

Schème-1: Outline for extraction of compound.

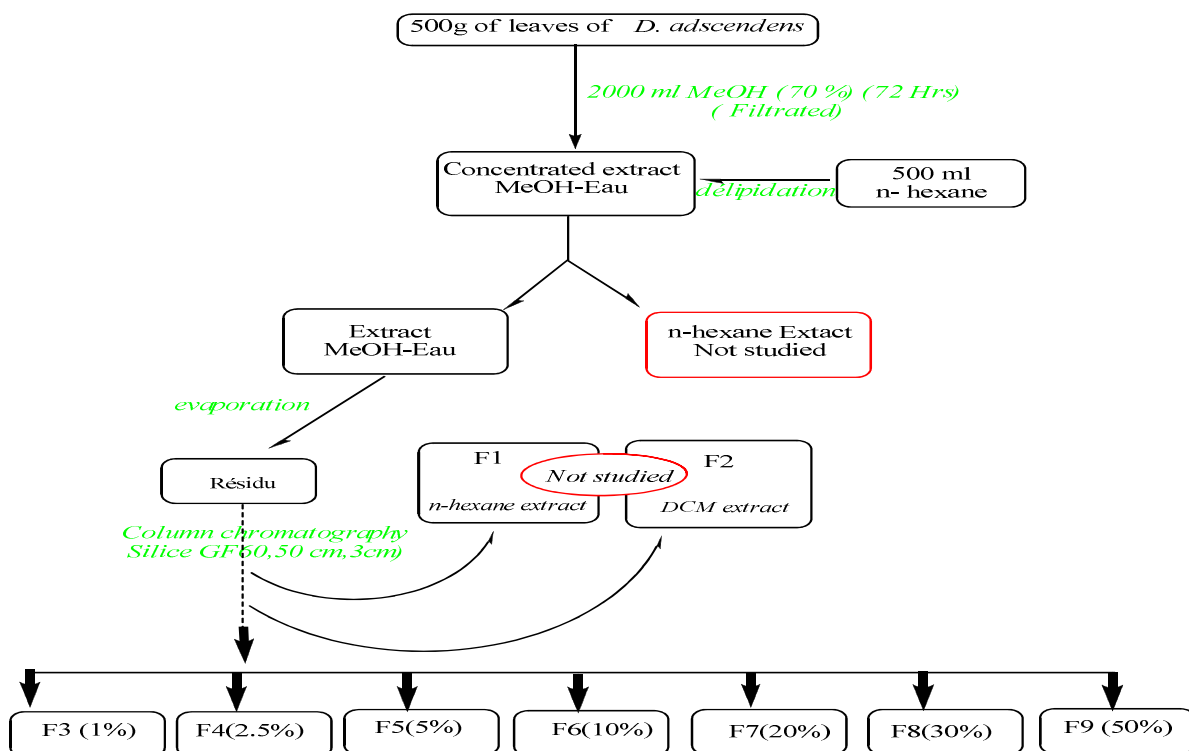


Table-1: Determination of the inhibition zone of the *D. adscendens* leaves extract.

M.O	Inhibition Zone (ø mm) (<i>D. adscendens</i>)						
	E ₁		CN (-)		CN(+)		
	We	MWE	H ₂ Od	MW (50%)	Ap	Gt	Ny
E.c	9±1	12±1	0	0	58±3	55±2	na
C.a	na	10±1	0	0	na	na	53±1
A.n	na	na	0	0	na	na	47±1
P.a	7±1	11±2	0	0	45±3	45±2	na
B.s	8±1	11±1	0	0	55±3	45±2	na
S.a	11±2	13±2	0	0	56±3	44±2	na

- Values are mean ± SD of three determinations.
- *S.a* : *Staphylococcus aureus* ; *B.s* : *Bacillus subtilis* ; *E.c.* : *Escherichia coli* ; *P.a.* : *Pseudomonas aeruginos*; *A.n.*: *Aspergillus niger* ; *C.a.*: *Candida albicans*.
- water extract, MWE: methanol-water extract.
- W (-): didistillate water negative control, MW (-): methanol - water (50/50 v/v) negative control.
- Ap (+): Ampicillin positif control; Gt(+): gentamicin positif control; Ny (+): Nystanin positif control; na: not actif.

Table-2: Determination of Concentration Minimal of Inhibition (CMI).

M.O	CMI (mg/ml) (<i>D. adscendens</i>)				
	E _r		CN(+) µg/ml		
	We	MWE	Ap	Gt	Ny
E.c.	150	100	10	10	nd
C.a.	nd	>100	nd	nd	10
A.n.	nd	nd	nd	nd	10
P.a.	>150	>100	10	10	nd
B.s.	>150	>100	10	10	nd
S.a.	>150	>100	10	10	nd

- nd: not determined. We : water extract, MWE : methanol water extract.
- CN(-): negative control, CN(+): positive control.

Table-3: Qualitative and quantitative analyses of essential oils of *D. adscendens* leaves.

Ref	Rt (min)	Compounds	% (v/v ml)
1	3.08	2-pentyl furan	2.71
2	3.16	1-methyl silabenzène	1.97
3	3.32	azido-4 heptane	2.02
4	3.65	2- (N-methyl pyrrolidine) methanamine	0.57
5	3.92	ol-1, 3-,hexene	1.92
6	6.90	2,2- dimethyl-hexanale	3.37
7	6.97	3-octenol	0.55
8	10.40	geraniol	5.42
9	10.54	pelargonaldehyde	3.26
10	13.14	methyl benzoate	0.51
11	13.34	perillardehyde	0.57
12	19.40	α-terpinolene	1.82
13	20.04	linalool	2.64
14	20.24	α-caryophyllene	4.67
15	20.45	mandelique acid	1.48
16	20.84	β-ionone	3.47
17	20.92	ol-13 8-cedrene,	0.62
18	21.15	eudesma	7.41
19	21.78	α-terpinene	1.29
20	21.81	3-(2-pentyl) 1, 2,4- cyclopentanetrione	0.58
21	22.85	oleic acid	2.68
22	23.38	caryophyllene oxide	11.32
23	24.04	epoxide II humulene	1.68
24	29.05	phytone	14.72
25	29.37	scytalone	3.83
26	30.44	hyperforine	3.07
27	31.47	palmitic acid	5.06
28	31.68	margaric acid	1.71
29	32.15	α-.isomethyl ionone	1.67
30	33.91	linoleic	1.42
31	34.02	4, 6,9- nonadecatriene	0.83
32	34.78	cetanole	1.22

- Ref = Reference; Rt = Retention time

Table-4: Identifies phenolic compounds.

Ref.	Rt (min)	Identified compounds
1	34.47 ± 0.03	<i>p</i> -coumaric acid
2	29.32 ± 0.06	caffeic acid
3	36.72 ± 0.08	rutin
4	31.95 ± 0.04	epicatechin
5	42.65 ± 0.09	quercetin

Table-5: Structural NMR analyses of compound X₁.

Atome	¹ Hδ (ppm)	J(Hz)	¹³ C, δ (ppm)	HMQC
1			171.03	
2			162.16	
3	7.63-7.57 (d)	15	146.66	
4.5	7.46-7.43 (m)		131.09	(H-4/C-4) (H-5/C-5)
6			127.23	
7.8	6.82-6.81 (m)		116.80	(H-7/C-7) (H-8/C-8)
9	6.31-6.25 (d)	15	115.59	

Table- 6: Structural NMR analyses of compound X₂.

Atome	¹ H δ (ppm)	J(Hz)	¹³ C δ (ppm)	HMQC
1			171.03	
2			149.47	
3			147.03	
4	7.53-7.50 (d)	17	146.81	H-4/ C-4
5			127.78	
6	6.79-6.75 (m)		122.84	H-6/ C-6
7	6.95-6.91 (m)		116.47	H-7/ C-7
8	6.24-6.18 (d)	17	115.51	H-8/ C-8
9	7.04-7.03 (m)		115.05	H-9/C-9

Table- 7: Structural NMR analyses of compound X₃.

Atome (X ₈)	¹ H δ (ppm)	J(Hz)	¹³ C δ (ppm)	HMQC
1			179.37	
2			170.53	
3			166.38	
4			162.94	
5			159.31	
6			158.35	
7			149.95	
8			145.94	
9			135.62	
10	7.67-7.62 (m)		123.59	H-10/ C-10
11	7.67-7.62 (m)		123.11	H-11/ C-11
12	6.89-6.85 (d)	10	117.67	H-12/ C-12
13			115.95	
14	3.83-3.79 (d)	10	105.44	H-14/ C-14
15	6.40 (s)		104.68	H-15/ C-15
16	6.21-6.20 (d)	1.3	102.39	H-16/ C-16
17	5.12-5.09 (d)	7.5	100.09	H-17/ C-17
18	3.83-3.79 (m)		94.94	H-18/ C-18
19	3.63-3.06 (m)		78.13	H-19/ C-19
20	3.63-3.06 (m)		77.17	H-20/ C-20
21	3.63-3.06 (m)		75.64	H-21/ C-21
22	3.63-3.06 (m)		73.92	H-22/ C-22
23	3.63-3.06 (m)		72.20	H-23/ C-23
24	3.63-3.06 (m)		72.09	H-24/ C-24
25	3.63-3.06 (m)		69.70	H-25/C-25
26	3.63-3.06 (m)		68.38	2H-26/ C-26
27	1.28-1.25 (d)	7	17.88	3H-27/C-27

Table- 8: Structural NMR analyses of compound X₄.

Atome	¹ H δ (ppm)	J(Hz)	¹³ C δ (ppm)	HMQC
1			158.01	
2			157.67	
3			157.37	
4			145.94	
5			145.78	
6			132.29	
7	6.82-6.74(m)		119.38	H-7/C-7
8	6.82-6.74(m)		115.87	H-8/C-8
9	6.98-6.97(d)	2.5	115.31	H-9/C-9
10			100.05	
11	5.94-5.90(m)		96.36	H-11/C-11
12	5.94-5.90(m)		95.87	H-12/C-12
13	5.94-5.90(s)		79.88	H-13/C-13
14	4.81-4.16(m)		67.49	H-14/C-14
15	2.92-2.69(m)		29.27	2H-15/C-15

Table -9: NMR structural characteristics of compound X₅.

Atome (X ₁₃)	¹ H δ (ppm)	J(Hz)	¹³ C δ (ppm)	HMQC
1			177.32	
2			165.56	
3			162.51	
4			158.21	
5			148.76	
6			147.97	
7			146.21	
8			136.00	
9			124.13	
10	7.74-7.73 (m)		121.65	H-10/C-10
11	7.65-7.64 (m)		116.20	H-11/C-11
12	6.89-6.86 (m)		115.97	H-12/C-12
13			104.00	
14	6.39-6.38 (d)	2.5	99.21	H-14/C-14
15	6.18-6.17 (d)	2.5	94.38	H-15/C-15