

1 **Supplementary Data**

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3 **Materials and Methods**

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5 **Materials**

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7 Ferric chloride, conc H₂SO₄, Potassium bismuth iodide solution, chloroform (all chemicals were
8 supplied by Department of Pharmacognosy, KNUST, Kumasi Ghana).

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10 **Method**

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12 Fresh leaves of *Cordia vignei* were collected and processed to obtain the extract as described in
13 section 2.1.

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15 **1. Phytochemical screening of hydroethanolic extract of *Cordia vignei* leaves.**

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17 The extract was screened qualitatively for the presence of phytochemicals such as tannins,
18 saponins, glycosides, steroids, alkaloids, coumarins, flavonoids and terpenoids by using simple
19 protocols as described by Sofowora, (1993) [34].

20 **2. Fourier transform infrared (FTIR)-spectroscopic analysis of the extract**

21 The Fourier transform infrared spectroscopy was conducted to detect the characteristic functional
22 groups of the hydroethanolic extract of *Cordia vignei* leaves using the procedure previously
23 described by Pavia *et al.*, (2001) [35] and Lakshmia *et al.*, (2015) [36]. Briefly, 5 mg of the extract
24 was pressed with potassium bromide (KBr) and the pellet was analyzed by using Spectrum Two
25 FT-IR Spectrometer (PERKIN-ELMER, UATR2, 94133, USA).

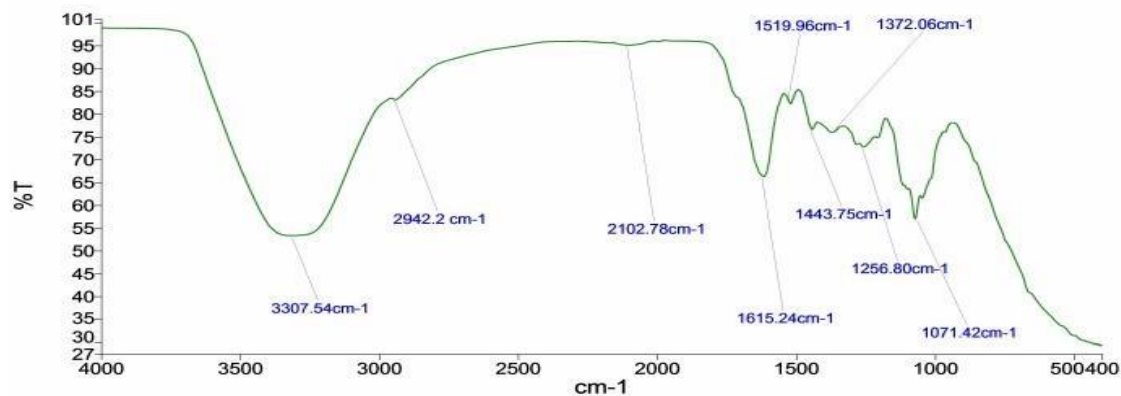
26 **Results**

27 **1. Phytochemical screening of the extract**

28 The qualitative phytochemical test showed that saponins, tannins, alkaloids, flavonoids and
29 terpenoids were present in the extract.

30 **2. Fourier transform infrared (FTIR) spectroscopy**

31 The Fourier transform infrared (FTIR) spectra are shown in the figure S1 below. The characteristic
32 functional groups representing these peaks (cm⁻¹) are presented in table S1. Wavenumbers in the
33 fingerprint region (1500-400 cm⁻¹) and their functional groups were not shown on the table.



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35 Figure S1. Fourier transform infrared spectra of hydroethanolic extract of *Cordia vignei* leaves.
 36 Five milligram (5 mg) of the extract was pressed with KBr to form a disc and this was analyzed
 37 by using Spectrum Two FT-IR Spectrometer. The results were presented as wavenumber (cm^{-1})
 38 (horizontal) against percentage transmittance (% T) (vertical). The wavenumbers and their
 39 corresponding functional groups are presented in the table S1 below.

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41 Table S1. Characteristic functional groups identified in FTIR spectroscopy

number	Wavenumber (cm^{-1})	Functional groups
1	3307.20, 1256.80	Phenol
2	3307.20, 1071.42	Alcohol
3	2933.69	Alkane
4	1615.24	Alkene
5	1517.93	Aromatic compound

42 Five milligram (5 mg) of the extract was pressed with potassium bromide (KBr) to form a disc and
 43 this was analyzed by using Spectrum Two FT-IR Spectrometer. The results were presented as
 44 wavenumber (cm^{-1}) (horizontal) against percentage transmittance (% T) (vertical) as shown on
 45 figure S1 above.

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