

Chapter 5

Ethnomedicinal plants used in gynaecological problems

Anuradha Das¹, Vinayaka KS², Chinmoyee Chakraborty³, Deepa R Hebbar⁴, Jaswinder Kaur⁵, Nibedita Jena⁶ and Bidhan Chandra Roy^{7*}

¹Department of Botany, Sindri College, Sindri, Binod Bihari Mahto Koylanchal University, Dhanbad, Jharkhand, India

²Department of Botany, Sri Venkataramana Swamy College, Vidyagiri, Bantwal, Dakshina Kannada (affiliated to Mangalore University), Karnataka, India

³Department of Life Sciences, Dibrugarh University, Dibrugarh, Assam, India

⁴Department of Botany, Government First Grade College, Ramanagara, Karnataka, India

⁵Department of Botany, Government Degree College, Sirathu, Kaushambi, Uttar Pradesh, India

⁶Ambika Prasad Research Foundation, Odisha, India

⁷Department of Botany, Dinabandhu Mahavidyalaya, Bongaon, West Bengal, India

*Email-id: bidhanroybot@gmail.com



Licensed under a Creative Commons Attribution 4.0 International License

Abstract: Ethnomedicinal knowledge is crucial in managing women's reproductive health within numerous traditional communities. A variety of medicinal plants have been extensively utilized to address common gynaecological issues, including menstrual irregularities, leucorrhoea, infertility, uterine bleeding and complications arising during pregnancy and childbirth. The present study emphasizes key ethnomedicinal plants that have been traditionally employed for addressing gynaecological concerns, featuring species such as *Asparagus racemosus*, *Saraca asoca*, *Aloe vera* and *Vitex negundo*. Various parts of these plants, including roots, leaves, seeds, bark, flowers and whole plants, are utilized in forms such as decoctions, powders, juices and infusions. These plant-based treatments embody a rich traditional knowledge system and offer significant insights for future pharmacological and clinical investigations. The documentation of such ethnobotanical data is vital for preserving indigenous knowledge and investigating plant-based therapeutic options for women's reproductive health.

Keywords: Clinical investigation, indigenous knowledge, leucorrhoea, reproductive health

Introduction

Gynaecological disorders rank among the most prevalent health issues affecting women globally, especially in rural and resource-constrained areas where access to modern healthcare facilities may be restricted (Gao *et al.*, 2025). Conditions such as irregular menstrual cycles, excessive uterine bleeding, leucorrhoea, infertility, vaginal infections and complications during pregnancy and childbirth have a significant impact on the physical and reproductive health of women (Zhang, 2022). For centuries, traditional communities have depended on ethnomedicinal knowledge and locally sourced plant materials to address these health concerns (Laldingliani *et al.*, 2011). Ethnomedicinal plants are crucial in primary healthcare systems, offering affordable and culturally accepted solutions for women's reproductive issues (Kumar *et al.*, 2021). This traditional knowledge, transferred through generations, illustrates the strong connection between indigenous communities and their surrounding biodiversity (Hossain and Ballardini, 2021; Begam and Kumar, 2026). Various plant species from different botanical families are traditionally employed to treat gynaecological disorders through a range of preparations, including decoctions, infusions, powders, juices and pastes (Rehman *et al.*, 2022). For instance, *Asparagus racemosus* (Shatavari) roots are extensively utilized for addressing hormonal imbalance and infertility issues (Pandey *et al.*, 2025; Ademola *et al.*, 2026), while *Saraca asoca* bark and *Hibiscus rosa-sinensis* flower buds are frequently used to manage menorrhagia and excessive menstrual bleeding (Smrithi *et al.*, 2023; Priya *et al.*, 2025). Plants such as *Aloe vera* and *Apium graveolens* are traditionally applied to regulate menstruation and relieve menstrual discomfort (Mazzei *et al.*, 2024), whereas *Amaranthus viridis* and *Tinospora cordifolia* are utilized to treat leucorrhoea and vaginal infections (Sharma and Sharma, 2023). The variety of ethnomedicinal plants recorded for gynaecological healthcare highlights the extensive repository of indigenous knowledge related to the reproductive health of women. These plant-based remedies not only provide therapeutic benefits but also serve as potential sources for the discovery of bioactive compounds that may contribute to the development of modern pharmaceuticals. Therefore, documenting and scientifically validating ethnomedicinal plants used for gynaecological problems is essential for preserving traditional knowledge, promoting sustainable utilization of plant resources and improving women's healthcare systems.

Methodology

The present study is based on a comprehensive study including an extensive literature survey and field documentation. Published research articles, ethnobotanical records, books and peer-reviewed journals were systematically reviewed to compile information on medicinal plants traditionally used for gynaecological disorders. Relevant data regarding botanical name, family, parts used, mode of preparation and therapeutic applications were extracted and cross-verified. In addition, field visits were conducted to document plants in their natural habitats and photographic records were captured to support accurate identification and authenticity of the reported species (Plate 1; Kumar, 2025; Sahu *et al.*, 2026).

Results and discussion

The present study documented 30 ethnomedicinal plant species belonging to 20 families traditionally used for the treatment of various gynaecological disorders (Table 1). These plants are employed to manage conditions such as menstrual irregularities, menorrhagia, leucorrhoea, infertility, vaginal infections and complications during pregnancy and childbirth. Among the recorded families, Fabaceae and Lamiaceae were the most represented, indicating their importance in traditional healthcare practices related to women's reproductive health.

Table 1: List of plants traditionally used in the treatment of gynaecological problems

Botanical name	Common name	Family	Parts use/Mode of use with purposes	Source (s)
<i>Abrus precatorius</i> L.	Rosary pea (E)	Fabaceae	Seed/ 1 g of powder is taken orally with rice starch at night for 15 days.	Das <i>et al.</i> , (2016)
<i>Abutilon indicum</i> (L.) Sweet	Indian mallow (E)	Malvaceae	Leaf/ The decoction is used for vaginal douches, washes and to	Kaushik <i>et al.</i> , (2009)

			treat vaginal infections.	
<i>Achyranthes aspera</i> L.	Prickly chaff flower (E)	Amaranthaceae	Root/ Decoction made with water is taken orally for easy delivery.	Kolla <i>et al.</i> , (2025)
<i>Aloe vera</i> (L.) Burm.f.	True aloe (E)	Asphodelaceae	Gel/ Daily intake of 30 ml of fresh juice or gel is traditionally used to regulate menstruation, reduce bloating and alleviate pain.	Poordast <i>et al.</i> , (2021)
<i>Amaranthus viridis</i> L.	Green amaranth (E)	Amaranthaceae	Leaf/ Fresh juice is administered orally to treat vaginal white discharge.	Akshada and Pratiksha, (2023)
<i>Annona squamosa</i> L.	Custard apple (E)	Annonaceae	Leaf/ Decoction is orally consumed to facilitate delivery.	Singh <i>et al.</i> , (2025)
<i>Apium graveolens</i> L.	Wild celery (E)	Apiaceae	Seed/ 500mg of celery seed thrice a day for six weeks significantly improves menstrual problems.	Al-Asmari <i>et al.</i> , (2017)
<i>Argemone mexicana</i> L.	Prickly poppy (E)	Papaveraceae	Leaf/ Juice is administered orally.	Kolla <i>et al.</i> , (2025)
<i>Artemisia vulgaris</i> L.	Common mugwort (E)	Asteraceae	Leaf and stem/ Sipping up to 2 cups of dried leaves infusion daily is recommended	Ekiert <i>et al.</i> , (2020)

			for menstrual and digestive support.	
<i>Asparagus racemosus</i> Willd.	Shatavari (H)	Asparagaceae	Root/ 3-6 grams of dried root powder is boiled in 1 cup of milk and 1 cup of water, reduced to 1 cup, and consumed warm for treating hormonal imbalances and infertility.	Shaha and Bellankimath, (2017)
<i>Azadirachta indica</i> A.Juss.	Neem (H)	Meliaceae	Leaf/ For seven days, in an empty stomach, 10 ml of juice combined with a cup of water is orally taken to prevent miscarriage.	Balamurgan <i>et al.</i> , (2017)
<i>Boerhavia diffusa</i> L.	Punarnava (H)	Nyctaginaceae	Whole plant/ Extract mixed with a small amount of til oil used in the vagina guarantees a painless birth.	Tiwari and Nautiyal, (2024)
<i>Curculigo orchioidea</i> Gaertn.	Golden eye grass (E)	Hypoxidaceae	Root/ The tuberous powder is traditionally consumed with milk as a tonic to support impotence.	Bhukta <i>et al.</i> , (2023)
<i>Cynodon dactylon</i> (L.) Pers.	Common lawn grass (E)	Poaceae	Whole plant/ 30 ml of juice mixed with a glass of cow's	Ahmadi <i>et al.</i> , (2025)

			milk is taken orally once a night for three days to manage bleeding during pregnancy.	
<i>Desmostachya bipinnata</i> (L.) Stapf	Daabh (E)	Poaceae	Root/ Decoction (40-50 ml) is taken orally to check excessive uterine bleeding.	Mishra and Mittal, (2025)
<i>Euphorbia hirta</i> L.	Asthma weed (E)	Euphorbiaceae	Leaf/ Extract from crushed leaves is taken orally once daily in the morning.	Kolla <i>et al.</i> , (2025)
<i>Guilandina bonduc</i> L.	Knicker nut (E)	Fabaceae	Seed/ The hard shells of the seeds are cracked, and the inner white kernel is consumed directly for treating irregular menstruation.	Husain <i>et al.</i> , (2020); Gobbi and Katrahalli, (2023)
<i>Hemidesmus indicus</i> (L.) R.Br.	Anantamula (H)	Apocynaceae	Root/ Juice is administered to treat urinary tract issues.	Lakshmi and Rajendran, (2013)
<i>Hibiscus × rosa-sinensis</i> L.	Rose mallow (E)	Malvaceae	Flower buds/ 10-12 fresh, tender flower buds are crushed into a paste and mixed with milk or cold water, consumed daily to treat menorrhagia.	Smrithi <i>et al.</i> , (2023)

<i>Leucas aspera</i> (Willd.) Link	Common leucas (E)	Lamiaceae	Leaf/ Paste is applied topically for pain and pelvic cramping.	Hiremath <i>et al.</i> , (2022)
<i>Pedaliium murex</i> L.	Elephant caltrop (E)	Pedaliaceae	Leaf & stem/ An infusion of the stem and leaves is used to treat gonorrhoea.	Gobbi and Katrahalli, (2023)
<i>Punica granatum</i> L.	Pomegranate	Lythraceae	Leaf & seed/ Infusion of leaves is consumed for a month by soaking them overnight & the dry seeds are soaked and consumed twice daily.	Jang <i>et al.</i> , (2024)
<i>Saraca asoca</i> (Roxb.) W.J.de Wilde	Ashok (E)	Fabaceae	Bark/ 1-3 grams of dried bark powder is taken with rice-washed water or honey, twice daily, to reduce severe bleeding.	Salvi <i>et al.</i> , (2022)
<i>Tamarindus indica</i> L.	Tamarind (E)	Fabaceae	Fruit/ A paste made from the fruit pulp is mixed with honey and consumed to regulate menstrual cycles.	Panda <i>et al.</i> , (2018)
<i>Tectona grandis</i> L.f.	Teak (E)	Lamiaceae	Leaf/ One teaspoon of powder is mixed with milk is suggested to potentially	Ngwewon do <i>et al.</i> , (2024)

			support fertility.	
<i>Terminalia chebula</i> Retz.	Myrobalan (E)	Combretaceae	Fruit/ 1-6 grams of fruit powder, often taken with honey or warm water.	Meher <i>et al.</i> , (2018)
<i>Tinospora cordifolia</i> (Willd.) Hook.f. & Thomson	Giloy (H)	Menispermaceae	Leaf/200 g of leaves (often combined with neem) are boiled to make a decoction, used for vaginal infections.	Chaudhary <i>et al.</i> , (2024)
<i>Vitex negundo</i> L.	Chaste tree (E)	Lamiaceae	Leaf/ Leaves are boiled in water for a post-partum bath to aid in the recovery of the uterus.	Islam <i>et al.</i> , (2024)
<i>Withania somnifera</i> (L.) Dunal	Ashwagandha (H)	Solanaceae	Root/ 5-10 grams of powder are consumed with warm water or warm milk twice a day.	Azgomi <i>et al.</i> , (2018)
<i>Woodfordia fruticosa</i> (L.) Kurz	Fire flame bush (E)	Lythraceae	Flower/1-2 g powder mixed with honey or water, twice daily to treat menorrhagia.	Thakur <i>et al.</i> , (2021)

(E: English; H: Hindi)

Analysis of plant parts used revealed that leaves and roots are the most frequently utilized, followed by seeds, bark, flowers, fruits and whole plants. Various preparation methods, such as decoctions, infusions, powders, juices and pastes were commonly used, with oral administration being the most prevalent mode (Figure 1).



Plate 1: Some common plants used in gynaecological problems; a) *Abrus precatorius*, b) *Abutilon indicum*, c) *Argemone mexicana*, d) *Curculigo orchioides*, e) *Cynodon dactylon*, f) *Desmostachya bipinnata*, g) *Saraca asoca*, h) *Terminalia chebula* and i) *Woodfordia fruticosa*

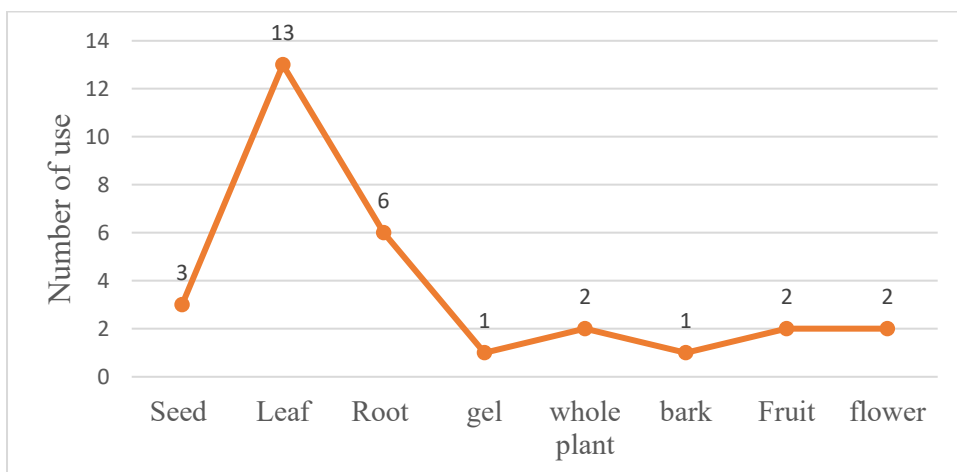


Figure 1: Different plant parts used to treat gynaecological problems

Several plants such as *Asparagus racemosus*, *Saraca asoca*, *Aloe vera* and *Vitex negundo* were widely recognized for their therapeutic properties in managing reproductive health disorders. These findings highlight the significant role of ethnomedicinal plants in traditional gynaecological healthcare. The documented species represent valuable sources of bioactive compounds and provide a basis for further pharmacological research and development of herbal medicines for women's reproductive health.

Conclusion

Present study documented 30 ethnomedicinal plant species from 20 distinct families traditionally used to treat gynaecological disorders such as menstrual irregularities, menorrhagia, leucorrhoea, infertility and pregnancy-related complications. Different plant parts, including leaves, roots, seeds, bark and flowers, were used in the form of decoctions, infusions, powders and juices for therapeutic purposes. The study also highlights the importance of traditional medicinal knowledge in women's reproductive healthcare. Further scientific validation and conservation efforts are needed to ensure the safe and sustainable use of these medicinal plants.

References

- Ademola J, Mahajan S, Srivathsan M and Langade D. (2026). Effects of shatavari (*Asparagus racemosus*) root extract on sexual wellness in women: findings from a prospective, randomized, double-blind, three-arm, parallel-group, placebo-controlled study. *International Journal of Women's Health*. 18: 561213. DOI: 10.2147/IJWH.S561213.
- Ahmadi M, Zare A, Shirazi MRJ, Askari S, Khoradmehr A, Mussin NM, Kaliyev AA, Rezazadeh FM, Saedi S, Taromsari MD, Boostani A, Tanideh N, Zhilisbayeva KR, Sharofiddin RS and Tamadon A. (2025). Therapeutic effects of *Cynodon dactylon* (*C. dactylon*) against polycystic ovary syndrome induced by letrozole in adult rats: ovarian and uterine aspects. *International Journal of Fertility and Sterility*. 19(2): 200-218.
- Akshada V and Pratiksha M. (2023). A study of biological potential of *Amaranthus viridis*. *International Journal of Pharmaceutical Research and Applications*. 8(3): 3300-3304.

- Al-Asmari AK, Athar MT and Kadasah SG. (2017). An updated phytopharmacological review on medicinal plant of Arab region: *Apium graveolens* Linn. Pharmacognosy Reviews. 11(21): 13-18.
- Azgomi RND, Zomorodi A, Nazemyieh H, Fazljou SMB, Bazargani HS, Nejatbakhsh F, Jazani AM and AsrBadr YA. (2018). Effects of *Withania somnifera* on reproductive system: a systematic review of the available evidence. BioMed Research International. 2018: 4076430. DOI: 10.1155/2018/4076430.
- Balamurugan S, Vijayakumar S, Prabhu S and Yabesh JEM. (2017). Traditional plants used for the treatment of gynaecological disorders in Vedaranyam taluk, South India- an ethnomedicinal survey. Journal of Traditional and Complementary Medicine. 8(2): 308-323.
- Begam SS and Kumar RV. (2026). Traditional knowledge and biodiversity conservation: a comprehensive review. Biodiversity Reports. 5(1): 10-12.
- Bhukta P, Ranajit SK, Sahu PK and Rath D. (2023). Phytochemistry and pharmacology of *Curculigo orchoides* Gaertn: a review. Journal of Applied Pharmaceutical Science. 13(10): 83-91.
- Chaudhary A, Das R, Mehta K and Mehta DK. (2024). Indian herb *Tinospora cordifolia* and *Tinospora* species: phytochemical and therapeutic application. Heliyon. 10(10): e31229. DOI: 10.1016/j.heliyon.2024.e31229.
- Das A, Jain V and Mishra A. (2016). A brief review on a traditional herb: *Abrus precatorius* (L.). International Journal of Forensic Medicine and Toxicological Sciences. 1(1): 1-10.
- Ekiert H, Pajor J, Klin P, Rzepiela A, Slesak H and Szopa A. (2020). Significance of *Artemisia vulgaris* L. (Common Mugwort) in the history of medicine and its possible contemporary applications substantiated by phytochemical and pharmacological studies. Molecules. 25(19): 4415. DOI: 10.3390/molecules25194415.
- Gao Y, Wang X, Wang Q, Jiang L, Wu C, Guo Y, Cui N, Tang H and Tang L. (2025). Rising global burden of common gynaecological diseases in women of childbearing age from 1990 to 2021: an update from the global burden of disease study 2021. Reproductive Health. 22: 57. DOI: 10.1186/s12978-025-02013-1.

- Gobbi V and Katrahalli K. (2023). Ethnomedicinal plants used in the treatment of gynaecological disorders by the traditional health practitioners in Bagalkot district, Karnataka, India. *Journal of Plant Science and Research*. 10(2): 245.
- Hiremath S, Pradeep and Jeerankalagi A. (2022). *Leucas aspera* Spreng (Dronapushpi): a review. *Journal of Ayurvedic and Herbal Medicine*. 8(1): 48-54.
- Hossain K and Ballardini RM. (2021). Protecting indigenous traditional knowledge through a holistic principle-based approach. *Nordic Journal of Human Rights*. 39(1): 51-72.
- Husain MK, Pratap GP, Alam M, Javed G and Kazmi MH. (2020). Botany, traditional uses and pharmacological importance of karanjwa (*Caesalpinia bonduc* (L.) Roxb.): a possible prophylactic AYUSH-unani single drug for the management of COVID-19. *International Journal of Herbal Medicine*. 8(6): 63-69.
- Islam Z, Caldeira GI, Canica M, Islam N and Silva O. (2024). *Vitex* genus as a source of antimicrobial agents. *Plants*. 13(3): 401. DOI: 10.3390/plants13030401.
- Jang JY, Kim D, Im E and Kim ND. (2024). Therapeutic potential of pomegranate extract for women's reproductive health and breast cancer. *Life*. 14(10): 1264. DOI: 10.3390/life14101264.
- Kaushik P, Kaushik D, Khokra S and Chaudhary B. (2009). *Abutilon indicum* (Atibala): ethno-botany, phytochemistry and pharmacology - a review. *International Journal of Pharmaceutical and Clinical Research*. 1(1): 4-9.
- Kumar M, Rawat S, Nagar B, Kumar A, Pala NA, Bhat JA, Bussmann RW, Cabral-Pinto M and Kunwar R. (2021). Implementation of the use of ethnomedicinal plants for curing diseases in the Indian Himalayas and its role in sustainability of livelihoods and socioeconomic development. *International Journal of Environmental Research and Public Health*. 18(4): 1509. DOI: 10.3390/ijerph18041509.
- Kumar S. (2025). Data collection from literature for biological sciences, medicinal plants research, ethnobotany and pharmacology: a methodological overview. *Journal of Biodiversity and Conservation*. 9(2): 167-169.

- Kolla A, Gawri S, Kolla V and Sahu B. (2025). Traditional ethnomedicinal practices for gynaecological disorders among the Gond tribe of Chhattisgarh: a regional perspective. *International Journal of Community Medicine and Public Health*. 12(3): 1523-1530.
- Lakshmi T and Rajendran R. (2013). *Hemidesmus indicus* commonly known as Indian sarasaparilla- an update. *International Journal of Pharma and Biosciences*. 4(4): 397-404.
- Laldingliani TBC, Thangjam NM, Zomuanawma R, Bawitlung L, Pal A and Kumar A. (2022). Ethnomedicinal study of medicinal plants used by Mizo tribes in Champhai district of Mizoram, India. *Journal of Ethnobiology and Ethnomedicine*. 18: 22. DOI: 10.1186/s13002-022-00520-0.
- Mazzei R, Genovese C, Magariello A, Patitucci A, Russo G and Tagarelli G. (2024). Plants in menstrual diseases: a systematic study from Italian folk medicine on current approaches. *Plants*. 13(5): 589. DOI: 10.3390/plants13050589.
- Mishra S and Mittal P. (2025). Delving into the therapeutic prospects of *Desmostachya bipinnata* (L.) in the context of polycystic ovary syndrome (PCOS): a comprehensive review. *Phytomedicine Plus*. 5(2025): 100741. DOI: 10.1016/j.phyplu.2025.100741.
- Meher SK, Panda P, Das B, Bhuyan GC and Rath KK. (2018). Pharmacological profile of *Terminalia chebula* Retz. and Willd. (Haritaki) in ayurveda with evidences. *Research Journal of Pharmacology and Pharmacodynamics*. 10(3): 115-124.
- Ngwewondo A, Ebouel FLE, Kowa TK, Yamthe LRT, Tamdem SG, Deutou AT, Tarkang PA, Lenta B and Agbor G. (2024). Evaluating the estrogenic activity and toxicity of *Tectona grandis* leaf extract on the reproductive and endocrine system of female wistar rats. *Journal of Drug Delivery and Therapeutics*. 14(12): 73-84.
- Panda T, Mishra N, Rahimuddin S, Pradhan BK, Rout SD and Mohanty RB. (2018). Folk medicine used for the treatment of gynaecological disorders in rural areas of Bhadrak district, Odisha, India. *Botanica*. 24(2): 132-142.
- Pandey AN, Yadav PK, Premkumar KV, Pandey AK and Chaube SK. (2025). Therapeutic potential of Shatavari (*Asparagus racemosus*) for psychological stress-mediated women's reproductive health

- disorders. Innovation Discovery. 2(3): 11. DOI: 10.53964/id.2025011.
- Poordast T, Ghaedian L, Ghaedian L, Najib FS, Alipour S, Hosseinzadeh M, Vardanjani HM, Salehi A and Hosseinimehr SJ. (2021). *Aloe vera*; a new treatment for atrophic vaginitis, a randomized double-blinded controlled trial. Journal of Ethnopharmacology. 270: 113760. DOI: 10.1016/j.jep.2020.113760.
- Priya GD, Devi KC, Crossia AWF and Bhuvaneswari S. (2025). Efficacy of *Saraca asoca* in the treatment of gynaecological disorders in herbal medicinal system. African Journal of Biomedical Research. 28(1): 1220-1222.
- Rehman S, Iqbal Z, Qureshi R, Rahman IU, Khan MA, Elshaer MMA, Al Farraj DA, Elshikh MS, Younas M, Sakhi S, Nawaz G, Ali N, Rahim F, Ali H, Khan I, Rahman SU and Elsaid NMAB. (2022). Ethnogynaecological knowledge of traditional medicinal plants used by the indigenous communities of North Waziristan, Pakistan. Evidence-Based Complementary and Alternative Medicine. 2022: 6528264. DOI: 10.1155/2022/6528264.
- Sahu JK, Sureshrao GA, Majhi S, Dimri R, Sharma BP, Tailor V, Kumar S and Patra A. (2026). Methodology for writing review articles in biological sciences: a systematic and scholarly guide. Archives of Current Research International. 26(2): 170-182.
- Salvi S, Varghese R, Digholkar G, Deshpande A, Malvankar C, Pawar A and Kumar D. (2022). *Saraca asoca*: a scoping review on the phytoconstituents, bioactives and their therapeutic effects. German Journal of Pharmaceuticals and Biomaterials. 1(3): 3-13.
- Shaha P and Bellankimath A. (2017). Pharmacological profile of *Asparagus racemosus*: a review. International Journal of Current Microbiology and Applied Sciences. 6(11): 1215-1223.
- Sharma PP and Sharma SP. (2023). Medicinal plants used for treating infertility and related disorders of women in India: a systematic review. International Journal of Research in Medical Sciences. 11(12): 4453-4470.
- Singh RP, Pattnaik AK, Rudrapal M and Bhattacharya S. (2025). *Annona squamosa* Linn.: a review of its ethnobotany, pharmacology,

phytochemistry, toxicity and conservation needs. Pharmacognosy Magazine. 21(2): 403-412.

Smrithi S, Shincymol VV, Ansary PY and Oommen SM. (2023). Effect of japakusuma mukula (flower buds of *Hibiscus rosa-sinensis* Linn.) with ksheera in asrigdhara- a case report. Kerala Journal of Ayurveda. 2(3): 15-20.

Thakur S, Kaurav H and Chaudhary G. (2021). A review on *Woodfordia fruticosa* Kurz (Dhatki): ayurvedic, folk and modern uses. Journal of Drug Delivery and Therapeutics. 11(3): 126-131.

Tiwari P and Nautiyal P. (2024). Role of punarnava in the management of gynaecological disorders: a comprehensive review. International Journal of AYUSH. 13(10): 39-50.

Zhang Y. (2022). Access to healthcare facilities and women's healthcare requirements in urban areas: a case study of Beijing. International Journal of Environmental Research and Public Health. 19(6): 3709. DOI: 10.3390/ijerph19063709.