs are also known as *genitals* and vaginal opening. The vagina is connected to the uterus at the cervix¹¹.

ANTIFERTILITY

Antifertility agents are those which are capable of stopping ovulation or fertilization and able to result in termination of being pregnant¹. Drugs which used for stopping fertilization are called as antifertility effects. These are also called contraceptive effects. Contraception is the method of stopping normal manner of ovulation, fertilization and ovum implantation not anything but being pregnant¹².

Table No.1: List of medicinal plants used for antifertility activity of male and female effects

S.No	Name of the plant	Family	Part used	Medicinal activity	Reference
1	<i>Amaranthus viridis L.</i>	Amaranthaceae	Roots	Contraception Activity	[13]
2	<i>Acacia concinna DC</i>	Fabaceae	Stem and barks	Spermicidal and semen coagulating activities	[14]
3	<i>Adhatoda vasica Nees Syn. Justice adhatoda L.</i>	Acanthaceae	Leaves	Anti-implantation and Abortifacient	[15], [16]
4	<i>Alangium Salvifolium (L.f.)</i>	Alangiaceae	Stems, Barks	Anti-implantation and Abortifacient	[13]
5	<i>Barleria prionitis Linn.</i>	Acanthaceae	Roots	Antifertility effect	[17]
6	<i>Butea monosperma (Lam.) Kuntze</i>	Fabaceae	Seeds	Effects on testicular function	[18]
7	<i>Cassia fistula Linn.</i>	Caesalpiniaceae	Pods, Seeds	Anti-oestrogenic activity	[19]
8	<i>Carica papaya Linn.</i>	Caricaceae	Fruits	Anti-spermatogenic activity	[20]
9	<i>Celastrus paniculatus Willd.</i>	Celastraceae	Seeds	Anti-spermatogenic action	[21]
10	<i>Daucus Carota Linn</i>	Apiaceae	Seeds	Blastocystotoxic and Anti-implantation effects, Post-coital contraceptive effects	[22], [23]
11	<i>Flagellaria indica Linn.</i>	Flagellariaceae	Leaves	Contraceptive	[24]
12	<i>Franseria artemisioides Willd.</i>	Asteraceae	Whole plants	Contraceptive	[25]
13	<i>Hibiscus rosa-sinensis Linn.</i>	Malvaceae	Roots	Anti-implantation and Uterotropic activity	[26]
14	<i>Indigofera linnaei Ali</i>	Fabaceae	Herbs	Anti-fertility activity	[27]
15	<i>Laurus nobilis Linn.</i>	Lauraceae	Leaves	Testicular dysfunction	[28]
16	<i>Nigella sativa Linn.</i>	Ranunculaceae	Seeds	Post-Coital Antifertility effect	[29]
17	<i>Olea europea Linn.</i>	Oleaceae	Fruits	Contraceptive	[30]
18	<i>Papaver somniferum Linn.</i>	Papaveraceae	Fruits	Induces Abortion	[13]
19	<i>Piper longum Linn.</i>	Piperaceae	Fruits	Antifertility Activity	[31]
20	<i>Portulaca oleracea Linn.</i>	Portulacaceae	Seeds	Impairment of Spermatogenesis	[32]
21	<i>Ricinus communis Linn.</i>	Euphorbiaceae	Seeds	Anti-implantation and Abortifacient	[33]
22	<i>Ruta graveolens Linn.</i>	Rutaceae	Aerial parts and Roots	Anticonceptive activity	[34]
23	<i>Salvia fruticosa Mill.</i>	Labiatae	Leaves	Anti-implantation Effect	[35]
24	<i>Taxus baccata Linn.</i>	Taxaceae	Leaves	Antifertility	[36]
25	<i>Trigonella foenum graecum Linn.</i>	Fabaceae	Seeds	Antifertility activity	[37]
26	<i>Valeriana Montana Linn.</i>	Valerianaceae	Roots	Sterilizer	[38]
27	<i>Vitex negundo L.</i>	Lamiaceae	Seeds	Anti-Androgenic Effect	[39]
28	<i>Xanthium spinosum Linn.</i>	Asteraceae	Leaves	Contraceptive	[40]
29	<i>Ziziphora tenuior Linn</i>	Labiatae	Seeds	Emmenagogue	[41]
30	<i>Zizyphus jujuba Mill.</i>	Rhamnaceae	Barks	Antifertility	[42]

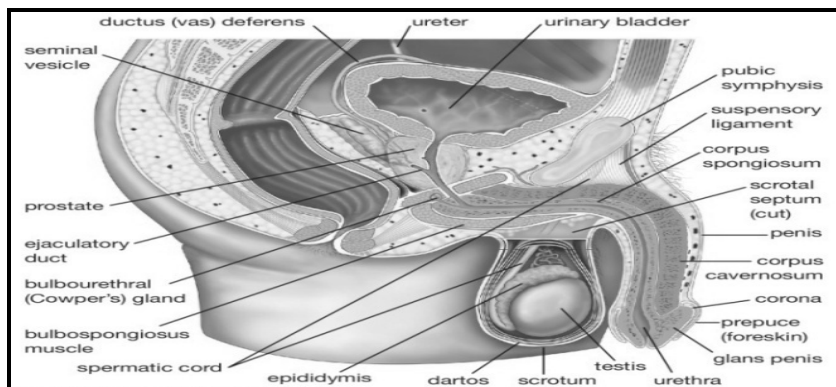


Figure No.1: Male Reproductive System

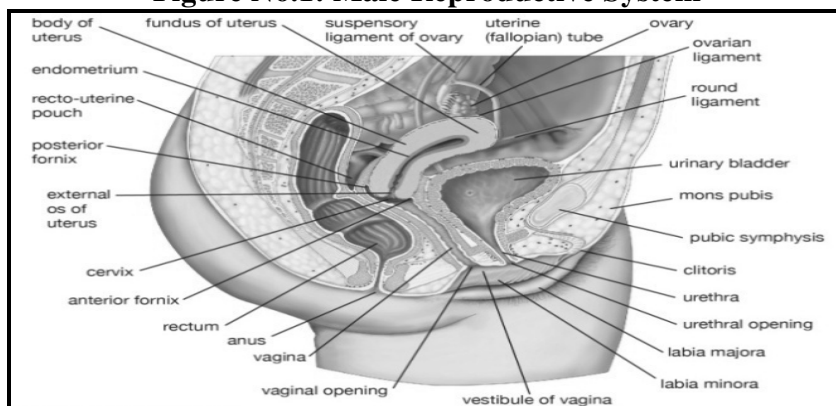


Figure No.1: Female Reproductive System

CONCLUSION

In conclusion, it is clear that therapeutic plants assume a significant job as antifertility specialists. Despite of various commercially available oral contraceptives inside the market, natural antifertility sellers suggests promising output by minimizing the number of adverse drug properties. Current research toward conventional medicinal drug is developing swiftly due to its safety and much less price consumption.

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CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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