

Document details

[Back to results](#) | 1 of 1

[Export](#) [Download](#) [Print](#) [E-mail](#) [Save to PDF](#) [Add to List](#) [More...](#)

Archives of Orofacial Sciences [Open Access](#)
Volume 13, Issue 2, 2018, Pages 55-62

Linum usitatissimum as an antimicrobial agent and a potential natural healer: A review (Review)

Fadzir, U.A.^a, Darnis, D.S.^b, Mustafa, B.E.^c, Mokhtar, K.I.^c  

^aDepartment of Biotechnology, International Islamic University Malaysia, Bandar Indera Mahkota, Kuantan, Pahang, 25200, Malaysia

^bDepartment of Chemistry, Kulliyah of Science, International Islamic University Malaysia, Bandar Indera Mahkota, Kuantan, Pahang, 25200, Malaysia

^cDepartment of Fundamental Dental and Medical Sciences, Kulliyah of Dentistry, International Islamic University Malaysia, Bandar Indera Mahkota, Kuantan, Pahang, 25200, Malaysia

Abstract

 [View references \(47\)](#)

Linum usitatissimum commonly known as flaxseed is one of the oldest crops traditionally cultivated mainly for its oil purposes. Flaxseed is widely known for its rich source of nutritive and bioactive compounds. Recently, it has gained considerable interest due to the potential health benefits attributed to its component of metabolites, including its antimicrobial properties. Two main components of flaxseed, the unsaturated fatty acids and lignan, are suggested as the main metabolites that exhibit antimicrobial activities. This paper aims to give an overview on fatty acid and phenolic compound in flaxseed and their possible activities as antimicrobial agents. © Penerbit Universiti Sains Malaysia. 2018.

SciVal Topic Prominence

Topic: Flax | Lignans | diglucoside SDG

Prominence percentile: 92.815 

Reaxys Database Information

 [View Compounds](#)

Author keywords

[Alpha linolenic acid](#) [Antimicrobial](#) [Flaxseed](#) [Lignan](#) [Phenolic compound](#)

Funding details

Funding sponsor	Funding number	Acronym
Ministry of Higher Education, Malaysia		
Funding text		
The authors acknowledge Fundamental Research Grant Scheme (FRGS 15-252-0493) under Ministry of Higher Education, Malaysia (MoHE) for the financial support.		

Metrics

0 Citations in Scopus

0 Field-Weighted Citation Impact



PlumX Metrics

Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

Cited by 0 documents

Inform me when this document is cited in Scopus:

[Set citation alert >](#)

[Set citation feed >](#)

Related documents

Antimicrobial activity of flaxseed meal extract against Escherichia coli O157:H7 and Staphylococcus aureus inoculated on red mustard

Son, H.-J. , Song, K.B. (2017) *Journal of Microbiology and Biotechnology*

Flaxseed as a source of functional ingredients

Rubilar, M. , Gutiérrez, C. , Verdugo, M. (2010) *Journal of Soil Science and Plant Nutrition*

Hydrolysis studies of flaxseed extract by high performance liquid chromatography

Draganescu, D. , Dodi, G. , Stoica, I. (2017) *Cellulose Chemistry and Technology*

View all related documents based on references

Find more related documents in Scopus based on:

References (47)

[View in search results format >](#) [All](#) [Export](#) [Print](#) [E-mail](#) [Save to PDF](#) [Create bibliography](#)

- 1 Abdelillah, A., Houcine, B., Halima, D., Meriel, C.S., Imane, Z., Eddine, S.D., Abdallah, M., (...), Daoudi, C.S. Evaluation of antifungal activity of free fatty acids methyl esters fraction isolated from Algerian Linum usitatissimum L. seeds against toxigenic Aspergillus
(2013) *Asian Pacific Journal of Tropical Biomedicine*, 3 (6), pp. 443-448. Cited 15 times.
<http://www.journals.elsevier.com/asian-pacific-journal-of-tropical-biomedicine/>
doi: 10.1016/S2221-1691(13)60094-5
- [View at Publisher](#)
-
- 2 Adolphe, J.L., Whiting, S.J., Juurlink, B.H.J., Thorpe, L.U., Alcorn, J. Health effects with consumption of the flax lignan secoisolariciresinol diglucoside
(Open Access)
(2010) *British Journal of Nutrition*, 103 (7), pp. 929-938. Cited 131 times.
doi: 10.1017/S0007114509992753
- [View at Publisher](#)
-
- 3 Al-Bayati, F.A. Antibacterial activity of Linum usitatissimum L seeds and active compound detection
(2007) *Rafidain J Sci*, 18 (2), pp. 27-36. Cited 3 times.
-
- 4 Al-Mathkhury, H.J.F., Al-Dhamin, A.S., Al-Taie, K.L. Antibacterial and antibiofilm activity of flaxseed oil
(2016) *Iraqi J Sci*, 57 (2 B), pp. 1086-1095.
-
- 5 Baker, E.J., Miles, E.A., Burdge, G.C., Yaqoob, P., Calder, P.C. Metabolism and functional effects of plant-derived omega-3 fatty acids in humans
(2016) *Progress in Lipid Research*, 64, pp. 30-56. Cited 71 times.
www.elsevier.com/locate/plipres
doi: 10.1016/j.plipres.2016.07.002
- [View at Publisher](#)
-
- 6 Barbary, O.M., El-Sohaimy, S.A., El-Saadani, M.A., Zeitoun, A.M.A. Antioxidant, antimicrobial and anti-HCV activities of lignan extracted from flaxseed
(2010) *Res J Agric Biol Sci*, 6 (3), pp. 247-256. Cited 19 times.
-
- 7 Bernacchia, R., Preti, R., Vinci, G. Chemical composition and health benefits of flaxseed
(2014) *Austin J Nutri Food Sci*, 2 (8), p. 1045. Cited 17 times.