

DAFTAR PUSTAKA

- Bargagli, M., Scoglio, M., Howles, S.A. and Fuster, D.G., 2025. Kidney stone disease: risk factors, pathophysiology and management. *Nature Reviews Nephrology*, 21(11), pp.794–808. Available at: <https://doi.org/10.1038/s41581-025-00990-x>
- Bramantyo, A. *et al.*, 2014. Prevalence of urinary tract infections in patients with kidney stones: a cross-sectional study, 2000–2013. Jakarta: RSUPN Cipto Mangunkusumo. Available at: <https://lontar.ui.ac.id/detail?id=20385732>
- Chai, T.-T., Wong, F.-C., Abd Manan, F., Ooh, K.F. and Mohd Ismail, N.I., 2014. *Orthosiphon aristatus*: a review of traditional uses, phytochemical profile, and pharmacological properties. *Journal of Medicinal Plants Research*, 7(9), pp.727–732.
- Cowan, M.M., 1999. Plant products as antimicrobial agents. *Clinical Microbiology Reviews*, 12(4), pp.564–582. Available at: <https://doi.org/10.1128/CMR.12.4.564>
- European Association of Urology (EAU), 2022. *EAU guidelines on urological infections*. Arnhem: European Association of Urology. Available at: <https://uroweb.org/guidelines/urological-infections> [Accessed 27 August 2025].
- Fadilah, N.N., 2023. Bioaktivitas dari tanaman kumis kucing (*Orthosiphon aristatus*). *Jurnal Ilmiah Farmasi*, 2(1). Available at: <https://journal.unesa.ac.id/index.php/icaj/article/view/32627> [Accessed 12 August 2025].
- Farmalkes, 2008. *Farmakope Herbal Indonesia*. Jakarta: Departemen Kesehatan Republik Indonesia. Available at: <https://farmalkes.kemkes.go.id/unduh/farmakope-herbal-indonesia-edisi-i/>
- Flores-Mireles, A.L., Walker, J.N., Caparon, M. and Hultgren, S.J., 2015. Urinary tract infections: epidemiology, mechanisms of infection and treatment options. *Nature Reviews Microbiology*, 13(5), pp.269–284. Available at: <https://doi.org/10.1038/nrmicro3432>
- Hidayati, A., Supriatna, S. and Hernani, M., 2017. Antilithiatic activity of *Sonchus arvensis* extract in a rat model. *Journal of Ethnopharmacology*, 210, pp.123–130. Available at: <https://doi.org/10.1016/j.jep.2017.08.021>
- Loubet, P., Ranfaing, J., Dinh, A., Dunyach-Remy, C., Bernard, L., Bruyère, F., Lavigne, J.P. and Sotto, A., 2020. Alternative therapeutic options to antibiotics for the treatment of urinary tract infections. *Frontiers in Microbiology*, 11, p.1509. Available at: <https://doi.org/10.3389/fmicb.2020.01509>
- Nisak, K. and Rini, C.S., 2021. Effectiveness of antibacterial activity of *Orthosiphon aristatus* leaves extract against *Proteus mirabilis* and *Staphylococcus saprophyticus*. *Medicra*, 4(2), pp.72–77. Available at: <https://doi.org/10.21070/medicra.v4i2.1582>
- Pangouw, E., Posangi, J., Lolo, W.A. and Bara, R., 2020. Uji aktivitas antibakteri jamur endofit pada daun dan batang tumbuhan kumis kucing (*Orthosiphon aristatus*) terhadap bakteri *Escherichia coli* dan *Staphylococcus aureus*. *PHARMACON*, 9(2), pp.211–218. Available at: <https://doi.org/10.35799/pha.9.2020.29273>

- Pearle MS, Goldfarb DS, Assimos DG, Curhan G, Denu-Ciocca CJ, Matlaga BR, et al. Medical Management of Kidney Stones: AUA Guideline. *Journal of Urology* [Internet]. 2014 Aug 1 [cited 2026 Apr 26];192(2):316–24. Available from: <https://doi.org/10.1016/j.juro.2014.05.006>
- Putra, B.R.S., Kusriani, D. and Fachriyah, E., 2013. Isolasi senyawa antioksidan dari fraksi etil asetat daun tempuyung (*Sonchus arvensis* L.). *Jurnal Kimia Sains dan Aplikasi*, 16(3), pp.69–72. Available at: <https://doi.org/10.14710/jksa.16.3.69-72>
- Rafi, M., Suwartiny, N.L. and Rohaeti, E., 2022. Traditional use, phytochemical composition, and biological activities of *Sonchus arvensis*. *Indonesian Journal of Pharmacy*, 33(4), pp.540–553. Available at: <https://doi.org/10.22146/ijp.3823>
- Sakti, B.W., Andriana, D. and Widyaningrum, I., 2023. Uji aktivitas antibakteri ekstrak etanol dan fraksi etanol-air daun kumis kucing (*Orthosiphon stamineus*) terhadap *Pseudomonas aeruginosa*. *Jurnal Kedokteran Komunitas*, 11(2). Available at: <https://jim.unisma.ac.id/index.php/kkfk/article/view/22663/16964>
- Scales, C.D. et al., 2012. Prevalence of kidney stones in the United States. *European Urology*, 62(1), pp.160–165. Available at: <https://doi.org/10.1016/j.eururo.2012.03.052>
- Soto, S.M., 2014. Importance of biofilms in urinary tract infections: new therapeutic approaches. *Advances in Biology*, 2014, pp.1–13. Available at: <https://doi.org/10.1155/2014/543974>
- Tavichakorntrakool, R. et al., 2012. Extensive characterizations of bacteria isolated from catheterized urine and stone matrices in patients with nephrolithiasis. *Nephrology Dialysis Transplantation*, 27(11), pp.4125–4130. Available at: <https://doi.org/10.1093/ndt/gfs085>
- Trautner, B.W. and Darouiche, R.O., 2004. Role of biofilm in catheter-associated urinary tract infection. *American Journal of Infection Control*, 32(3), pp.177–183. Available at: <https://doi.org/10.1016/j.ajic.2003.08.005>
- Türk, C., Neisius, A., Petrik, A., Seitz, C., Skolarikos, A., Thomas, K. and Gambaro, G., 2022. *EAU guidelines on urolithiasis*. Arnheim: European Association of Urology. Available at: <https://uroweb.org/guidelines/urolithiasis> [Accessed 23 August 2025].
- Waras Nurcholis, Fachrur Rizal Mahendra, Milanda Fiorella Gultom, Safira Khoirunnisa, Mayang Anggita Cahya Kurnia, & Hamdan Hafizh Harahap. (2022). Phytochemical, Antioxidant and Antibacterial Screening of *Orthosiphon stamineus* Leaf Extract Two Phenotypes. *Jurnal Jamu Indonesia*, 7(3), 121-129. <https://doi.org/10.29244/jji.v7i3.280>
- WHO, 2013. *Kesehatan reproduksi wanita infeksi saluran kemih (ISK)*. Jakarta: Salemba Medika.
- Widyaningrum, I., Andriana, D. and Sakti, B.W., 2023. Uji aktivitas antibakteri ekstrak etanol dan fraksi etanol-air daun kumis kucing (*Orthosiphon stamineus*) terhadap *Pseudomonas aeruginosa*. *Jurnal Ilmu Kefarmasian Indonesia*, 21(1), pp.45–52.



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Bakteri *Pseudomonas aeruginosa* secara in vitro

Arin Cahyulis Abidin, Prof. Dr. Mae Sri Hartati W, Apt, M.Si; dr. Mia Munawaroh Yuniyanti, M.Biomed.

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Winarto, W.P., 2004. *Tempuyung: tanaman penghancur batu ginjal*. Jakarta: Agromedia Pustaka.

Wulandari, T.M. *et al.*, 2021. An overview of the traditional uses, phytochemicals, and pharmacological activities of tempuyung (*Sonchus arvensis* L.). *International Journal of Pharmaceutical Sciences and Medicine*, 6(6), pp.34–41. Available at: <https://doi.org/10.47760/ijpsm.2021.v06106.004>

Zhang, X. *et al.*, 2021. Synergistic effects of herbal extracts on antibiotic-resistant Gram-negative bacteria. *Journal of Herbal Medicine*, 15(3), pp.45–52.