

INVENTORY OF MEDICINAL PLANT IN THE REHABILITATION ZONE OF THE BLOK PASIR BATANG GUNUNG CIREMAI NATIONAL PARK

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ABSTRACT

The potential of plant diversity in the forest which has medicinal properties is still largely ignored and has not been utilized and developed. One of them is the potential that has not been identified regarding the existence of medicinal plants in the rehabilitation zone of Blok Pasir Batang. The aim of the study was to identify the potential of medicinal plant species and their efficacy in the Blok Pasir Batang rehabilitation zone. The information produced is the result of scientific documentation collected as the initial data base in the rehabilitation zone.

Key words: Inventory, Medicine Plant, Pasir Batang

1. Introduction

Medicinal plants are plants that contain components of chemical compounds (Wardiah et al., 2015). The number of medicinal plants that have medicinal properties in Indonesia until now has not been known with certainty, so that it is necessary to thoroughly document the use of plants as raw material for treatment (Hidayat and Hardiansyah, 2012). The potential of plant diversity in the forest that has medicinal properties is still widely ignored and has not been utilized and developed. As one of the first steps is to inventory through vegetation analysis activities on the preparation of plant communities in the Blok Pasir Batang rehabilitation zone in hopes of seeing the potential in the zone. The aim of the study was to identify the potential of medicinal plant species and their efficacy in the Pasir Batang

2. Methods

Data biotic potential is plant structure through vegetation analysis. The vegetation analysis method used is the path method. Example lines are made to cut contour lines (high lines/topographic lines) and parallel to each other. Retrieval of data at the level of understorey, seedlings, stakes and poles is carried out on smaller plots and made in plots of 20 x 20m². The size of the plant sample is 1m x 1m, seedlings are 2m x 2m, sample plots are 5m x 5m, sample plots are 10m x 10m and sample plots are 20m x 20m (Kusmana & Istomo 1995). The side intensity used is 10%, with a research area of 30 Ha, 75 plot plots are obtained. The data that has been collected is then analyzed descriptively with a unit of analysis based on primary data and secondary data. Identify the types of medicinal plants using books: 1) Heyne. 1987. Indonesian Useful Plants. Volume 1-4. Saran Wana Jaya Foundation, Jakarta. 2). Van Steenis, C.G.G.J., 2006. Flora of the Java Mountains. LIPI

Research Center. 3) Ginanjar, M. 2010. Biodiversity Information on Ciremai Mountain National Park. Ciremai Mountain National Park Hall. Brass. 4) Dalimarta, and Setiawan, 2000. Atlas of Indonesian Medicinal Plants. Volume 1-5. Agriwijaya, Jakarta. The study was conducted in the Karangsari Block rehabilitation zone of Ciremai Mountain National Park. Materials used include vegetation and a map of the research location. The equipment used included cameras, GPS, measuring tape, altimeter, clinometer, air thermometer, and stationery.

3. Result and Discussion

3.1. Potential Efficacious Plant

Species the number of plant species found in the rehabilitation zone was 43 species, belonging to 24 families. The most common species originated from the family Moraceae as many as 6 species. While medicinal plant vegetation found as many as 27 species, belonging to 16 families of the total species found

Table 1. Species of medicinal plant vegetation

No	Family	Scientific Name
1	Asteraceae	<i>Ageratum conyzoides</i>
2	Fabaceae	<i>Senna seamea</i>
3	Lamiaceae	<i>Orthosiphon aristatus</i>
4	Lauraceae	<i>Persea americana</i>
5	Malvaceae	<i>Sterculia oblongata</i>
6	Malvaceae	<i>Melochia umbrellata</i>
7	Malvaceae	<i>Sida rhombifolia</i>

No	Family	Scientific Name
8	Melastomataceae	<i>Melastoma polyanthum</i>
9	Meliaceae	<i>Dysoxylum gaudichaudianum</i>
10	Meliaceae	<i>Swietenia mahagoni</i>
11	Meliaceae	<i>Toona sureni</i>
12	Mimosaceae	<i>Mimosa pudica</i>
13	Moraceae	<i>Ficus fistulosa</i>
14	Moraceae	<i>Ficus septica</i>
15	Moraceae	<i>Ficus ampelas</i>
16	Moraceae	<i>Ficus variegata</i>
17	Moraceae	<i>Arthocarpus heterophyllus</i>
18	Oxalidiaceae	<i>Oxalis corniculata</i>
19	Piperaceae	<i>Piper aduncum</i>
20	Poaceae	<i>Cynodon dactylon</i>
21	Poaceae	<i>Imperata cylindrica</i>
22	Podocarpaceae	<i>Schima wallichii</i>
23	Rosaceae	<i>Rubus fraxinifolius</i>
24	Ulmaceae	<i>Trema orientalis</i>
25	Umbelliferae	<i>Centella asiatica</i>
26	Urticaceae	<i>Pilea melastomoide</i>
27	Urticaceae	<i>Laportea stimulans</i>

3.2. Benefits of Medicinal Plants

The medicinal properties found in observation plots at all levels (understorey, seedlings, poles, stakes, and trees) are outlined below:

1. *Ageratum conyzoides*

Efficacy of the leaves as a medicine for new wounds, fever, dysentery, and hemorrhoids medicine, besides that the leaves also contain essential oils.

2. *Arthocarpus heterophyllus*

The usefulness of jackfruit can be used to prevent heart disease, cancer, anemia, nourish the eyes, smooth the digestive system, nourish the skin, maintain metabolism, and reduce blood pressure.

3. *Centella asiatica*

The benefits of gotu kola can treat hepatitis, measles, fever, tonsils, sore throat, bronchitis, urinary tract infections and stones, red eyes, hemorrhoids, poisoning, vomiting blood, coughing up blood, nosebleeds, intestinal worms, leprosy. (Yuniarti, 2008).

4. *Cynodon dactylon*

The efficacy of *Cynodon dactylon* can be used as a first aid for minor injuries by pulverizing the leaves and then covering the minor wound. Other properties can be used for the treatment of urinary tract infections, prostatitis, syphilis, and dysentery.

5. *Dysoxylum gaudichaudianum*

Its usefulness can reduce seizures, the leaves can be used as juice to help the childbirth process, and can be used as a TBC drug.

6. *Ficus ampelas*

Efficacy of kiampelas comes from the liquid that can be drunk for treatment for those who have difficulty removing urine and as a medicine for diarrhea.

7. *Ficus fistulosa*

The young shoots can be eaten raw.

8. *Ficus septica*

Parts of the plant used as medicine are parts of the roots, leaves, sap, and fruit. Its properties can treat skin diseases such as ulcers, appendicitis, treat the result of poisonous snake bites, and shortness of breath medication.

9. *Ficus variegata*

If the skin is chewed or boiled, it can stop bleeding bowel movements, the skin can also be eaten to replace young areca nut. The leaves and fruit can be eaten raw, stew the fruit if mixed with a little salt can cure dysentery.

10. *Imperata cylindrical*

Efficacy of rhizomes and roots of reeds can shed urine, and treat fever.

11. *Laportea stimulans*

Pulus leaves also have properties as cough and hair washing remedies.

12. *Melastoma polyanthum*

The efficacy of *Melastoma polyanthum* leaves as a medicine for diarrhea, leucorrhoea medicine, inflammation of the intestine, overcome nosebleeds, help heal wounds on the skin, and as a thrush drug. Its roots and sap to treat

13. *Melochia umbellate*

The benefits of this plant are used to treat hepatitis, liver, high blood pressure, and cholesterol.

14. *Mimosa pudica*

Efficacy of the embarrassed princess can be used as a medicine for phlegm, rheumatism, insomnia, and prevent the arrival of hepatitis and bronchitis.

15. *Orthosiphon aristatus*

The efficacy of a cat's whiskers can treat kidney infections, bladder infections, stone urine, gout, and eliminate heat.

16. *Oxalis corniculata*

The benefits of calingcing can cure hepatitis, diarrhea, urinary tract infections, hypertension, neutralize poisons, antibiotics, and reduce blood pressure.

17. *Persea americana*

The benefits of *Persea americana* fruit are to maintain heart health, reduce cholesterol, control blood pressure,

anti-inflammatory, improve eye health, regulate blood sugar levels, prevent birth defects, reduce the risk of stroke, protect against cancer, fight free radicals, treat bad breath, increase absorption nutrition, skin care, and gain weight

18. *Pilea melastomoide*

The benefits of pohpohan leaves are to overcome back pain, relieve menstrual pain, prevent high blood pressure, prevent bone loss, treat diabetes, and maintain endurance.

19. *Piper aduncum*

The efficacy of stem sap is efficacious as a medicine for boils and new wound medicine.

20. *Rubus fraxinifolius*

The leaves are useful for treatment if you throw mucous water by squeezing and drinking

21. *Schima wallicii*

The flower crown tastes flat and is commonly used as a mixture of traditional herbal spices.

22. *Senna siamea*

The efficacy of johar plants is as a cure for malaria, diabetes, cure diabetes, prevent liver damage, ward off free radicals, treat various kinds of chronic diseases such as cancer, tumors, tuberculosis, diabetes, stroke.

23. *Sida Rhombifolia*

The parts used as medicine are roots, leaves, and flowers, can be used as a medicine for toothache, heartburn, itching, rheumatism, boils, eczema, and if stung by bees.

24. *Sterculia oblongata*

Leaves can be used as a medicine for heartburn, canker sores, cracked lips, or can also be used to treat urinary pain caused by heat

25. *Swietenia mahagoni*

The fruit's properties can improve blood circulation, reduce cholesterol, accumulate fat in the blood vessels, reduce pain, bleeding and bruising, and act as an antioxidant to get rid of free radicals, reduce fat in the body, help improve the immune system, prevent blood clots, and strengthen function liver and slows down the blood clotting process.

26. *Toona sureni*

The efficacy of decoction of the bark can treat fever, diarrhea, and dysentery, while the leaves have antioxidant activity

27. *Trema orientalis*

Efficacious as an antidiarrheal medication, cough, colds, abdominal pain, and dysentery.

4. Conclusion

Plants with the potential for drugs in the Rehabilitation Zone of Pasir Batang Block as many as 27 species belong to 16 families of the total number found as many as 43 species, and

the efficacy of plants found as a whole can be utilized from all parts of the plant.

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