Agriculture and Food

A IMS Agriculture and Food, 11(3): 584–599.
DOI: 10.3934/agrfood.2026030
Received: 19 April 2026
Revised: 13 July 2026
Accepted: 24 July 2026
Published: 04 August 2026

https://www.aimspress.com/journal/agriculture

Research article

Wild-type SARS-CoV-2–ACE2 binding inhibitory activity of Zingiberaceae herbs and spices

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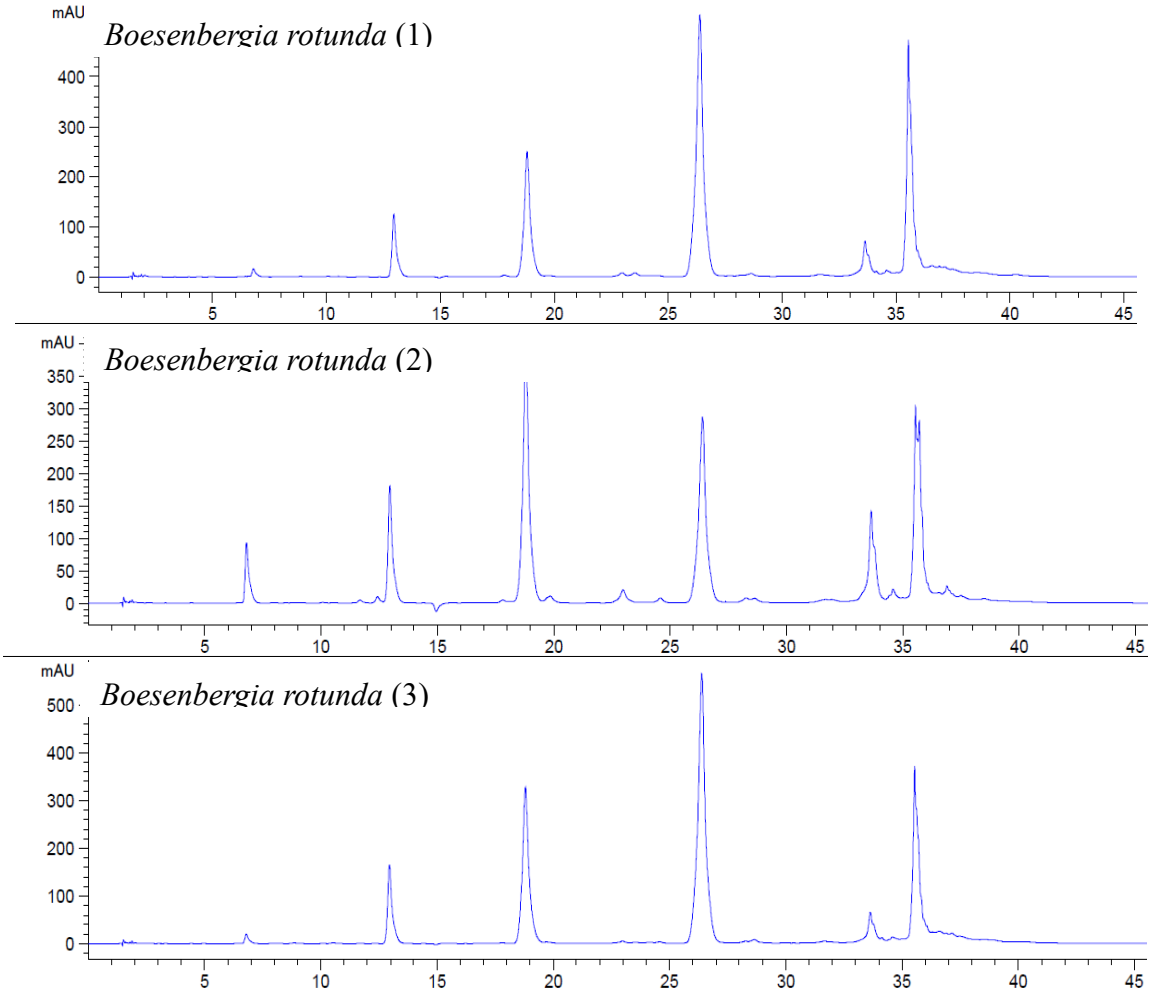
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Table S1. Zingiberaceace plant samples.

Scientific name*	Used part	Source (Region)	Extraction yield (% w/w)
Alpinia galanga (L.)	Rhizome	Sakon Nakhon (Northeast)	19
Alpinia galanga (L.)	Rhizome	Sakon Nakhon (Northeast)	10
Alpinia galanga (L.)	Rhizome	Sakon Nakhon (Northeast)	7
Curcuma aromatic Salisb.	Rhizome	Sakon Nakhon (Northeast)	11
Zingiber montanum (J. Koenig) Link ex Dietr.	Rhizome	Sakon Nakhon (Northeast)	7
Curcuma parviflory Wall.	Rhizome	Sakon Nakhon (Northeast)	5
Curcuma longa Linn.	Rhizome	Sakon Nakhon (Northeast)	6
Kaempferia marginata Carey	Rhizome	Kalasin (Northeast)	17
Boesenbergia rotunda (L.) Mansf.	Rhizome	Kalasin (Northeast)	10
Kaempferia sp.	Rhizome	Kalasin (Northeast)	6
Zingiber zerumbet L.	Rhizome	Kalasin (Northeast)	12
Boesenbergia rotunda (L.) Mansf.	Rhizome	Chiang Mai (North)	11
Boesenbergia rotunda (L.) Mansf.	Rhizome	Bangkok (Centre)	11
Kaempferia parviflora Wall.	Rhizome	Bangkok (Centre)	9
Curcuma sp.	Rhizome	Bangkok, (Centre)	12
Curcuma longa L.	Rhizome	Bangkok, (Centre)	13
Amomum biflorum Jack.	Leave and stem	Bangkok (Centre)	4
Curcuma comosa Roxb.	Rhizome	Bangkok (Centre)	10
Kaempferia galanga L.	Rhizome	Bangkok (Centre)	6
Zingiber zerumbet L.	Rhizome	Bangkok (Centre)	7
Zingiber officinale R.	Rhizome	Bangkok (Centre)	8

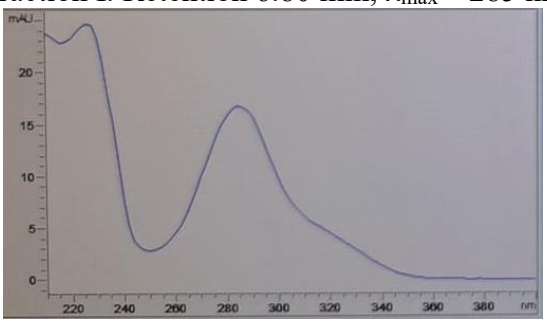
*Note: Source: Department of Agriculture (Katepraseart, 2007), Department of Medical Sciences (2021-2022), and Phechphakdee et al. (2020).

(A) Chromatograms of *Boesenbergia rotunda* rhizome ethanol extracts

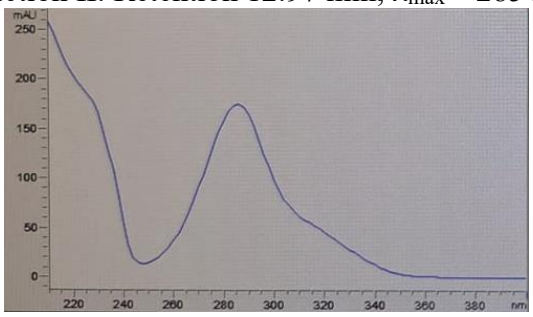


(B) UV-Spectra of all peaks in *B. rotunda* extracts

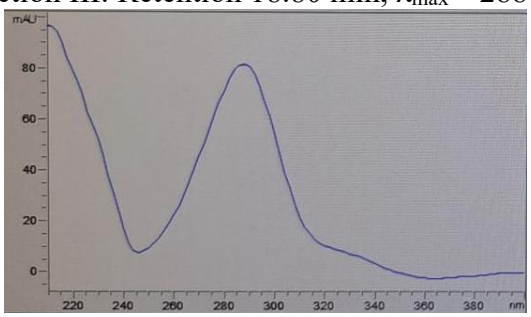
Fraction I: Retention 6.80 min, λ_{max} = 285 nm



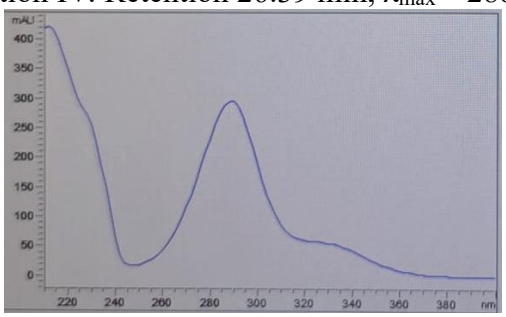
Fraction II: Retention 12.97 min, λ_{max} = 285 nm



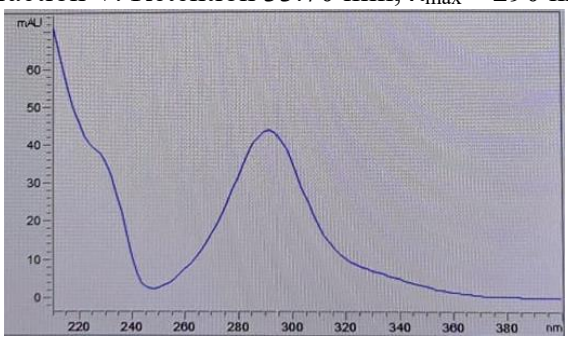
Fraction III: Retention 18.80 min, λ_{max} = 288 nm



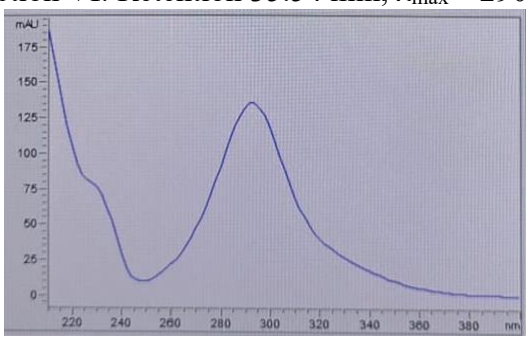
Fraction IV: Retention 26.39 min, λ_{max} = 288 nm



Fraction V: Retention 33.70 min, λ_{max} = 290 nm



Fraction VI: Retention 35.54 min, λ_{max} = 290 nm



(C) Standard Panduratin A: Retention time 35.54 min, λ_{max} = 290 nm

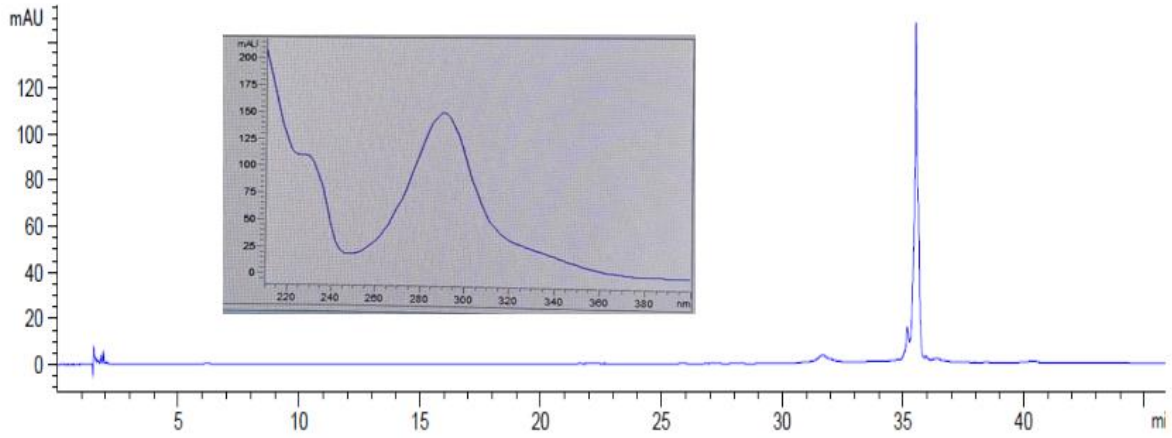


Figure S1. HPLC chromatography of three samples of *Boesenbergia rotunda* extracts at concentration of 1 mg/ml (A), UV-spectra of six major compounds in *Boesenbergia rotunda* extracts (B), and HPLC chromatography and UV-spectrum of a standard compound, panduratin A (C).

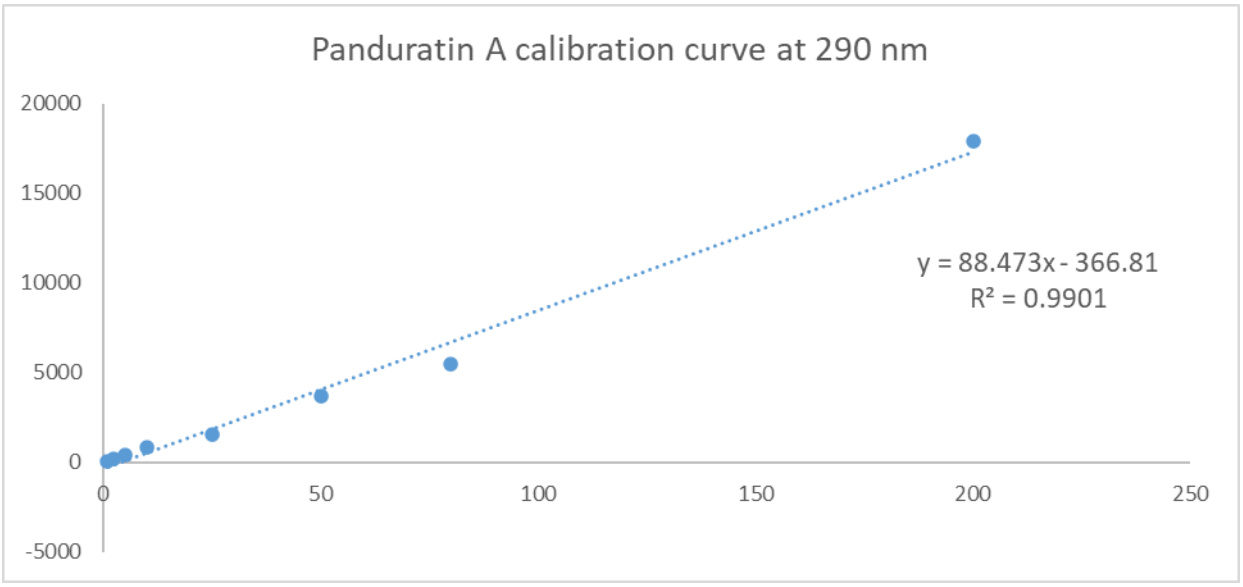


Figure S2. Panduratin A calibration curve integrated at 290 nm.

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