

Brought to you by [INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA](#)

Scopus

[Back](#)

A Review of Medicinal Plants from the Anak Dalam Tribe of Jambi: An Evaluation of Their Potential for Diabetic Wound Healing Effects—Current Status and Future Perspectives

[Drug Design, Development and Therapy](#) • Review • Open Access • 2026 • DOI: 10.2147/DDDT.S602665 [Djatkiko, Adjeng Pratiwi](#)^a; [Chaerunisaa, Anis Yohana](#)^b; [Khairinisa, Miski Aghnia](#)^c; [Khatib, Alfi](#)^d; [Muhaimin, Muhaimin](#)^{a,e} ^a Department of Pharmaceutical Biology, Faculty of Pharmacy, Universitas Padjadjaran, Sumedang, 45363, Indonesia[Show all information](#)

0

Citations

[View PDF](#)[Full text](#) [Export](#)[Save to list](#)

Document	Impact	Cited by (0)	References (193)	Similar documents
----------	--------	--------------	------------------	-------------------

Abstract

The Anak Dalam tribe, popularly known as Suku Anak Dalam (SAD), is an indigenous community in the Jambi Province of Indonesia. The traditional knowledge within this group is deeply intertwined with forest resources, particularly regarding medicinal plants utilized for wound healing. Significantly, diabetic wounds are a severe complication of diabetes mellitus. These wounds are typically characterized by delayed healing processes, high susceptibility to infection, and an elevated risk of amputation. Accordingly, this review summarizes medicinal plants traditionally employed by the Anak Dalam community for various wound-related conditions. Beyond simple documentation, the study evaluates the potential relevance of these species as candidate sources for diabetic wound-healing research. In this study, a narrative literature review was conducted utilizing databases such as Scopus, ScienceDirect, PubMed, Google Scholar, and ResearchGate, covering publications released between 2015 and 2025. Altogether, 40 medicinal plants were examined. Specifically, several species (ie, *Anredera cordifolia*, *Centella asiatica*, *Psidium guajava*, and *Piper betle*) demonstrated pharmacological activities directly relevant to wound-healing processes. The primary phytochemical constituents identified across these studies are flavonoids, alkaloids, terpenoids, saponins, and phenolic compounds. Crucially, these compounds are reported to exhibit potent antioxidant, anti-inflammatory, and antibacterial activities. Furthermore, these substances support vital biological processes associated with tissue repair, such as fibroblast proliferation, collagen synthesis, angiogenesis, and re-epithelialization. Most existing evidence, however, is derived from in vitro assays, animal models, or indirect pharmacological investigations. Therefore, the findings of this review should be viewed as a basis for generating potential candidates rather than as definitive proof of established clinical efficacy. This review highlights the necessity of integrating ethnobotanical knowledge with rigorous pharmacological validation. Ultimately, such integration is essential to support future research into evidence-based herbal approaches for the management of diabetic wounds. © 2026 Djatkiko et al.

Author keywords

Anak Dalam tribe; diabetic wound healing; herbal medicine; medicinal plants; traditional medicine

Indexed keywords

MeSH

Animals; Diabetes Complications; Diabetes Mellitus; Humans; Indonesia; Plant Extracts; Plants, Medicinal; Wound Healing

EMTREE drug terms

alkaloid; antioxidant; flavonoid; midazolam; phenol derivative; phytochemical; saponin; terpenoid; plant extract

EMTREE medical terms

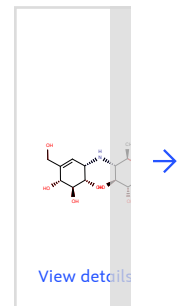
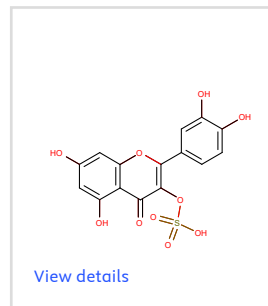
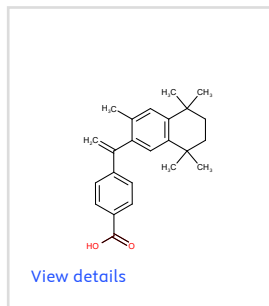
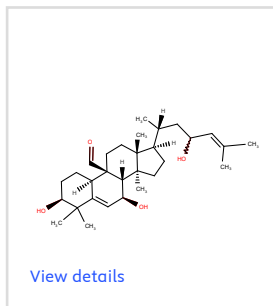
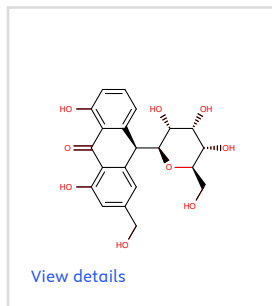
angiogenesis; animal model; *Anredera cordifolia*; antibacterial activity; *Centella asiatica*; collagen synthesis; diabetes mellitus; diabetic wound; drug therapy; electric potential; epithelization; evidence based practice; fibroblast; forest; guava; healing impairment; herbal medicine; human; in vitro

study; Indonesia; medicinal plant; nonhuman; pharmacology; Piper betle; review; therapy; tissue repair; traditional medicine; wound healing; animal; chemistry; diabetes mellitus; diabetic complication; drug effect

Reaxys Chemistry database information

Reaxys is designed to support chemistry researchers at every stage with the ability to investigate chemistry related research topics in peer-reviewed literature, patents and substance databases. Reaxys retrieves substances, substance properties, reaction and synthesis data.

Substances

[View all substances \(22\)](#)


Powered by **Reaxys**

Chemicals and CAS Registry Numbers

Unique identifiers assigned by the Chemical Abstracts Service (CAS) to ensure accurate identification and tracking of chemicals across scientific literature.

midazolam	59467-70-8, 59467-96-8
saponin	8047-15-2
Plant Extracts	

Funding details

Details about financial support for research, including funding sources and grant numbers as provided in academic publications.

Funding sponsor	Funding number	Acronym
Lembaga Pengelola Dana Pendidikan See opportunities by LPDP ↗		LPDP
Universitas Padjadjaran See opportunities by UNPAD ↗	2625/UN6.3.1/PT.00/2025	UNPAD
Universitas Padjadjaran See opportunities by UNPAD ↗		UNPAD
Indonesian Ministry of Higher Education, Science and Technology	4303/ B3/DT.03.08/2025, 3927/UN6, RKT/HK.07.00/2025	

Funding text

The authors would like to thank Directorate of Research, Downstream, and Community Engagement Universitas Padjadjaran for providing the Beasiswa Unggulan Pascasarjana Padjadjaran (BUPP) Grant for this research in 2025 (Contract No. 2625/UN6.3.1/PT.00/2025). This publication charge is funded by Universitas Padjadjaran through the Indonesian Endowment Fund for Education (LPDP) on behalf of the Indonesian Ministry of Higher Education, Science and Technology and managed under the EQUITY Program (Contract No. 4303/ B3/DT.03.08/2025 and 3927/UN6. RKT/HK.07.00/2025).

Corresponding authors

Corresponding author	M. Muhaimin
Affiliation	Department of Pharmaceutical Biology, Faculty of Pharmacy, Universitas Padjadjaran, Sumedang, 45363, Indonesia
Email address	muhaimin@unpad.ac.id

© Copyright 2026 Elsevier B.V., All rights reserved.

Abstract

Author keywords

Indexed keywords

Reaxys Chemistry database information

Chemicals and CAS Registry Numbers

Funding details

Corresponding authors

About Scopus

[What is Scopus](#)

[Content coverage](#)

[Scopus blog](#)

[Scopus API](#)

[Privacy matters](#)

Language

[日本語版を表示する](#)

[查看简体中文版本](#)

[查看繁體中文版本](#)

[Просмотр версии на русском языке](#)

Customer Service

[Help](#)

[Tutorials](#)

[Contact us](#)

ELSEVIER

[Terms and conditions](#) [Privacy policy](#) [Cookies settings](#)

All content on this site: Copyright © 2026 [Elsevier B.V.](#), its licensors, and contributors. All rights are reserved, including those for text and data mining, AI training, and similar technologies. For all open access content, the relevant licensing terms apply.

