

**Effectiveness Of Giving Boiled Water Betel Leaf (Piper Betle)  
On The Incidence Of Vaginal Discharge: Literature Review**

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**Abstract**

**Background:** Vaginal discharge is a discharge from the vagina. Reproductive problems are often considered unimportant because vaginal discharge is basically a natural thing that occurs before and after menstruation. The content of betel leaf (Piper betle) is very good, so it is often used as a traditional medicine that is widely used by the community to treat diseases such as: vaginal discharge, swollen gums, mouth ulcers, scarlet fever, facilitating menstruation, throat inflammation, asthma, nosebleeds and underarm odor. Therefore the authors are interested in taking a literature review entitled, the effectiveness of boiled water which conducts research on betel leaves (Piper betle) on the incidence of vaginal discharge.

**Objective:** To determine the effectiveness of the administration of betel leaf decoction water (Piper betle) on the incidence of vaginal discharge.

**Methods:** The research design was literature review. The criteria for articles taken based on keywords, year, title, abstract, full paper and answer the research objectives sourced from Google scholar. The number of articles used in this study was 10 articles.

**Results:** Based on 10 research articles that the use of betel leaf water decoction is very influential in overcoming vaginal discharge by the presence of active compounds in betel leaves that are antibacterial and antifungal.

**Conclusion:** Betel leaves have an effective influence on overcoming the incidence of vaginal discharge by direct administration or washing because the compound content of betel leaves contains active substances.

Keywords: Betel Leaf, Piper betle, Vaginal discharge, Flour albus

***Efektivitas Pemberian Air Rebusan Daun Sirih (Piper Betle) Terhadap Kejadian Keputihan:  
Literature Review***

*Abstract*

**Latar Belakang:** Keputihan adalah keluarnya cairan dari vagina. Masalah reproduksi yang sering dianggap tidak penting karena keputihan pada dasarnya adalah suatu hal yang wajar terjadi menjelang menstruasi dan sesudah. Kandungan daun sirih (Piper betle) sangat bagus maka sering kali digunakan sebagai obat tradisional yang banyak digunakan masyarakat untuk mengatasi penyakit seperti: keputihan, gusi bengkak, sariawan, demam berdarah, memperlancar haid, radang tenggorongan, asma, mimisan dan bau ketiak. Maka dari itu penulis tertarik untuk mengambil literature review yang berjudul, efektivitas air rebusan yang melakukan penelitian tentang daun sirih (Piper betle) terhadap kejadian keputihan.

**Tujuan:** Untuk mengetahui efektivitas pemberian air rebusan daun sirih (Piper betle) terhadap kejadian keputihan.

**Metode:** Rancangan penelitian adalah literature review. Kriteria artikel yang diambil berdasarkan kata kunci, tahun, judul, abstrak, full paper dan menjawab tujuan penelitian yang bersumber dari Google scholar. Jumlah artikel yang digunakan dalam penelitian ini yaitu sebanyak 10 artikel.

**Hasil:** Berdasarkan 10 artikel penelitian bahwa penggunaan rebusan air daun sirih sangat berpengaruh dalam mengatasi keputihan oleh adanya senyawa aktif pada daun sirih yang bersifat sebagai antibakteri dan antijamur.

**Kesimpulan:** Daun sirih mempunyai pengaruh yang efektif mengatasi kejadian keputihan dengan cara pemberian secara langsung atau cebok karena kandungan senyawa yang dimiliki daun sirih mengandung zat aktif.

**Kata Kunci:** Daun Sirih, Piper betle, Keputihan, Flour albus

**Introduction**

The reproductive organs are one of the organs of the body with sensitive areas that require extraordinary consideration. Organ health Reproduction starts with cleanliness yourself to be included in the cleanliness vagina with the aim of keeping it clean, healthy, and normal so as to avoid disease(Astuti et al., 2018).

This was confirmed by WHO in Panghiyngani (Panghiyngani et al., 2018) estimated every year there are 357 million cases reproductive health problems and cases every year which can be cured new four cases infectious infections, including: Chlamydia trachomatis (131 million), Neisseria gonnorrhoeae (87 million), syphilis (6 million),

and *Trichomonas vaginalis* (142 million).

While the biggest possibility

that can be cured the disease is people with an age range of 15-45 year.

Next according to the Ministry of Health Republic of Indonesia (2015), explains whiteness is a symptom often experienced by women. vaginal discharge (*Flor albus, leukorrhoea, vaginal discharge*) is term for discharge from gender woman. In a state of normal, fluid which come out in the form of linders who clear no conspicuous, odorless and a little thick. In pathology, the amount, consistency, color and odor of the reproductive fluid will change.

Things that can trigger vaginal discharge are vaginal secretions in women which usually appear before or after menstruation, this is a physiological condition (normal). In addition to physiological factors (normal), there are pathological factors (abnormal). Pathological factors (no normal) due to by infections, bacteria, parasites, fungi, and *Trichomonas vaginalis virus*, vaginal bacteria, syphilis and

*candida albicans gonorrhoeae* (Handayani et al., 2017).

According to Citrawati(Citrawati et al., 2019) states that Indonesian women are about 90% likely experience whiteness so that this matter closely related with condition the hot weather resulting in dampness in the feminine area can make it easier for women to experience vaginal discharge, this happens because the humidity in the feminine area due to hot weather makes it easier for yeast infections to develop.

One of the reproductive problems in adolescents and women of childbearing age that is often considered unimportant is the occurrence of vaginal discharge in the reproductive organs because vaginal discharge is basically a natural thing that occurs before menstruation, besides that it is considered normal but also due to the lack of knowledge about reproductive health. as previously explained. Based on the above, Handayani(Handayani et al., 2017) states that

plants are often used by the community as an alternative to reduce whiteness is a leaf betel apart easy to find in the environment, leaves Betel does not have harmful side effects.

The betel leaf contains essential oils consisting of hydroxykavikol, cavibetol, estragol, eugenol, and carvakol. The content in the betel leaf that can overcome the eugenol compound, because the eugenol contained in the betel leaf is anti-fungal and anti-bacterial. Physiological vaginal discharge that occurs because of poor personal hygiene, wearing tight clothing so that it becomes moist which is characterized by complaints of vaginal discharge that is not itchy, smells, and is clear in color, whereas pathological vaginal discharge is characterized by complaints of itching, yellow or green color, smells, then from the content of eugenol compounds from betel leaf can overcome vaginal discharge.

Therefore the content from leaves betel (Piper betle) is very good then it is often used as medicine traditional that is widely used in the community for overcome diseases such as:

vaginal discharge, gums swelling, thrush, dengue fever, facilitate menstruation, inflammation throat, asthma, nosebleeds and armpit odor. Furthermore, this is also confirmed from the results research that performed by Kustanti(Kustanti, 2017) showing on use leaf stew betel is effective for lowering whiteness occurs.

Based on the description above, the authors are interested in taking a Literature Review entitled, effectiveness of boiled water conducting research on betel leaf (Piper Betle) on the incidence of vaginal discharge.

### **Materials and Methods**

The research method used in this study is a literature review. Literature review itself is a form of research conducted by searching from several books, journal literature, and articles Literature study itself is library data (Nursalam, 2014).

The literature sources that will be used in this research are searched through Google Scholar using the keywords “Betel Leaf, Keputihan”, “Piper Betle, Flour Albus” and

“Bethel Leaf, Whiteneess”. There were 10 articles to be reviewed with 7 national articles in Indonesian and 3 international articles in English.

### Results and Discussion

vaginal discharge or flour albus is a where are the symptoms? the occurrence of expenditure fluid from the vagina(Amanah et al., 2018). Vaginal discharge is a condition that can occur physiologically and can become pathological vaginal discharge due to infection. If the vagina is infected with germs such as fungi, parasites, bacteria and viruses, the balance of the ecosystem in the vagina will be disturbed, which previously didderlien bacteria or lactobacillus eat glycogen produced by estrogen in the vaginal wall for growth and make the vaginal pH acidic, this cannot happen. when the vaginal pH is alkaline. The alkaline vaginal pH makes disease germs live and thrive in the vagina (Sibagariang, Pusmaika, & Rismalinda, 2010).

In addition to treatment with modern methods, there are still ways that can be done to

treat vaginal discharge, including the traditional way. The treatment method is carried out by utilizing types of medicinal plants that can be found easily in the natural environment. Betel leaf has pharmacological effects such as relieving cough, anti-inflammatory, stimulating the central nervous system, relieving snoring, preventing premature ejaculation, vaginal discharge, stopping bleeding and strengthening teeth.(Citrawati et al., 2019).

This statement is supported by several journals that have been reviewed and obtained the results that there is an effect of betel leaf on vaginal discharge. Based on the results of research on The Of Betel Leaf Decoction (Betle Piper L.) On Vaginal Ph Levels, it shows that there is an effect of giving boiled green betel leaf (piper betle L) water on vaginal pH levels. and after given boiled water betel leaf In adolescents, the average value of vaginal pH after being given boiled betel leaf water is lower than before being given betel green leaf stew. Vaginal discharge occurs because the pH level of the vagina is disturbed(Siswina et al., 2018).

Based on the research results of the effectiveness boiled water betel leaf green in overcoming vaginal discharge in adolescents. These changes occur because the phenol content in green betel leaves is 5 times stronger than the other content in green betel leaves. These phenols function to inhibit antibacterial and antifungal activity. One way to inhibit the growth of bacteria is to inhibit the process of forming cell walls that have already been formed. How to make green betel leaf boiled water, namely 10 betel leaves with 250 cc of water and boiled until boiling until the remaining 100 cc of betel leaf boiled water for 1 time (Diah Astutiningrum, 2019).

This is also in line with the research above regarding the effectiveness of boiled water, namely the effect of giving boiled water of green betel leaf showing that giving boiled water of green betel leaf in adolescents is effective in reducing the incidence of vaginal discharge. By using boiled water, green betel leaf, which is rinsed directly or directly to the intimate organs, is more effective than oral (Kustanti, 2017).

This is also in line with other research on The Effectiveness of Giving Betel Leaves in Overcoming Flour Albus Reenagers shows that it is effective by giving boiled betel leaves to reduce vaginal discharge, by providing therapy in using boiled betel leaf which is used to clean regularly for 6 days, as much as 100 cc in the morning and 100 cc in the evening (Anggraini & Wulandari, 2020).

The results of this study are also in line with the above regarding the administration of betel leaf stew on reducing vaginal discharge in adolescents Betel leaf decoction has an effect on reducing pathological vaginal discharge in adolescents to reduce vaginal discharge, because of the content possessed by betel leaves, namely eugenol compounds in betel leaves, proven to kill fungi, and tannin compounds are astringents that reduce fluid secretion.(Oktriani & Wulandari, 2018).

While the results of research on the effect of red betel leaf boiled water on decreasing the symptoms of Flour Albus in WUS show that there is an effect of red betel leaf boiled water on reducing vaginal discharge symptoms in

women because women of childbearing age apply red betel leaf boiled water as a non-pharmacological drug to treat vaginal discharge. whiteness. Red betel contains phytochemical compounds, namely essential oils, alkaloids, saponins, tannins and flavonoids where the chemical content has the potential as antimicrobial power.(Ernawati, 2019).

Based on the results This research is also in line with use effect leaf boiled water red betel against whiteness on WUS also shows that water leaf stew red betel can have an effect in reducing whiteness on WUS regarding the effectiveness of boiled water, namely the results test got can be concluded that water leaf stew red betel can overcome the whiteness experienced by women and very good for take care of organs womanhood. Because the content of substances in red betel that have a major effect in reducing the symptoms of pathological vaginal discharge, such as carvacrol is a disinfectant and antifungal, so it can be used as an antiseptic. Flavonoids are antioxidants, antiseptic, and anti-inflammatory. Alkaloids have

antimicrobial properties. Essential oils act as antibacterial and tannins also have antibacterial properties. Red betel contains alkaloids that are not owned by green betel(Firmanila et al., 2016).

The results of this study are also in line with the provision of leaf stew red betel against whiteness denoting giving betel leaf red is influential in overcome whiteness pathological in teenager. Because the content in red betel can also inhibit pathogens(Wulan, 2019).

The results of this study are also the same regarding The Effect Of Using Red Betel Leaves (Piper Crocatum) For Vaginal Discharge Among Fertile Age Women. boiled water leaf red betel very effective for overcoming whiteness on woman age fertile. By making red betel boiled water, starting with washing the betel leaves thoroughly, 7 pieces of red betel leaf and 1 liter of water, boiled for 15 minutes, and how to use the red betel boiled water flushed from front to back in the vaginal area. And the treatment is given for 7 days, once a day is done at night(Yanti, 2017).



This is in line with other research on the effect of water stew on leaves red betel against whiteness on WUS which shows that there is an effect of red betel leaf boiled water on reducing vaginal discharge in women of childbearing age to overcome vaginal discharge. Because the administration is done with a swab or flushed directly on the female area, it is more effective than oral (R. Meina Ayu Apsari, T. Rohita, 2020).

Based on 9 articles using a quasi-experimental research method, namely research using betel leaf decoction which shows significant results, namely by the presence of Eugenol compounds that can overcome the same whiteness contained in red and green betel leaves. Meanwhile, 1 article that uses a descriptive method also shows that it is effective in giving betel leaf decoction to reduce vaginal discharge.

Based on 10 articles obtained concluded that use boiled water Betel leaf is effective in overcoming vaginal discharge because it contains compounds owned by betel leaf, namely the

active substance as antibacterial and antifungal. And the eugenol content found in red or green betel leaves can overcome fungi and is analgesic.

### **Conclusion**

Betel leaf has an effective effect in overcoming the incidence of vaginal discharge by means of direct administration or wipes and the compounds contained in betel leaf contain active substances that are antibacterial and antifungal. And the eugenol content found in red or green betel leaves can overcome fungi and is analgesic. Provision of green betel leaf boiled water is given 2 times a day (day and night) for 6 days while the red betel leaf boiled water is given 1 time a day (night) for 7 days.

Recommendations from this study for women who experience vaginal discharge. It is expected to understand about the vaginal discharge experienced so that it does not become a serious and dangerous matter, so it is necessary to pay attention to personal hygiene as well as possible.



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