



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Volume 96, December 2017, Pages 348-360Chemical constituents and medical benefits of *Plantago major* (Review)Adom, M.B.^a, Taher, M.^a,  Mutalabisin, M.F.^a, Amri, M.S.^a, Abdul Kudos, M.B.^a, Wan Sulaiman, M.W.A.^b, Sengupta, P.^{ad}, Susanti, D.^c ^aDepartment of Pharmaceutical Technology, Faculty of Pharmacy, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, Kuantan, Pahang, Malaysia^bDepartment of Basic Medical Sciences, Faculty of Pharmacy, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, Kuantan, Pahang, Malaysia^cDepartment of Chemistry, Faculty of Science, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, Kuantan, Pahang, Malaysia[View additional affiliations](#) 

Abstract

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The medicinal benefits of *Plantago major* have been acknowledged around the world for hundreds of years. This plant contains a number of effective chemical constituents including flavonoids, alkaloids, terpenoids, phenolic acid derivatives, iridoid glycosides, fatty acids, polysaccharides and vitamins which contribute to its exerting specific therapeutic effects. Correspondingly, studies have found that *Plantago major* is effective as a wound healer, as well as an antiulcerative, antidiabetic, antidiarrhoeal, anti-inflammatory, antinociceptive, antibacterial, and antiviral agent. It also combats fatigue and cancer, is an antioxidant and a free radical scavenger. This paper provides a review of the medicinal benefits and chemical constituents of *Plantago major* published in journals from year 1937 to 2015 which are available from PubMed, ScienceDirect and Google Scholar. © 2017 Elsevier Masson SAS

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Author keywords

Chemical constituents Medicinal benefits *Plantago major*

Indexed keywords

EMTREE drug terms: alkaloid derivative antibiotic agent antidiabetic agent antidiarrheal agent
antiinflammatory agent antineoplastic agent antinociceptive agent antioxidant
antiulcer agent antiviral agent fatty acid flavonoid iridoid phenol derivative
Plantago major extract polysaccharide terpenoid derivative vitamin
wound healing promoting agentEMTREE medical terms: antibacterial activity antidiabetic activity antidiarrheal activity antiinflammatory activity
antineoplastic activity antinociception antioxidant activity antiulcer activity
antiviral activity chemical composition drug mechanism fatigue flower fruit
human malignant neoplasm nonhuman plant leaf plant root plant seed
plant stem plant taxonomy *Plantago major* priority journal Review
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