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A Herb Enriched with Superb Healthcare,  
Vigour and Vitality**

By

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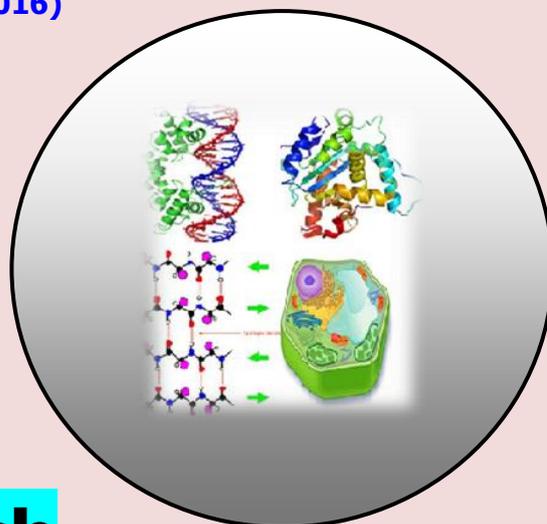
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RESEARCH PAPER

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## ***Chlorophytum borivilianum* L. (Safed Musli): A Herb Enriched with Superb Healthcare, Vigour and Vitality**

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### ABSTRACT

*Safed Musli (Chlorophytum borivilianum L.) also known as a traditional rare Indian medicinal herb which has many therapeutic applications. It is used to cure physical illness and weakness, as an aphrodisiac agent and revitalizer, as general sex tonic, remedy for diabetes, arthritis and increasing body immunity, curative for natal and postnatal problems, for rheumatism and joint pains, increase lactation in feeding mothers, as antimicrobial, anti-inflammatory, antitumor agent, also used in diarrhea, dysentery, gonorrhoea, leucorrhoea etc. It has spermatogenic property and is found useful in curing impotency, now it is considered as an alternative 'Viagra'. Its root contains steroidal and triterpenoidal saponins, sapogenins and fructans which act as therapeutic agents and play vital role in many therapeutic applications. It is a rich source of over 25 alkaloids, vitamins, proteins, carbohydrates, steroids, saponins, potassium, calcium, magnesium, phenol, resins, mucilage, and polysaccharides and also contains high quantity of simple sugars, mainly sucrose, glucose, fructose, galactose, mannose and xylose. The focus of the present review is to galvanize the potential of therapeutic and nutritive values of this herb*

**Keywords:** Alkaloids, Saponin, Erectile dysfunction, Obesity, Tuberous root and Aphrodisiac.

### INTRODUCTION

Safed musli (*Chlorophytum borivilianum*) is an eminent medicinal plant of India and considered as a 'white gold' or 'divya aushad' in Indian systems of medicine. In Ayurveda, *C. borivilianum* belongs to the group of "Vajikaran Rasayana" corroborated to its rejuvenating, aphrodisiac, natural sex tonic properties and effective in alleviating sexual disorders. It is largely used as ethnic medicine by local healers of indigenous communities of India (Oudhia, 2000). Traditionally, *C. borivilianum* is well known for treating male impotency in India. The multi therapeutic and nutritional importance of *C.*

borivilianum is attributed to the rich source of phytochemicals particularly saponins. Recently, *C. borivilianum* has gained well established domestic (Indian) and international market for being herbal alternative of "Viagra" without any side effects. Under the trade name 'Nai Chetna', the state government of Gujrat, India, has launched a novel potency drug from *C. borivilianum*. Modern pharmacological studies of *C. borivilianum* have demonstrated a wide range of pharmacological activities, most importantly aphrodisiac, immunomodulatory and anticancer activities (Thakur et. al., 2007). The increased commercial exploitation of *C. borivilianum* and low productivity of this endangered plant has raised the concern over its conservation (Figure 1).



**Figure 1. Habit and Cultivation of Safed musli.**

It has been envisaged that efforts should be made to standardize, encourage and popularize the cultivation of *C. borivilianum* as a commercial crop. The analysis of previous pharmacological investigations suggested lack of substantial scientific evidences in various studies and do not stand the test of critical assessment. Due to high economic value, *C. borivilianum* has also encountered a problem of adulteration with closely resembling medicinally inferior species. The studies available on toxicity, safety and quality of *C. borivilianum* are inadequate for providing information on commercial utilization (Thakur et al., 2009). Thus, the present review summarizes comprehensive information on *C. borivilianum* and possible scope for future research to fill the existing lacunae on its different aspects of the study.

#### **PHYTOCHEMISTRY AND THERAPEUTIC INDICATIONS**

The Musli roots contain around 25 types of alkaloids, vitamins and minerals like calcium, potassium, and magnesium. It also contains polysaccharides, resins, phenol, and mucilage content. The simple sugars like fructose, glucose, galactose, sucrose, xylose and mannose are also found in the Musli roots. The medicinal properties may be due to the saponin and polysaccharide content in the Safed Musli roots (Rath & Panja., 2013). The medicinal value is thought to derive from its saponin and polysaccharide content, up to 17 percent by dry weight. It has also recently been suggested that it may produce an aphrodisiac agent.

Safed Musli (*Chlorophytum borivilianum*), is a potent aphrodisiac and string adaptogenic herb used in ayurveda and herbal science. Musli tuberous roots and seeds are used for therapeutic purposes. It is effective for improving male performance, inducing spermatogenesis and providing strength to the muscles. It would not be wrong to call Safed Musli as a domicile of the medical properties like. anti-inflammatory properties, antioxidant properties, antacid properties, aphrodisiac properties, androgenic properties and many more. The use of Safed Musli has shown good effects on the body keeping good for bodybuilder and athletes, help fight fatigue and physical weakness, help gain more healthy weight which makes it ideal for underweight people, ideal for bodybuilders as they help muscle gain (Khanam et al.,2013).

The mental health gets improved with this consumption which is a huge benefit of Safed Musli viz. It helps relieve stress and depression, Reduces anxiety, improves sleeping disorder, and It has mind-calming property. Safed Musli is hugely known as a sex tonic and Ayurvedic aphrodisiac compound by many. They are ideal for men especially and can be used by women also. They are also called Herbal Viagra by many! It also helps in increasing sexual time and helps in enhancing performance. It helps improve Male Weakness, Helps in cases of Impotency or erectile dysfunction due to the presence of Rho-Kinase II, It helps increase sperm count, reduces frigidity in women. Provide vaginal lubrication, cures premature ejaculation and boost urge for sex in both males and females. Safed Musli (*Chlorophytum borivilianum*) is very useful for treating oligospermia and improves count, volume, liquefaction time and motility. It also improves serum testosterone levels and improves testicular functions. Safed Musli extract is studied for these benefits and according to scientific study, it is significantly beneficial as compared to placebo. In ayurveda, Safed Musli is well-known for its spermatogenic potential. However, it is used in conjunction with other herbs (Singh et al., 2012). Safed Musli provides nourishment to the malnourished body and it increases the body weight. According to Ayurveda, nocturnal emission (Night Fall or Wet Dreams) occurs due to excess Pitta associated with Vata. Dreams, thinking and visualization of physical relations or even watching TV with such scenes can trigger this condition. In Ayurveda, herbs acting on Pitta should be selected primarily and then herbs acting on Vata should be chosen. Safed Musli acts on both Pitta and Vata. If patient feel weakness, low backache, and loss of strength or energy after nocturnal emission, then Safed Musli Powder along with Shakkar (sugarcane brown sugar) should be used for a few weeks (figure 2.).



**Figure 2.**

This remedy also helps reducing frequency of nocturnal emissions and revitalizes the body. No doubt, it provides strength to penile tissue, improves hardness, and helps sustaining longer erections, but it has less stimulant action and erectogenic effect as compared to Anacyclus Pyrethrum (Akarkara). Its main function is to provide the strength, acts on testes, improves hormone profile, and induces spermatogenesis (Mujeeb et al., 2009).

All these things help together to improve erections as well. If the more stimulant action is required, then it should be used with Akarkara. It alone can help people with mild to moderate condition having slight erections. In severe cases or people with no erections should use it with Akarkara. According to modern research study, Safed Musli potent antioxidant, antihyperglycemic and antidiabetic effect, which is comparable with allopathic medicine Glibenclamide. However, according to ayurveda, diabetes treatment can differ according to the strength and weight of the patient. Ayurveda recommends nourishing and strengthening therapy for weak and thin diabetic patients and recommend losing weight for obese or overweight individuals. According to ayurveda, Safed Musli (*Chlorophytum borivillianum*) should work well in thin, weak or underweight people. It is less likely to be effective in the management of diabetes in obese or overweight individuals. This point should also be considered in the research studies conducting on Safed Musli and its effect on diabetes. If diabetic patient is weak, thin or underweight, then Safed Musli Powder should be used in dosage of a half teaspoon with milk twice daily. It will also help managing the blood sugar level. The treatment should be changed according to current health status. It does not mean patient has to take it for a whole life. When Vata aggravation pacifies completely and Kapha increases, then it may no longer be effective (Katalinc et al., 2006). Safed Musli has anti-inflammatory properties, which helps reducing joint inflammation that occurs in the arthritis, especially osteoarthritis. In osteoarthritis, this type of Kapha is reduced and inflammation occurs. Safed Musli increases Kapha according to ayurvedic principles, so it is highly beneficial for formation of synovial fluids and stopping further deterioration. However, it should be used in people who are not obese or overweight because it may also slightly increase the body weight. In obese people, other herbs acting on reducing the weight should be first used. Musli has significant anti-stress and antioxidant activities. It also acts as Rasayana, which helps promoting longevity and vitality (Lobo et. al., 2010). For this purpose, one can use it in dosage of 3 grams with milk. For improving strength and increasing lifespan, winter is a perfect season for its regular use. It should be used for 2 to 3 months on regular basis. Safed Musli acts as galactagogue, which enhances milk production. It can be used with other herbs like cumin and Shakkara for increasing the milk supply.

## CONCLUSION

Consequent upon the above, it is glaring that the uses and benefits of Safed Musli herb cannot be over-emphasized and efforts must be made to preserve and conserve it for medicinal purposes. However, this herb is encountering threat of extinction because of livestock over-grazing as well as the activities of the over-zealous pharmacists by grazing it without replacement. It is high time a giant step be taken to educate and enlighten the public for the sustenance of the herb by farming and conserve the unique herb. This herb is useful for treating some respiratory problems such as asthma, chronic cough, and bronchitis when used together with other herbs. The herb enhances the urinary system resistance to infections by functioning as a diuretic. The preparation of Safed Musli is an effective remedy to treat hepatitis and also helps revitalize and regulate the function of the liver. Safed Musli functions as a stimulant, and it is an excellent appetizer helps to normalize digestion in the stomach. This herb preparation has also been discovered to treat Irritable Bowel Syndrome (IBS) and piles. The Safed Musli tuber is ground into powder and used externally to treat various skin diseases without any side effects. The Safed Musli's aphrodisiac properties have been well clarified by Ayurveda in its texts to boost semen quality and quantity. Its preparations are extensively employed in curing erectile dysfunction, low sperm motility and sperm count and as well as low libido in women. Safed Musli has also been researched to be effective in enhancing general health system referred to as "rasayana" in addition to the above medicinal benefits. It increases the immunity levels and the body. In the recent research, new medicinal properties of Safed Musli have been discovered viz. The herb is an excellent anti-oxidant. It effectively prevents postmenopausal osteoporosis. There are antibacterial properties in its

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