

Table S1 The information of the alkaloids isolated from the *Zanthoxylum nitidum*

No.	Name	Formula	Selected ion	Exact mass	Type	Literature
1	magnoflorine	C ₂₀ H ₂₄ NO ₄	M	342.1705	aporphine	[4]
2	liriodenine	C ₁₇ H ₉ NO ₃	M+H	276.0655	aporphine	[5-9]
3	isotembetarine	C ₂₀ H ₂₆ NO ₄	M	344.1862	benzylisoquinoline	[10]
4	α -allocryptopine	C ₂₁ H ₂₃ NO ₅	M+H	370.1649	protopine	[5,8,11]
5	coptisine	C ₁₉ H ₁₄ NO ₄	M	320.0923	protoberberine	[12]
6	protoberberrubine	C ₁₉ H ₁₆ NO ₄	M	322.1079	protoberberine	[12]
7	nitidine	C ₂₁ H ₁₈ NO ₄	M	348.1236	benzophenanthrine	[5,8,11,13-15]
8	chelerythrine	C ₂₁ H ₁₈ NO ₄	M	348.1236	benzophenanthrine	[5,13,14]
9	sanguinarine	C ₂₀ H ₁₄ NO ₄	M	332.0923	benzophenanthrine	[12]
10	isofgaridine	C ₂₀ H ₁₆ NO ₄	M	334.1079	benzophenanthrine	[14]
11	decarine	C ₁₉ H ₁₃ NO ₄	M+H	320.0917	benzophenanthrine	[5,6]
12	N-norchelerythrine	C ₂₀ H ₁₆ NO ₄	M+H	334.1079	benzophenanthrine	[5-8,13]
13	rhoifoline B	C ₂₁ H ₁₇ NO ₅	M+H	364.1185	benzophenanthrine	[16]
14	oxynitidine	C ₂₁ H ₁₇ NO ₅	M+H	364.1180	benzophenanthrine	[5,7,11,13]
15	oxychelerythrine	C ₂₁ H ₁₇ NO ₅	M+H	364.1180	benzophenanthrine	[5,13]
16	oxyterihanine	C ₂₀ H ₁₆ NO ₅	M+H	350.1028	benzophenanthrine	[5]
17	oxyavicine	C ₂₀ H ₁₃ NO ₅	M+H	348.0866	benzophenanthrine	[7,15]
18	6-hydroxymethyldihydronitidine	C ₂₂ H ₂₁ NO ₅	M+H	380.1498	benzophenanthrine	[16]
19	bocconoline	C ₂₂ H ₂₁ NO ₅	M+H	380.1498	benzophenanthrine	[5,16]
20	O-demethyl- bocconoline	C ₂₁ H ₁₉ NO ₅	M+H	366.1336	benzophenanthrine	[17]
21	dihydronitidine	C ₂₁ H ₁₉ NO ₄	M+H	350.1387	benzophenanthrine	[3,8,11]
22	dihydrochelerythrine	C ₂₁ H ₁₉ NO ₄	M+H	350.1387	benzophenanthrine	[5-8,15]
23	6-methoxynitidine	C ₂₂ H ₂₁ NO ₅	M+H	380.1492	benzophenanthrine	[18]
24	6-methoxychelerythrine	C ₂₂ H ₂₁ NO ₅	M+H	380.1492	benzophenanthrine	[3,5,15]
25	6-ethoxychelerythrine	C ₂₃ H ₂₃ NO ₅	M+H	394.1654	benzophenanthrine	[5,13]
	(R)-6-[(R)-1-hydroxyethyl]dihydrochelerythrine (1)	C ₂₃ H ₂₃ NO ₅	M+H	394.1654	benzophenanthrine	[15]
27	6-methoxynorchelerythrine	C ₂₁ H ₁₇ NO ₅	M+H	364.1185	benzophenanthrine	[15]
28	6-hydroxydihydrochelerythrine	C ₂₁ H ₁₉ NO ₅	M+H	366.1341	benzophenanthrine	[15]
29	6-acetyldihydronitidine	C ₂₄ H ₂₃ NO ₅	M+H	406.1654	benzophenanthrine	[8]

30	6-acetyldihydrochelerythrine	C ₂₄ H ₂₃ NO ₅	M+H	406.1654	benzophenanthrine	[8]
31	6-acetyldihydroavicine	C ₂₃ H ₁₉ NO ₅	M+H	390.1341	benzophenanthrine	[8]
32	6-methoxyisodecarine	C ₂₀ H ₁₅ NO ₅	M+H	350.1028	benzophenanthrine	[19]
33	6-methoxysanguinarine	C ₂₁ H ₁₇ NO ₅	M+H	364.1185	benzophenanthrine	[19]
34	zanthomurolanine	C ₃₇ H ₄₅ NO ₅	M+H	584.3370	benzophenanthrine	[20]
35	epi-zanthomurolanine	C ₃₇ H ₄₅ NO ₅	M+H	584.3370	benzophenanthrine	[20]
36	zanthocadinanines A	C ₃₇ H ₄₅ NO ₅	M+H	584.3370	benzophenanthrine	[20]
37	zanthocadinanines B	C ₃₇ H ₄₅ NO ₅	M+H	584.3370	benzophenanthrine	[20]
38	epi-zanthocadinanine B	C ₃₇ H ₄₅ NO ₅	M+H	584.3370	benzophenanthrine	[20]
39	isoarnottianamide	C ₂₁ H ₁₉ NO ₆	M+H	382.1285	benzophenanthrine	[5]
40	arnottianamide	C ₂₁ H ₁₉ NO ₆	M+H	382.1285	benzophenanthrine	[5,6,8]
41	integriamide	C ₂₀ H ₁₅ NO ₆	M+H	366.0972	benzophenanthrine	[5]
42	skimmianine	C ₁₄ H ₁₃ NO ₄	M+H	260.0917	quinoline	[5,7- 9,11,13,16,18]
43	haplopine	C ₁₃ H ₁₁ NO ₄	M+H	246.0761	quinoline	[7]
44	dictamnine	C ₁₂ H ₉ NO ₂	M+H	200.0706	quinoline	[9,16,18]
45	γ-fagarine	C ₁₃ H ₁₁ NO ₃	M+H	230.0812	quinoline	[16,18]
46	5-methoxydictamnine	C ₁₃ H ₁₁ NO ₃	M+H	230.0812	quinoline	[18]
47	robustine	C ₁₂ H ₉ NO ₃	M+H	216.0661	quinoline	[16]
48	zanthobungeanine	C ₁₆ H ₁₇ NO ₃	M+H	272.1287	quinoline	[9]
49	zanthodioline	C ₁₆ H ₁₉ NO ₅	M+H	306.1136	quinoline	[9]
50	edulinine	C ₁₆ H ₂₁ NO ₄	M+H	292.1549	quinoline	[8]
51	N-methylflindersine	C ₁₅ H ₁₅ NO ₂	M+H	242.1181	quinoline	[9]
52	4-methoxy-(-)-methyl-2-quinolone	C ₁₁ H ₁₁ NO ₂	M+H	190.0868	quinoline	[16]