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# PHYTOCHEMICAL AND ANTIMICROBIAL SCREENING OF THE STEM BARK EXTRACTS OF *PTEROCARPUS ERINACEUS* (POIR)

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**Abstract**
Medicinal plants are very rich in phytochemicals and have been widely used in modern-day processing drugs. Pterocarpus Erinaceus and has been commonly utilized in Nigerian folk medicine to treat various illnesses such as diarrhea, dysentery, urethral discharges, fever. In this study, the phytochemical constituents and antimicrobial activities of Pterocarpus Erinaceus were analyzed. The result of the phytochemical analysis revealed the presence of tannins, saponins, and flavonoids. The antimicrobial screening showed that the plant is active against Salmonella typhi, Klebsiella pneumoniae, Enterobacter aerogenes, Enterococcus faecalis, and Escherichia coli.

**Keywords:** P. Erinaceus, Tannins, Saponins, Flavonoids

## Introduction

Nature has provided humanity with many floras that contain essential medicinal value (Biba et al., 2014). Plants are an important source of many human needs. There is a growing focus on the importance of medicinal plants in health care (Farnsworth & Soejarto, 2010; Sarwar et al., 2011). Plants are the essential foundation of medicine (Aslam et al., 2020; Bukar et al., 2016; Raina et al., 2014) and sources of health-promoting substances (Ozkan et al., 2016). Medicinal plants are very rich in phytochemicals (Ugboko et al., 2020) and have been widely used in modern-day processing drugs (Ahmed et al., 2014; Modibbo, 2014). Over the years, plants have been used in traditional medical practice due to their curative potentials (Caballero-Serrano et al., 2019; Debashree Priyadarshini et al., 2020; Hao, 2019). Medicinal plants have assumed an impressive part in the global health system (Oladeji, 2016; Zahra et al., 2019). Medicinal plants are the plant that contains substances in any part of its organ that is crucial in therapeutic purposes and drugs processing (Bajpai & Agarwal, 2015; Sofowora et al., 2013). Medicinal plants are enriched with various phytochemical and biological potentials, which has been widely investigated (Abba et al., 2018; Ameh & Eze, 2010; Awotedu et al., 2018; Hadiza Haruna, 2019; Njoku et al., 2011; Nkumah et al., 2015; Ogunwande et al., 2007; Okwu & Josiah, 2006; Olanipekun, 2013).

*Pterocarpus Erinaceus* is an essential medicinal tree (Noufou et al., 2016), and a leguminous tree commonly used for timber (Adjonou et al., 2020; Johnson et al., 2020). It is of high socio-cultural importance because of its multipurpose uses (Segla et al., 2015). The tree is among the most exploited trees in Africa (Dumenu, 2019; Goba et al., 2019; Habou et al., 2019; Segla et al., 2020). Perhaps, uncontrolled exploitation of the species is implicated in regeneration capacity and a decrease in socioeconomic and medicinal activities (Kossi et al., 2019). *P. Erinaceus* has been widely utilized in Nigerian folk medicine to treat various illnesses such as diarrhea, dysentery, urethral discharges, fever



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(Hage et al., 2014; Oladije et al., 2020; Saidu et al., 2015; Salawu et al., 2008). *P. Erinaceus* contains nutritious foliage which is essential fodder for livestock (Nacoulma et al., 2011). The leaf is high in protein and safe for farm animals. Research has investigated the anti-inflammatory, analgesic and anti-plasmodial activities of *P. Erinaceus* (Noufou et al., 2016), antidiarrheal activity (Ezeja et al., 2012), antiulcerogenic properties (Olaleye et al., 2013), Antimalarial activity (Karou et al., 2003), Antioxidant (Patrick, 2018), antimycotic activity (Etuk et al., 2008), and antifungal properties of its bark, leaves, and roots (Tittikpina et al., 2019). Evidence has affirmed the importance of this tree species. The current study aims to evaluate the aqueous contents of this plant and its antimicrobial activities against some pathogens. Phytochemical evaluation is fundamental in uncovering bioactive components existing in medicinal plants (Alqethami & Aldhebiani, 2021). The primary purpose of this study is to screen the phytochemical and antimicrobial contents of the stem bark extracts of *P. Erinaceus*.

## Material and method

### *Plant Collection*

The stem bark of *Pterocarpus Erinaceus* was collected and sent to the laboratory for proper identification. The plant preparation and crude extraction were carried out using the standard procedure described in Adebayo and Ishola (2009).

### *The phytochemical and antimicrobial screening of the extracts*

The powdered stem bark of *P. Erinaceus* was tested for secondary metabolites such as tannins, anthraquinones, saponins, flavonoids, and phenols using standard methods described by (Abioye et al., 2013). Antimicrobial activity was carried out using hexane, ethyl acetate, and methanol fractions together with the crude methanol on cup plate method on gram-positive and gram-negative pathogens such as Salmonella typhi, Klebsiella pneumoniae, Enterobacter aerogenes, Enterococcus faecalis, and *Escherichia coli* in (Abioye et al., 2013; Adebayo & Ishola, 2009; Gabriel & Onigbanjo, 2010).

## Result

500g of the grounded stem bark of *P. Erinaceus* was successively extracted with n-hexane, ethyl acetate, and methanol to obtain some reddish-brown, brown, and yellowish solid masses. The bioactive components of the plant are shown in Table 1. While the antimicrobial assay results on the extracts are shown in table 2.

The phytochemical screening performed on the aqueous extract of the plant's stem bark revealed the presence of tannin, saponins, and flavonoids. It was found that phenol was absent contrary to a previous study (e.g., Gabriel & Onigbanjo, 2010). The reason for the absence of phenol is unclear. However, the probable explanation could be attributed to the screening process.

**Table 1:**

Phytochemical screening results of Pterocarpus erinaceus

| Compounds | Positive /Negative |
|---|---|
| Tannins | + |
| Saponins | + |
| Flavonoids | + |
| Phenols | - |

key: (+) = Presence; (-) = Absence



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**Table 2:**
Sensitivity test results of the extracts

| Extracts | Organisms / Zones of Inhibition (mm) | | | | |
|---|---|---|---|---|---|
| | Escherichia | Klebsiella | Enterobacter | Enterococcus | Salmonella |
| Hexane | 20 | 20 | 30 | 20 | 10 |
| Ethyl acetate | - | - | - | 20 | 10 |
| Methanol | 30 | 20 | 20 | 10 | 20 |

## Discussion

The study aimed to investigate the phytochemical and antimicrobial basis of the stem bark of Pterocarpus Erinaceus. The analysis showed that *P. Erinaceus* is rich in bioactive components, including tannins, flavonoids, and saponins. However, the presence of phenol was negative in the plant's extract. Perhaps, the secondary metabolites revealed in the plant have been proven to possess antimicrobial activity (Ajiboye & Olawoyin, 2020; Dakheel et al., 2020; Othman et al. Following the antimicrobial activity screening, hexane, ethyl acetate, and methanol indicated varieties of activity. The investigation revealed that hexane and methanol are the most active in the sense that they were found to be active in the isolated organisms. However, Ethyl acetate was found to act in Klebsiella and Enterococcus. Consistent with (Gabriel & Onigbanjo, 2010), the analysis showed that Ethyl acetate exhibits the lowest sensitivity against the organisms. The study provides further evidence that *P. Erinaceus* exhibit antimicrobial activity against the tested pathogens.

## Conclusion

The present study's findings support the use of the stem bark extract of Pterocarpus Erinaceus against Escherichia coli, Klebsiella pneumoniae, Enterobacter aerogenes, Enterococcus faecalis, and Salmonella typhi. The bioactive constituent of the plant's stem bark has been demonstrated to act against the isolated pathogens. The result contributes to the literature by providing valuable data to the medicinal properties of *P. erinaceus.*

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## References

Abba, C. C., Eze, P. M., Abonyi, D. O., Nwachukwu, C. U., Proksch, P., Okoye, F. B. C., & Eboka, C. J. (2018). Phenolic compounds from endophytic Pseudofusicoccum sp. Isolated from Annona muricata. *Tropical Journal of Natural Product Research*, *2*(7). https://doi.org/10.26538/tjnpr/v2i7.6

Abioye, E. O., Akinpelu, D. A., Aiyegoro, O. A., Adegboye, M. F., Oni, M. O., & Okoh, A. I. (2013). Preliminary phytochemical screening and antibacterial properties of crude stem bark extracts and fractions of Parkia biglobosa (Jacq.). *Molecules*, *18*(7). https://doi.org/10.3390/molecules18078485

Adebayo, E. A., & Ishola, O. R. (2009). Phytochemical and antimicrobial screening of the crude extracts from the root, stem bark, and leaves of Bridelia ferruginea. *African Journal of Biotechnology*, *8*(4). https://doi.org/10.4314/ajb.v8i4.59904

Adjonou, K., Abotsi, K. E., Segla, K. N., Rabiou, H., Houetchegnon, T., Sourou, K. N. B., Johnson, B. N., Ouinsavi, C. A. I. N., Kokutse, A. D., Mahamane, A., & Kokou, K. (2020). Vulnerability of African Rosewood (Pterocarpus erinaceus, Fabaceae) natural stands to climate change and



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implications for silviculture in West Africa. *Heliyon*, *6*(6). https://doi.org/10.1016/j.heliyon.2020.e04031

Ahmed, N., Mahmood, A., Mahmood, A., Tahir, S. S., Bano, A., Malik, R. N., Hassan, S., & Ishtiaq, M. (2014). Relative importance of indigenous medicinal plants from Layyah district, Punjab Province, Pakistan. *Journal of Ethnopharmacology*, *155*(1). https://doi.org/10.1016/j.jep.2014.05.052

Ajiboye, A. E., & Olawoyin, R. A. (2020). Antibacterial activities and phytochemical screening of crude extract of Carica papaya leaf against selected pathogens. Global Journal of Pure and Applied Sciences, 26(2). https://doi.org/10.4314/gjpas.v26i2.8

Alqethami, A., & Aldhebiani, A. Y. (2021). Medicinal plants used in Jeddah, Saudi Arabia: Phytochemical screening. *Saudi Journal of Biological Sciences*, *28*(1). https://doi.org/10.1016/j.sjbs.2020.11.013

Ameh, G. I., & Eze, C. S. (2010). Phytochemical Constituents of Some Nigerian Plants. *Bio-Research*, *8*(1). https://doi.org/10.4314/br.v8i1.62544

Aslam, A., Gajdács, M., Zin, C. S., Rahman, N. S. B. A., Ahmed, S. I., & Jamshed, S. Q. (2020). Public awareness and practices towards self-medication with antibiotics among the Malaysian population. A development of questionnaire and pilot-testing. *Antibiotics*, *9*(2). https://doi.org/10.3390/antibiotics9020097

Awotedu, O. L., Ogunbamowo, P. O., Emmanuel, I. B., & Lawal, I. O. (2018). Phytominerals and Phytochemical Studies of Azadirachta indica, Leea guineensis and Parkia biglobosa Leaves. *International Annals of Science*, *6*(1). https://doi.org/10.21467/ias.6.1.28-34

Bajpai, A. K., & Agarwal, K. K. (2015). Uses and Importance of Medicinal Plants As An Alternative Medicine A Historical Review. *IOSR Journal of Environmental Science*, *1*(1).

Biba, V. S., Amily, A., Sangeetha, S., & Remani, P. (2014). Anticancer, antioxidant, and antimicrobial activity of Annonaceae family. *World Journal of Pharmacy and Pharmaceutical Sciences*, *3*(3).

Bukar, B. B., Dayom, D. W., & Uguru, M. O. (2016). The Growing Economic Importance of Medicinal Plants and The Need For Developing Countries To Harness From it: A Mini-Review. *IOSR Journal Of Pharmacy Www.Iosrphr.Org*, *6*(5).

Caballero-Serrano, V., McLaren, B., Carrasco, J. C., Alday, J. G., Fiallos, L., Amigo, J., & Onaindia, M. (2019). Traditional ecological knowledge and medicinal plant diversity in Ecuadorian Amazon home gardens. *Global Ecology and Conservation*, *17*. https://doi.org/10.1016/j.gecco.2019.e00524

Dakheel, M. M., Alkandari, F. A. H., Mueller-Harvey, I., Woodward, M. J., & Rymer, C. (2020). Antimicrobial in vitro activities of condensed tannin extracts on avian pathogenic Escherichia coli. Letters in Applied Microbiology, 70(3). https://doi.org/10.1111/lam.13253

Debashree Priyadarshini, Binodini Tripathy, & Gopal C.Nanda. (2020). Perspective Importance of Medicinal Plants in Mch, and Rch Care In Present Scenario – A Bird's Eye View. *International Journal of Ayurveda and Pharma Research*. https://doi.org/10.47070/ijapr.v8i9.1620

Dumenu, W. K. (2019). Assessing the impact of felling/export ban and CITES designation on the exploitation of African rosewood (Pterocarpus Erinaceus). *Biological Conservation*, *236*. https://doi.org/10.1016/j.biocon.2019.05.044

Etuk, E. U., Suberu, H. A., Ameh, I. G., & Abubakar, K. (2008). Antimycotic effect of the aqueous leaf extract of Pterocarpus Erinaceus in rats. *Journal of Pharmacology and Toxicology*, *3*(4). https://doi.org/10.3923/jpt.2008.318.323

Ezeja, I. M., Ezeigbo, I. I., Madubuike, K. G., Udeh, N. E., Ukweni, I. A., Akomas, S. C., & Ifenkwe, D. C. (2012). Antidiarrheal activity of Pterocarpus Erinaceus methanol leaf extract in experimentally-induced diarrhea. *Asian Pacific Journal of Tropical Medicine*, *5*(2). https://doi.org/10.1016/S1995-7645(12)60014-5



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Farnsworth, N. R., & Soejarto, D. D. (2010). Global Importance of Medicinal Plants. In *Conservation of Medicinal Plants*. https://doi.org/10.1017/cbo9780511753312.005

Gabriel, A., & Onigbanjo, H. (2010). Phytochemical and Antimicrobial Screening of the Stem Bark Extracts of <I>Pterocarpus erinaceus</I> (Poir). *Nigerian Journal of Basic and Applied Sciences*, *18*(1). https://doi.org/10.4314/njbas.v18i1.56835

Goba, A. E., Koffi, K. G., Sié, R. S., Kouonon, L. C., & Koffi, Y. A. (2019). Demographic structure and natural regeneration of natural stands of pterocarpus erinaceus poir. (fabaceae) in the savannah regions of côte d'ivoire. *Bois et Forets Des Tropiques*, *341*(3). https://doi.org/10.19182/bft2019.341.a31750

Habou, R., Kossi, A., Issiaka, I.-M., Kossi, N. S., Babou, A. B., Adzo, D. K., Ali, M., & Kouami, K. (2019). Influence of anthropogenic and ecological factors on stand structure of Pterocarpus Erinaceus Poir. in Sudanian and Sahelian zones of Burkina Faso and Niger. *Journal of Ecology and The Natural Environment*, *11*(7). https://doi.org/10.5897/jene2019.0776

Hadiza Haruna, A. (2019). Phytochemical Analysis of <i>Telfaria Occidentals</i> and <i>Ocimum Gratissimum</i> Samples Collected from Gwarimpa Abuja Nigeria. *Journal of Diseases and Medicinal Plants*, *5*(1). https://doi.org/10.11648/j.jdmp.20190501.13

Hage, S., Marinangeli, C., Stanga, S., Octave, J. N., Quetin-Leclercq, J., & Kienlen-Campard, P. (2014). Gamma-secretase inhibitor activity of a Pterocarpus Erinaceus extract. *Neurodegenerative Diseases*, *14*(1). https://doi.org/10.1159/000355557

Hao, D.-C. (2019). Genomics and Evolution of Medicinal Plants. In *Ranunculales Medicinal Plants* (pp. 1–33). Elsevier. https://doi.org/10.1016/b978-0-12-814232-5.00001-0

Johnson, B. N., Luce, M., Quashie, A., Gilles Chaix, Camus-Kulandaivelu, L., Adjonou, K., Kossi, |, Segla, N., Adzo, |, Kokutse, D., Ouinsavi, C., Babou, |, Bationo, A., Rabiou, H., Kouami Kokou, |, & Vignes, | Hélène. (2020). Isolation and characterization of microsatellite markers for the threatened African endemic tree species Pterocarpus erinaceus Poir. *Ecology and Evolution*, *10*, 13403. https://doi.org/10.1002/ece3.6944

Karou, D., Dicko, M. H., Sanon, S., Simpore, J., & Traore, A. S. (2003). Antimalarial activity of Sida acuta Burm. f. (Malvaceae) and Pterocarpus erinaceus Poir. (Fabaceae). *Journal of Ethnopharmacology*, *89*(2–3). https://doi.org/10.1016/j.jep.2003.09.010

Kossi, A., Towanou, H., Habou, R., Kossi Novinyo, S., Komla Elikplim, A., Benziwa Nathalie, J., Pyoabalo, A., Christine A.I. Nougbodé, O., Akossiwoa Marie-Luce, Q., Adzo Dzifa, K., Ali, M., & Kouami, K. (2019). Challenges of Conservation and Sustainable Management of African Rosewood ( Pterocarpus Erinaceus ) in West Africa. In *Natural Resources Management and Biological Sciences [Working Title]*. IntechOpen. https://doi.org/10.5772/intechopen.88796

Modibbo, Y. (2014). Effects of Pterocarpus Erinaceus Stem Bark Aqueous Extract on Anemic Rats. *Scientific Research Journal (SCIRJ)*, *II*. www.scirj.org

Nacoulma, B. M. I., Traore, S., Hahn, K., & Thiombiano, A. (2011). Impact of land-use types on population structure and extent of bark and foliage harvest of Afzelia Africana and Pterocarpus Erinaceus in Eastern Burkina Faso. *International Journal of Biodiversity and Conservation*, *3*(3).

Njoku, V. O., Obi, C., & Onyema, O. M. (2011). Phytochemical constituents of some selected medicinal plants. *African Journal of Biotechnology*, *10*(66). https://doi.org/10.5897/AJB11.1948

Nkumah, O. C., Iroka, & Chukwuma. (2015). Phytochemical analysis and medicinal uses of Hibiscus sabdariffa. *International Journal of Herbal Medicine*, *2*(6).

Noufou, O., André, T., Richard, S. W., Yerbanga, S., Maminata, T., Ouédraogo, S., Hay Anne, E., Irène, G., & Pierre, G. I. (2016). Anti-inflammatory and anti-plasmodial activities of methanol extract of Pterocarpus erinaceus Poir. (Fabaceae) leaves. *International Journal of Pharmacology*, *12*(5). https://doi.org/10.3923/ijp.2016.549.555



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Ogunwande, I. A., Walker, T. M., & Setzer, W. N. (2007). A review of aromatic herbal plants of medicinal importance from Nigeria. In *Natural Product Communications* (Vol. 2, Issue 12). https://doi.org/10.1177/1934578x0700201224

Okwu, D. E., & Josiah, C. (2006). Evaluation of the chemical composition of two Nigerian medicinal plants. *African Journal of Biotechnology*, *5*(4). https://doi.org/10.4314/ajb.v5i4.

Oladeji, O. (2016). The Characteristics and Roles of Medicinal Plants: Some Important Medicinal Plants in Nigeria. *Natural Products: An Indian Journal*, *12*(3).

Oladije, J. E., Apeh, D. O., Idih, F. M., Shaibu, I. E., Shuaibu, H. T., & Ameh, D. O. (2020). Effects of Ethanol Extract of Pterocarpus Erinaceus Leaves and Potassium Bromate Administration on Some Biochemical and Haematological Indices in Albino Rats. *EAS Journal of Pharmacy and Pharmacology*, *2*(5). https://doi.org/10.36349/easjpp.2020.v02i05.002

Olaleye, M. T., Akinmoladun, A. C., Crown, O. O., Ahonsi, K. E., & Adetuyi, A. O. (2013). Homopterocarpin contributes to the restoration of gastric homeostasis by Pterocarpus erinaceus following indomethacin intoxication in rats. *Asian Pacific Journal of Tropical Medicine*, *6*(3). https://doi.org/10.1016/S1995-7645(13)60023-1

Olanipekun, M. K. (2013). Ethnobotanical Importance and Phytochemical Analysis of Some Medicinal Plants Commonly Used As Herbal Remedies in Oye Local Government Area of Ekiti- State, Nigeria. *IOSR Journal of Agriculture and Veterinary Science*, *5*(6). https://doi.org/10.9790/2380-0562831

Othman, L., Sleiman, A., & Abdel-Massih, R. M. (2019). Antimicrobial activity of polyphenols and alkaloids in middle eastern plants. In Frontiers in Microbiology (Vol. 10, Issue MAY). https://doi.org/10.3389/fmicb.2019.00911

Ozkan, G., Kamiloglu, S., Ozdal, T., Boyacioglu, D., & Capanoglu, E. (2016). Potential use of Turkish medicinal plants in the treatment of various diseases. In *Molecules* (Vol. 21, Issue 3). https://doi.org/10.3390/molecules21030257

Patrick, A. T. (2018). Antioxidant Effects of Methanolic Stem-Bark Extract of Pterocarpus Erinaceus on Gastric Acid Secretion. *In original: International Journal Of Sciences*, *0*(0).

Raina, H., Soni, G., Jauhari, N., Sharma, N., & Bharadvaja, N. (2014). Phytochemical importance of medicinal plants as potential sources of anticancer agents. In *Turkish Journal of Botany* (Vol. 38, Issue 6). https://doi.org/10.3906/bot-1405-93

Saidu, I. N., Umar, K. S., & Isa, M. H. (2015). Ethnobotanical survey of anticancer plants in Askira/Uba local government area of Borno State, Nigeria. *African Journal of Pharmacy and Pharmacology*, *9*(5). https://doi.org/10.5897/ajpp2014.4083

Salawu, O. A., Aliyu, M., & Tijani, A. Y. (2008). Hematological studies on the ethanolic stem bark extract of Pterocarpus Erinaceus poir (Fabaceae). *African Journal of Biotechnology*, *7*(9). https://doi.org/10.4314/ajb.v7i9.58650

Sarwar, M., Attitall, I. H., & Abdollahi, M. (2011). A review on the recent advances in pharmacological studies on medicinal plants; animal studies are done but clinical studies needs completing. *Asian Journal of Animal and Veterinary Advances*, *6*(8). https://doi.org/10.3923/ajava.2011.867.883

Segla, K. N., Adjonou, K., Rabiou, H., André Bationo, B., Mahamane, A., Guibal, D., Kokou, K., Chaix, G., Kokutse, A. D., & Langbour, P. (2020). Relations between the ecological conditions and the properties of Pterocarpus Erinaceus Poir. Wood from the Guinean-Sudanian and Sahelian zones of West Africa. *Holzforschung*, *74*(11). https://doi.org/10.1515/hf-2019-0250

Segla, K. N., Kokutse, A. D., Adjonou, K., Langbour, P., Chaix, G., Guibal, D., & Kokou, K. (2015). Biophysical characteristics of Pterocarpus Erinaceus (POIR.) timber in Togo's Guinean and Sudanian zones. *Bois et Forets Des Tropiques*, *324*. https://doi.org/10.19182/bft2015.324.a31266



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Sofowora, A., Ogunbodede, E., & Onayade, A. (2013). The role and place of medicinal plants in the strategies for disease prevention. In *African journal of traditional, complementary, and alternative medicines : AJTCAM / African Networks on Ethnomedicines* (Vol. 10, Issue 5). https://doi.org/10.4314/ajtcam.v10i5.2

Tittikpina, N. K., Sandjo, L. P., Nana, F., Vaillant, V., Fontanay, S., Philippot, S., Diop, Y. M., Batawila, K., Akpagana, K., Kirsch, G., Duval, R. E., Jacob, C., & Chaimbault, P. (2019). Investigation of the antifungal activity of Pterocarpus Erinaceus led to the identification of two new diarylpropanoids from its roots. *Phytochemistry Letters*, *32*. https://doi.org/10.1016/j.phytol.2019.05.013

Ugboko, H. U., Nwinyi, O. C., Oranusi, S. U., Fatoki, T. H., & Omonhinmin, C. A. (2020). Antimicrobial Importance of Medicinal Plants in Nigeria. In *Scientific World Journal* (Vol. 2020). https://doi.org/10.1155/2020/7059323

Zahra, W., Rai, S. N., Birla, H., Singh, S. sen, Rathore, A. S., Dilnashin, H., Keswani, C., & Singh, S. P. (2019). Economic importance of medicinal plants in Asian countries. In *Bioeconomy for Sustainable Development*. https://doi.org/10.1007/978-981-13-9431-7_19



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