

Supporting Information:

Marine algal derived endophytic fungi from Konkan coast, India: a rich source of species diversity and bioactive potential

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Table S1. IC₅₀ values of ethyl acetate total culture fungal extracts tested on cancer cell lines after 48 h of treatment at concentrations ranging from 10-200 µg/mL.

Isolate No.	IC ₅₀ values on various human cell lines (µg/mL)			
	A431	HeLa	A549	MCF-7
AG1.1	44 ± 0.38	>200	47 ± 0.66	42 ± 0.59
AG1.1 (G)	<10	<10	<10	<10
AG1.2	<10	<10	<10	<10
AG1.3	27 ± 0.8	181 ± 0.74	22 ± 0.15	42 ± 0.32
AG1.4	70 ± 0.78	42 ± 0.42	35 ± 0.11	49 ± 0.11
AG1.5	75 ± 0.18	>200	>200	>200
PG1.1	47 ± 0.85	89 ± 0.46	145 ± 0.35	168 ± 0.69
PG1.2	<10	<10	<10	<10
PG1.3	>200	47 ± 0.54	>200	>200
PG1.4.2	93 ± 0.11	80 ± 0.47	<10	<10
PG1.5	172 ± 0.08	85 ± 0.67	77 ± 0.78	89 ± 0.44
PG1.6	<10	<10	<10	<10
PG1.7	74 ± 0.93	>200	59 ± 0.75	60 ± 0.71
PG1.8	177 ± 0.48	15 ± 0.02	>200	>200
VB1.1	<10	>200	<10	<10
VB1.2	89 ± 0.12	<10	<10	<10
VB2.1	197 ± 0.77	190 ± 0.37	42 ± 0.49	46 ± 0.63
VG1.2	182 ± 0.35	38 ± 0.17	<10	<10
VG1.3	<10	<10	>200	>200
VG1.4	<10	45 ± 0.49	<10	<10
VG2.1	60 ± 0.92	12 ± 0.76	50 ± 0.15	79 ± 0.58
VG2.2	<10	>200	>200	>200
VG2.3	25 ± 0.04	<10	78 ± 0.39	45 ± 0.22
VG2.5	>200	39 ± 0.39	>200	>200
VG2.6	48 ± 0.55	<10	66 ± 0.38	70 ± 0.39
TG1.1'	20 ± 0.52	175 ± 0.49	>200	>200
TG1.2	>200	>200	>200	>200
TB1.1	27 ± 0.46	>200	63 ± 0.77	40 ± 0.18

Table S2. Myco-components identified in ethyl acetate crude extract of *A. unguis* total culture extract.

S. No.	Name of compound	Chemical formula	Retention time (min)
1	1-Decene	C ₁₀ H ₂₀	7.431
2	Decane, 3,6-dimethyl-	C ₁₂ H ₂₆	8.417
3	1-Dodecene	C ₁₂ H ₂₄	10.546
4	3-Hexanone, 2,4-dimethyl-	C ₈ H ₁₆ O	10.679
5	1-Undecene, 5-methyl-	C ₁₂ H ₂₄	13.369
6	Octane, 2,7-dimethyl-	C ₁₀ H ₂₂	13.478
7	Phenol, 2,4-bis(1,1-dimethylethyl)-	C ₁₄ H ₂₂ O	14.863
8	Cetene	C ₁₆ H ₃₂	15.88
9	Undecane	C ₁₁ H ₂₄	15.968
10	9-Eicosene, (E)-	C ₂₀ H ₄₀	18.138
11	1,2,3-Trimethyldiaziridine	C ₄ H ₁₀ N ₂	18.203
12	5-Eicosene, (E)-	C ₂₀ H ₄₀	20.179
13	1-Docosene	C ₂₂ H ₄₄	22.046
14	Cyclotetradecane	C ₁₄ H ₂₈	23.761
15	N-(Trimethylsilyl)acetamide	C ₅ H ₁₃ NOSi	6.284
16	Formamide, N,N-diethyl-	C ₅ H ₁₁ NO	6.638
17	Ethylbis(trimethylsilyl)amine	C ₈ H ₂₃ NSi ₂	6.822
18	1-Hexene, 4,5-dimethyl-	C ₈ H ₁₆	6.832
19	Azetidine, 1-acetyl-2-methyl-	C ₈ H ₁₁ NO	6.869
20	2,4,4-Trimethyl-1-hexene	C ₉ H ₁₈	6.801
21	1-Hexene, 2,5,5-trimethyl-	C ₉ H ₁₈	7.066
22	Silanol, trimethyl-, carbonate (2:1)	C ₇ H ₁₈ O ₃ Si ₂	7.077
23	N,N-Dimethylacetamide	C ₄ H ₉ NO	7.158
24	Acetamide, N,N-diethyl-	C ₆ H ₁₃ NO	7.549
25	Acetamide, N-ethyl-	C ₄ H ₉ NO	7.849
26	Glycerol, tris(trimethylsilyl) ether	C ₁₂ H ₃₂ O ₃ Si ₃	11.645
27	1,6-Heptadien-4-ol , tert-butyl dimethylsilyl ether	C ₁₃ H ₂₆ OSi	13.767
28	1-Methyl-1-(1-naphthyl)-1-silacyclobutane	C ₁₄ H ₁₆ Si	15.107
29	2-Ketoglutaric acid ditms,	C ₁₁ H ₂₂ O ₅ Si ₂	15.26
30	4H-Furo[3,2-c]pyran-2(6H)-one, 4-[(trimethylsilyl)oxy]-	C ₁₀ H ₁₄ O ₄ Si	15.567
31	4H-Furo[3,2-c]pyran-2(6H)-one, 4-[(trimethylsilyl)oxy]-	C ₁₀ H ₁₄ O ₄ Si	15.699
32	Benzoic acid, 4-methyl-2-trimethylsilyloxy-, trimethylsilyl ester	C ₁₄ H ₂₄ O ₃ Si ₂	15.716
33	Phthalic acid, ethyl hex-2-yn-4-yl ester	C ₁₆ H ₁₈ O ₄	16.09
34	1-Hexadecanol	C ₁₆ H ₃₄ O	15.876
36	Azelaic acid, bis(trimethylsilyl) ester	C ₁₅ H ₃₂ O ₄ Si ₂	18.114

37	E-15-Heptadecenal	$C_{17}H_{32}O$	18.135
38	Tetradecanoic acid, trimethylsilyl ester	$C_{17}H_{36}O_2Si$	18.682

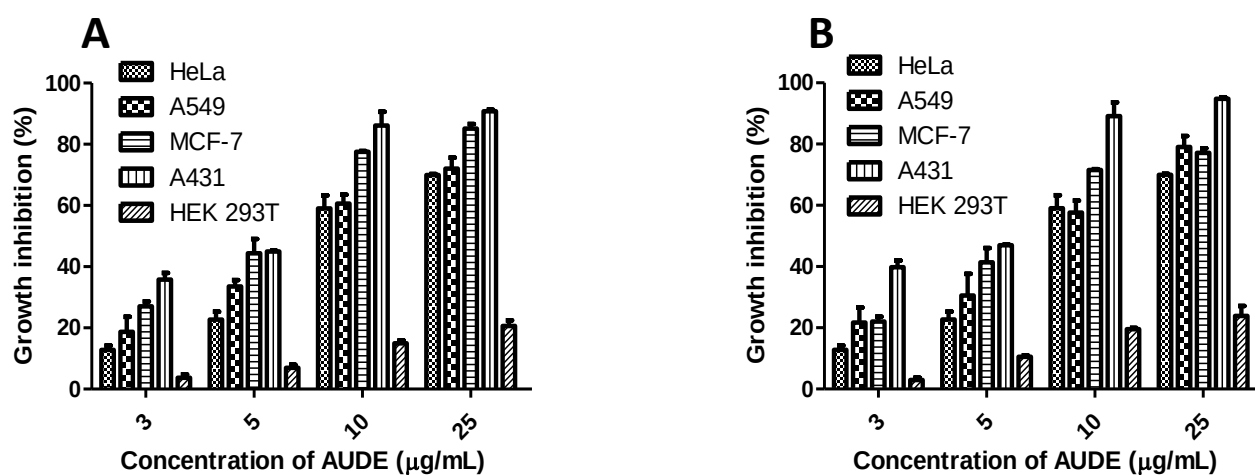


Fig. S1 *In vitro* cytotoxicity analysis of AUDE by A) MTT assay and B) Resazurin reduction test on various human cell lines after 48 h of treatment at 3 – 25 µg/mL concentrations.

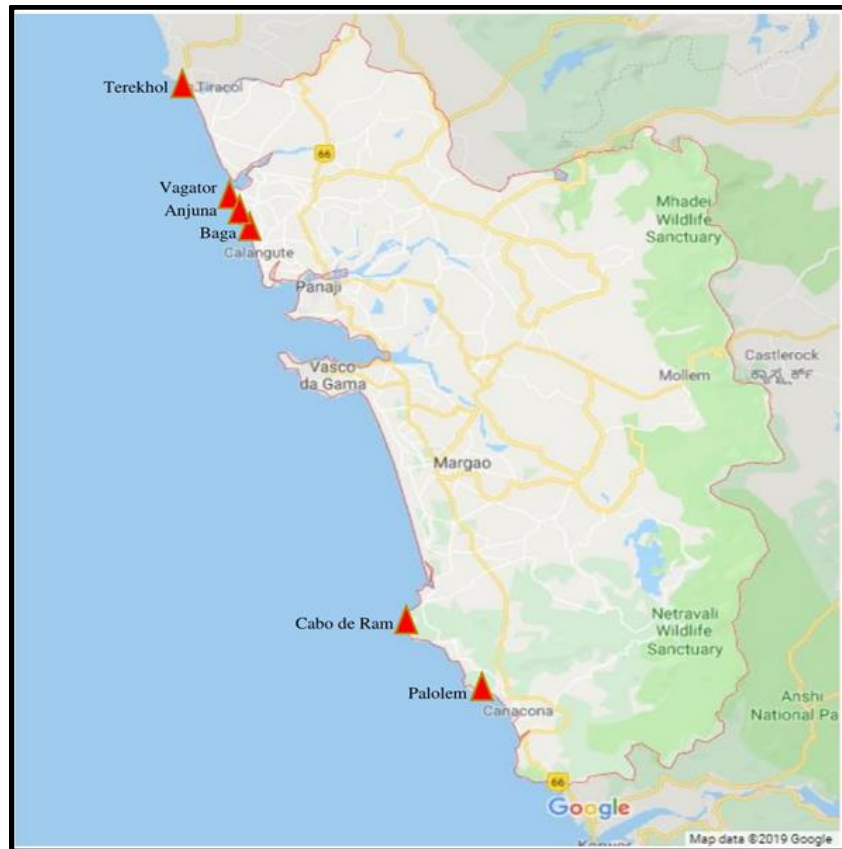


Fig. S2 Sampling sites of marine algae from Konkan coast, India