

**Table S1:** Pharmacological potential of compounds isolated from the genus *Dictyota*

No.	Name	Species	Class	Activity	References
1	Acutilol A	<i>D. acutiloba</i>	Diterpene	Chemical defense	[11]
2	Acutilol A acetate	<i>D. acutiloba</i>	Diterpene	Chemical defense	[11]
3	Acutilol B	<i>D. acutiloba</i>	Diterpene	Chemical defense	[11]
4	Dictyoxepin	<i>D. acutiloba</i> <i>D. pinnatifida</i>	Diterpene	Antimicrobial	[11, 113]
5	Dictyolene	<i>D. acutiloba</i>	Diterpene	-	[11]
6	9-Hydroxydolabelladien-6-one	<i>D. bartayresiana</i>	Diterpene	-	[13]
7	5-Acetoxy-12-hydroxydolabell-3,7Z-dienone	<i>D. bartayresiana</i>	Diterpene	-	[13]
8	9-Acetoxydolabellatrien-16-al	<i>D. bartayresiana</i>	Diterpene	-	[13]
9	5-Acetoxy-12-hydroxydolabell-3,7E-dienone	<i>D. bartayresiana</i>	Diterpene	-	[13]
10	Trihydroxydolasta-2-en-6-one	<i>D. bartayresiana</i>	Diterpene	-	[13]
11	Dictyol G acetate	<i>D. binghamiae</i> , <i>D. dichotoma</i>	Diterpene	-	[18, 87]
12	Dictyoxide A	<i>D. binghamiae</i>	Diterpene	-	[18]
13	Dictyotriol A diacetate	<i>D. binghamiae</i>	Diterpene	-	[18]
14	Pachydictyol A	<i>D. binghamiae</i> , <i>D. ciliolata</i> , <i>D. dichotoma</i> , <i>D. guineensis</i> , <i>D. menstrualis</i> , <i>D. mertensii</i>	Diterpene	Antiproliferative	[18, 21, 22, 25, 33, 61, 99, 105, 112]
15	Dictyoxid	<i>D. binghamiae</i> , <i>D. guineensi</i>	Diterpene	-	[18, 99]
16	Diacetal	<i>D. binghamiae</i>	Diterpene	-	[18]
17	Isopachydictyol	<i>D. caribaea</i> , <i>D. dichotoma</i> , <i>D. guineensis</i> , <i>D. menstrualis</i> , <i>D. mertensii</i>	Diterpene	Antimicrobial	[4, 21, 22, 33, 99, 105, 112]
18	Dictyol B acetate	<i>D. caribaea</i> , <i>D. ciliolata</i> , <i>D. dichotoma</i> , <i>D. mertensi</i>	Diterpene	Antiproliferative, Antimicrobial	[21, 22, 25, 62, 112]
19	Dichotomanol	<i>D. caribaea</i>	Diterpene	-	[21, 22]
20	Dichotomanol acetate	<i>D. caribaea</i>	Diterpene	-	[21, 22]
21	Cycloxenianol acetate	<i>D. caribaea</i>	Diterpene	-	[21, 22]
22	Ciliolatale	<i>D. ciliolata</i>	Diterpene	Antifungal	[23]
23	17-Acetoxy-dictyodial	<i>D. ciliolata</i>	Diterpene	Antifungal	[23]

24	Dictyol C	<i>D. ciliolata</i> , <i>D. dichotoma</i> , <i>D. fasciola</i> , <i>D. menstrualis</i> , <i>D. mertensii</i> , <i>Dictyota</i> sp.	Diterpene	Antifungal, Anti-inflammatory Antimicrobial, Antioxidant, Neuroprotective	[23, 33, 72, 92, 103, 112, 127]
25	Dictyol H	<i>D. ciliolata</i>	Diterpene	Antifungal	[23]
26	Dictyodial	<i>D. ciliolata</i> , <i>D. flabellata</i>	Diterpene	Antifungal	[23, 33, 96]
27	3- <i>O</i> -(6'-deoxy-6'-sulfo- $\alpha$ -D-glucopyranosyl)-1- <i>O</i> -oleoyl-2- <i>O</i> -palmitoylglycerol	<i>D. ciliolata</i>	Sulfonoglycolipid	-	[24]
28	Dictyospiromide	<i>D. coriacea</i>	Alkaloid	Antioxidant	[26]
29	1,9-Dihydroxycrenulide	<i>D. coriacea</i>	Diterpene	Hypopigmentation	[27]
30	Epiloliolide	<i>D. coriacea</i>	Diterpene	Hypopigmentation	[27]
31	D-Mannitol	<i>D. coriacea</i>	Carbohydrate	-	[27]
32	4 $\beta$ -Hydroxydictyodial A	<i>D. crenulata</i>	Diterpene	-	[30, 33]
33	Acetoxycrenulide	<i>D. crenulata</i> , <i>D. menstrualis</i>	Diterpene	Anti-inflammatory, Antimicrobial	[31, 54, 103]
34	Dictyocrenulol	<i>D. crenulata</i>	Diterpene	-	[31]
35	$\beta$ -Crenulal	<i>D. crenulata</i>	Diterpene	-	[32]
36	Sanadaol	<i>D. crenulata</i> , <i>D. dichotoma</i> , <i>D. fasciola</i>	Diterpene	Algicidal	[32, 48, 92]
37	Acetyldictyolal	<i>D. dichotoma</i> , <i>D. fasciola</i>	Diterpene	-	[43, 92]
38	Hydroxyacetyldictyolal	<i>D. dichotoma</i>	Diterpene	-	[43]
39	Isodictyohemiacetal	<i>D. dichotoma</i>	Diterpene	-	[43]
40	Dictydiacetal	<i>D. dichotoma</i>	Diterpene	-	[43]
41	4-Acetoxydictyolactone	<i>D. dichotoma</i>	Diterpene	-	[44]
42	Dictyotalide A	<i>D. dichotoma</i>	Diterpene	-	[44]
43	Dictyotalide B	<i>D. dichotoma</i>	Diterpene	-	[44]
44	Nordictyotalide	<i>D. dichotoma</i>	Diterpene	-	[44]
45	<i>ent</i> -Erogorgiaene	<i>D. dichotoma</i>	Diterpene	-	[45]
46	1,5-Cyclo-tetrahydroerogorgiaene	<i>D. dichotoma</i>	Diterpene	-	[45]
47	Acetoxy-hydroxy-dolabella-3,7-dien-9-one	<i>D. dichotoma</i>	Diterpene	-	[46]
48	3,4-Epoxy-hydroxy-dolabella-7-en-9-one	<i>D. dichotoma</i>	Diterpene	-	[46]
49	7,8-Epoxy-hydroxy-dolabella-3-en-9-one	<i>D. dichotoma</i>	Diterpene	-	[46]
50	9-Acetoxydolabella-3,7,12-trien-16-al	<i>D. dichotoma</i>	Diterpene	-	[46]

51	9-Acetoxydolabellatrien-16-oic acid	<i>D. dichotoma</i>	Diterpene	-	[46]
52	9-Acetoxydolabella-3,7-dien-12-ol	<i>D. dichotoma</i>	Diterpene	-	[46]
53	9-Acetoxy-7,8-epoxydolabella-3-en-12-ol	<i>D. dichotoma</i>	Diterpene	-	[46]
54	9-Hydroxydolest-1,3-dien-6-one	<i>D. dichotoma</i>	Diterpene	-	[46]
55	4,12-Dihydroxydolabella-2,7Z-dien-9-one	<i>D. dichotoma</i>	Diterpene	-	[46]
56	4,12-Dihydroxydolabella-2,7E-dien-9-one	<i>D. dichotoma</i>	Diterpene	-	[46]
57	12-Hydroxydolabella-3,7E-dien-9-one	<i>D. dichotoma</i>	Diterpene	-	[46]
58	12-Hydroxydolabella-3,7Z-dien-9-one	<i>D. dichotoma</i>	Diterpene	-	[46]
59	4,12-Dihydroxydolabellan-2,6-dien-9-one	<i>D. dichotoma</i>	Diterpene	-	[46]
60	4,12-Dihydroxydolabellan-2,6-dien-9-one	<i>D. dichotoma</i>	Diterpene	-	[46]
61	12Z-Hydroxydolabella-3,6-dien-9-one	<i>D. dichotoma</i>	Diterpene	-	[46]
62	12E-Hydroxydolabella-3,6-dien-9-one	<i>D. dichotoma</i>	Diterpene	-	[46]
63	5,6,18-Triacetoxy-hydroxy-dolabelladiene	<i>D. dichotoma</i>	Diterpene	-	[4]
64	18-Acetoxy-10-hydroxy-2,7-dolabelladiene	<i>D. dichotoma</i>	Diterpene	-	[4]
65	5-Acetoxy-dihydroxy-2,7-dolabelladiene	<i>D. dichotoma</i>	Diterpene	-	[4]
66	7,8-Epoxy-3,18-dolabelladiene	<i>D. dichotoma</i>	Diterpene	-	[4]
67	18-Acetoxy-2,7-dolabelladiene	<i>D. dichotoma</i>	Diterpene	-	[4]
68	Dictyotatriol A	<i>D. dichotoma</i>	Diterpene	-	[4]
69	Dictyotin A	<i>D. dichotoma</i> , <i>D. menstrualis</i>	Diterpene	Anti-inflammatory, Antimicrobial	[47, 103]
70	Dictyotin B	<i>D. dichotoma</i>	Diterpene	-	[47]
71	Dictyotin C	<i>D. dichotoma</i>	Diterpene	-	[47]
72	(1 <i>R</i> ,4 <i>S</i> ,4 <i>αR</i> ,8 <i>αR</i> )-1,6-Dimethyl-4-[(2 <i>R</i> )-6-methylhept-5-en-2-yl]-1,2,3,4,4 <i>α</i> ,7,8,8 <i>α</i> -octahydronaphthalen-1-yl methyl ether	<i>D. dichotoma</i>	Diterpene	-	[47]
73	Dictyotin D methyl ether	<i>D. dichotoma</i>	Diterpene	-	[47]
74	Dictyol J	<i>D. dichotoma</i>	Diterpene	Algicidal	[48]
75	Dictyolactone	<i>D. dichotoma</i> , <i>D. flabellata</i>	Diterpene	Algicidal	[48, 96]

76	Dictyol A	<i>D. dichotoma</i>	Diterpene	-	[49]
77	Dictyol B	<i>D. dichotoma</i> , <i>D. mertensii</i>	Diterpene	Antimicrobial	[49]
78	Dictyol F	<i>D. dichotoma</i>	Diterpene	-	[50]
79	Epidictyol F	<i>D. dichotoma</i>	Diterpene	-	[50]
80	Dihydromethoxy-pachydictyol A	<i>D. dichotoma</i>	Diterpene	-	[50]
81	14,15-Epoxy-pachydictyol A	<i>D. dichotoma</i>	Diterpene	-	[50]
82	2,6-Cycloether pachydictyol A	<i>D. dichotoma</i>	Diterpene	-	[50]
83	9 <i>R</i> -Hydroxydichotoma-2,14-dien-19,20-diol	<i>D. dichotoma</i>	Diterpene	-	[51]
84	9 <i>R</i> -Acetoxydichotoma-2,14-dien-19,20-diol	<i>D. dichotoma</i>	Diterpene	-	[51]
85	7-Hydroxy-2,6-cyclohexadien-18,19-diol	<i>D. dichotoma</i>	Diterpene	-	[51]
86	7-Acetoxy-2,6-cyclohexadien-18,19-diol	<i>D. dichotoma</i>	Diterpene	-	[51]
87	Crenulacetal A	<i>D. dichotoma</i>	Diterpene	-	[52]
88	Crenulacetal B	<i>D. dichotoma</i>	Diterpene	-	[52]
89	Crenulacetal C	<i>D. dichotoma</i>	Diterpene	-	[52]
90	Crenulacetal D	<i>D. dichotoma</i>	Diterpene	-	[52]
91	Dichotone	<i>D. dichotoma</i>	Diterpene	-	[53]
92	Dichotodione	<i>D. dichotoma</i>	Diterpene	-	[53]
93	Dictyohydroperoxide	<i>D. dichotoma</i>	Diterpene	-	[54]
94	Hydroperoxyacetoxycrenulide	<i>D. dichotoma</i>	Diterpene	-	[54]
95	Dictymal	<i>D. dichotoma</i>	Diterpene	-	[55]
96	Dichotenone A	<i>D. dichotoma</i>	Diterpene	-	[56]
97	Dichotenone B	<i>D. dichotoma</i>	Diterpene	-	[56]
98	Loliolide	<i>D. dichotoma</i>	Diterpene	-	[56]
99	Dichotenol A	<i>D. dichotoma</i>	Diterpene	-	[57]
100	Dichotenol B	<i>D. dichotoma</i>	Diterpene	-	[57]
101	Dichotenol C	<i>D. dichotoma</i>	Diterpene	-	[57]
102	Dictytriene A	<i>D. dichotoma</i>	Diterpene	-	[58]
103	Dictytriene B	<i>D. dichotoma</i>	Diterpene	-	[58]
104	Dictyone	<i>D. dichotoma</i>	Diterpene	-	[58]
105	Dictytriol	<i>D. dichotoma</i>	Diterpene	-	[58]
106	Tricyclodictyofuran A	<i>D. dichotoma</i>	Diterpene	-	[59]
107	Tricyclodictyofuran B	<i>D. dichotoma</i>	Diterpene	-	[59]
108	Tricyclodictyofuran C	<i>D. dichotoma</i>	Diterpene	-	[59]
109	Dictyoxetane	<i>D. dichotoma</i>	Diterpene	-	[60]
110	Pachydictyol B	<i>D. dichotoma</i>	Diterpene	-	[61]

111	Pachydietylol C	<i>D. dichotoma</i> , <i>D. spiralis</i>	Diterpene	Anti-trypanosomal, Cytotoxic	[61, 126]
112	Dictyol E	<i>D. dichotoma</i> , <i>D. fasciola</i> , <i>D. guineensis</i> , <i>D. spiralis</i>	Diterpene	Anti-trypanosomal, Cytotoxic	[61, 92, 99, 126]
113	<i>cis</i> -Africanan-1 $\alpha$ -ol	<i>D. dichotoma</i>	Diterpene	-	[61]
114	Fucosterol	<i>D. dichotoma</i>	Sterol	Antiproliferative, Antimicrobial	[61, 63, 65]
115	2,2,6,7-Tetramethyl-10-oxatricyclo[4.3.0.1(1,7)]-decan-5-one	<i>D. dichotoma</i>	Oxatricyclic derivative	-	[61]
116	<i>N</i> -(4-bromo- <i>n</i> -butyl)-piperidin-2-one	<i>D. dichotoma</i>	Halogenated derivative	-	[61]
117	<i>tert</i> -Hexadecanethiol	<i>D. dichotoma</i>	Thiol derivative	-	[61]
118	Dictyotadiol	<i>D. dichotoma</i> , <i>D. guineensis</i>	Diterpene	-	[62, 99]
119	Coprostanol	<i>D. dichotoma</i>	Sterol	-	[63]
120	Epicoprostanol	<i>D. dichotoma</i>	Sterol	-	[63]
121	Campesterol	<i>D. dichotoma</i>	Sterol	-	[63]
122	Stigmasterol	<i>D. dichotoma</i>	Sterol	-	[63]
123	$\beta$ -Sitosterol	<i>D. dichotoma</i>	Sterol	-	[63]
124	Cholesterol	<i>D. dichotoma</i>	Sterol	-	[63]
125	Brassicasterol	<i>D. dichotoma</i>	Sterol	-	[63]
126	Cholestanol	<i>D. dichotoma</i>	Sterol	-	[63]
127	5 $\beta$ -Cholestan-3-one	<i>D. dichotoma</i>	Sterol	-	[63]
128	1-Octanol	<i>D. dichotoma</i>	Aldehyde	-	[65]
129	p-Cresol	<i>D. dichotoma</i>	Aromatic derivative	-	[65]
130	2,6-Nonadienal	<i>D. dichotoma</i>	Aldehyde	-	[65]
131	Trans-anethole	<i>D. dichotoma</i>	Aromatic derivative	-	[65]
132	$\alpha$ -Cubebene	<i>D. dichotoma</i>	Diterpene	-	[65, 66]
133	$\beta$ -Bourbonene	<i>D. dichotoma</i>	Diterpene	-	[65, 66]
134	$\beta$ -Cubebene	<i>D. dichotoma</i>	Sesquiterpene	-	[65, 66]
135	$\gamma$ -Gurjurene	<i>D. dichotoma</i>	Sesquiterpene	-	[65]
136	Germacrene D	<i>D. dichotoma</i>	Sesquiterpene	-	[65, 66]
137	$\alpha$ -Muurolene	<i>D. dichotoma</i>	Sesquiterpene	-	[65, 66]
138	$\alpha$ -Amorphene	<i>D. dichotoma</i>	Sesquiterpene	-	[65, 66]
139	$\delta$ -Cadenene	<i>D. dichotoma</i>	Sesquiterpene	-	[65, 66]
140	<i>cis</i> -Calamenene	<i>D. dichotoma</i>	Sesquiterpene	-	[65, 66]
141	$\alpha$ -Calacorene	<i>D. dichotoma</i>	Sesquiterpene	-	[65, 66]
142	$\beta$ -Sesquiphellandrene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]

<b>143</b>	$\alpha$ -Cadinol	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>144</b>	Cembrene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>145</b>	Cycloisosativene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>146</b>	$\tau$ -Murolol	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>147</b>	$\alpha$ -Ylangene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>148</b>	$\delta$ -Selinene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>149</b>	$\alpha$ -Copaene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>150</b>	Aromadendrene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>151</b>	(E)- $\beta$ -Farnesene	<i>D. dichotoma</i>	Hydrocarbon	-	[66]
<b>152</b>	$\alpha$ -Curcumene	<i>D. dichotoma</i>	Aromatic derivatives	-	[66]
<b>153</b>	Bicyclogermacrene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>154</b>	Epizonarene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>155</b>	$\gamma$ -Cadinene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>156</b>	$\gamma$ -Murolene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>157</b>	Germacrene B	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>158</b>	<i>trans</i> -Cadina-1,4-diene	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>159</b>	1,8-Cineole	<i>D. dichotoma</i>	Sesquiterpene	-	[66]
<b>160</b>	6-Hydroxydolabella-3,7,12-triene	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[67]
<b>161</b>	9-Hydroxyisodolasta-1,3,5(14)-trienone	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	Antiproliferative	[67, 72]
<b>162</b>	9-Hydroxydolasta-1,3-diene	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[67]
<b>163</b>	3,4-Epoxy-6-hydroxydolabella-7,12-diene	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[67]
<b>164</b>	12-Hydroxydolabella-3Z,7Z-dien-2-one	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[67]
<b>165</b>	9,13-Dihydroxydolasta-1,3-diene	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[67]
<b>166</b>	13-Acetoxy-9-hydroxydolasta-1,3-diene	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[67]
<b>167</b>	9-Hydroxydolasta-1,3-dien-13-one	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[67]
<b>168</b>	17,18:18,19-Bisepoxyxenic-methoxy-triene	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[68]
<b>169</b>	3 $\beta$ -Hydroxydilophol	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[68]
<b>170</b>	18-Hydroxy-2,7-dolabelladiene	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[68]
<b>171</b>	4,17-Hydroxyxenic-trienaloic acid lactone	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[69]
<b>172</b>	17-Xenic-trien-1-al-18-oic acid lactone	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[69]

<b>173</b>	Epoxyxenic-hydroxydienaloic acid lactone	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[69]
<b>174</b>	17-Acetoxyxenic-4-hydroxy-trien-dial	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[69]
<b>175</b>	17-Acetoxy-4 $\alpha$ -hydrocrenulide	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[69]
<b>176</b>	Deacetoxydictyol H	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[69]
<b>177</b>	2-Hydroxydictyoxide	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[69]
<b>178</b>	(3 $\alpha$ S,4 $\alpha$ R,8S,8 $\alpha$ S)-4 $\alpha$ -Hydroxy-3 $\alpha$ ,8 $\alpha$ -dimethyl-5-methylidene-1-(propan-2-yl)-3,3 $\alpha$ ,4,4 $\alpha$ ,5,6,7,8,8 $\alpha$ ,9-decahydrobenzo[f]azulen-8-yl acetate	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[70]
<b>179</b>	(3 $\alpha$ S,4 $\alpha$ R,8S,8 $\alpha$ S,10S)-4 $\alpha$ ,8-Dihydroxy-3 $\alpha$ ,8 $\alpha$ -dimethyl-5-methylidene-1-(propan-2-yl)-2,3,3 $\alpha$ ,4,4 $\alpha$ ,5,6,7,8,8 $\alpha$ ,9,10-dodecahydrobenzo[f]azulen-10-yl acetate	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[70]
<b>180</b>	(3 $\alpha$ S,4 $\alpha$ R,8S,8 $\alpha$ S,10S)-4 $\alpha$ -Hydroxy-3 $\alpha$ ,8 $\alpha$ -dimethyl-5-methylidene-1-(propan-2-yl)-2,3,3 $\alpha$ ,4,4 $\alpha$ ,5,6,7,8,8 $\alpha$ ,9,10-dodecahydrobenzo[f]azulene-8,10-diyl diacetate	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[70]
<b>181</b>	4 $\alpha$ -Hydroxy-3 $\alpha$ ,8 $\alpha$ -dimethyl-5-methylidene-1-(propan-2-yl)-2,3,3 $\alpha$ ,4,4 $\alpha$ ,5,6,7,8,8 $\alpha$ ,9,10-dodecahydrobenzo[f]azulen-10-yl acetate	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[70]
<b>182</b>	Divarinone	<i>D. dichotoma</i> var. <i>divaricata</i>	Diterpene	-	[71]
<b>183</b>	Dolabellatrienol	<i>D. dichotoma</i> var. <i>implexa</i>	Diterpene	-	[72]
<b>184</b>	Amijiol acetate	<i>D. dichotoma</i> var. <i>implexa</i>	Diterpene	-	[72]
<b>185</b>	Dolastane amijiol-7-10-diacetate	<i>D. dichotoma</i> var. <i>implexa</i>	Diterpene	-	[72]
<b>186</b>	8 $\beta$ -Hydroxy-pachydictyol A	<i>D. dichotoma</i> var. <i>implexa</i>	Diterpene	-	[72]
<b>187</b>	Amijiol	<i>D. dichotoma</i> var. <i>implexa</i>	Diterpene	-	[72, 82]
<b>188</b>	Dictyol I acetate	<i>D. dichotoma</i> var. <i>implexa</i>	Diterpene	-	[73]



<b>189</b>	Indicol	<i>D. dichotoma</i> var. <i>indica</i>	Diterpene	Antiproliferative	[74]
<b>190</b>	Indicarol acetate	<i>D. dichotoma</i> var. <i>indica</i> .	Diterpene	-	[74]
<b>191</b>	Isolinearol	<i>D. dichotoma</i> var. <i>indica</i>	Diterpene	-	[74]
<b>192</b>	Linearol	<i>D. dichotoma</i> var. <i>indica</i>	Diterpene	-	[74]
<b>193</b>	Dictinol	<i>D. dichotoma</i> var. <i>indica</i>	Diterpene	-	[76]
<b>194</b>	Dictindiol	<i>D. dichotoma</i> var. <i>indica</i>	Diterpene	-	[76]
<b>195</b>	Dictintriol	<i>D. dichotoma</i> var. <i>indica</i>	Diterpene	-	[76]
<b>196</b>	Dictyotriol A	<i>D. dichotoma</i> var. <i>indica</i>	Diterpene	-	[77]
<b>197</b>	Dictyotriol B	<i>D. dichotoma</i> var. <i>indica</i>	Diterpene	-	[77]
<b>198</b>	Fucoxanthin	<i>D. dichotoma</i> var. <i>indica</i>	Carotenoid	Antiproliferative	[78, 79]
<b>199</b>	Isoamijiol	<i>D. dichotoma</i> var. <i>linearis</i> .	Diterpene	-	[82]
<b>200</b>	14-Deoxyamijiol	<i>D. dichotoma</i> var. <i>linearis</i>	Diterpene	-	[82]
<b>201</b>	Amijitrienol	<i>D. dichotoma</i> var. <i>linearis</i>	Diterpene	-	[83]
<b>202</b>	14-Deoxyisoamijiol	<i>D. dichotoma</i> var. <i>linearis</i>	Diterpene	-	[83]
<b>203</b>	4-Acetoxy-9,14-dihydroxydolastadiene	<i>D. dichotoma</i> var. <i>linearis</i>	Diterpene	-	[84]
<b>204</b>	14-Hydroxydolasta-1(15),7,9-triene	<i>D. dichotoma</i> var. <i>linearis</i>	Diterpene	-	[84]
<b>205</b>	4,9,14-Trihydroxydolasta-1(15),7-diene	<i>D. dichotoma</i> var. <i>linearis</i>	Diterpene	-	[84]
<b>206</b>	4,7,14-Trihydroxydolasta-1(15),8-diene	<i>D. dichotoma</i> var. <i>linearis</i>	Diterpene	-	[84]
<b>207</b>	4,6-Diacetoxy-14-hydroxydolastadiene	<i>D. dichotoma</i> var. <i>linearis</i>	Diterpene	-	[84]
<b>208</b>	Isopachydictyolal	<i>D. dichotoma</i> var. <i>linearis</i>	Diterpene	Antiviral	[85]
<b>209</b>	4 $\alpha$ -Acetyl dictyodial	<i>D. dichotoma</i> var. <i>lineari</i> .	Diterpene	Antiviral	[85]
<b>210</b>	2-Methyl-6-[(2S,3 $\alpha$ S,4R,5S,7R,8 $\alpha$ R)-2,4,7-trihydroxy-3,8-dimethylidenedecahydroazulen-5-yl]hept-2-ene-4,5-diyl diacetate	<i>D. dichotoma</i> var. <i>volubilis</i>	Diterpene	-	[86]



<b>211</b>	6-Methyl-2-[(2 <i>S</i> ,3 <i>αS</i> ,4 <i>R</i> ,5 <i>S</i> ,7 <i>R</i> ,8 <i>αR</i> )-2,4,7-trihydroxy-3,8-dimethylidenedecahydroazulen-5-yl]hept-5-en-3-yl acetate	<i>D. dichotoma</i> var. <i>volubilis</i>	Diterpene	-	[86]
<b>212</b>	2-Methyl-6-[(3 <i>αR</i> ,4 <i>R</i> ,5 <i>S</i> ,7 <i>R</i> ,8 <i>αR</i> )-3,4,7-trihydroxy-3-methyl-8-methylidene-3,3 <i>α</i> ,4,5,6,7,8,8 <i>α</i> -octahydroazulen-5-yl]hept-2-ene-4,5-diyl diacetate	<i>D. dichotoma</i> var. <i>volubilis</i>	Diterpene	-	[86]
<b>213</b>	6-[(3 <i>αR</i> ,4 <i>R</i> ,5 <i>S</i> ,8 <i>αR</i> )-3,4-Dihydroxy-3-methyl-8-methylidene-3,3 <i>α</i> ,4,5,6,7,8,8 <i>α</i> -octahydroazulen-5-yl]-2-methylhept-2-en-4-yl acetate	<i>D. dichotoma</i> var. <i>volubilis</i>	Diterpene	-	[86]
<b>214</b>	2-[(3 <i>αS</i> ,4 <i>R</i> ,5 <i>S</i> ,7 <i>R</i> ,8 <i>αR</i> )-4,7-Dihydroxy-3-methyl-8-methylidene-1,3 <i>α</i> ,4,5,6,7,8,8 <i>α</i> -octahydroazulen-5-yl]-5-hydroxy-6-methylhept-6-en-3-yl acetate	<i>D. dichotoma</i> var. <i>volubilis</i>	Diterpene	-	[86]
<b>215</b>	6-[(3 <i>αS</i> ,4 <i>R</i> ,5 <i>S</i> ,7 <i>R</i> ,8 <i>αR</i> )-4-(Acetyloxy)-7-hydroxy-3-methyl-8-methylidene-1,3 <i>α</i> ,4,5,6,7,8,8 <i>α</i> -octahydroazulen-5-yl]-2-methylhept-2-ene-4,5-diyl diacetate	<i>D. dichotoma</i> var. <i>volubilis</i>	Diterpene	-	[87]
<b>216</b>	6-[(3 <i>αS</i> ,4 <i>R</i> ,5 <i>S</i> ,7 <i>R</i> ,8 <i>αR</i> )-4,7-Dihydroxy-3-methyl-8-methylidene-1,3 <i>α</i> ,4,5,6,7,8,8 <i>α</i> -octahydroazulen-5-yl]-2-methylhept-2-ene-4,5-diyl diacetate	<i>D. dichotoma</i> var. <i>volubilis</i>	Diterpene	-	[87]
<b>217</b>	(4 <i>E</i> )-2-[(3 <i>αS</i> ,4 <i>R</i> ,5 <i>S</i> ,7 <i>R</i> ,8 <i>αR</i> )-4,7-Dihydroxy-3-methyl-8-methylidene-1,3 <i>α</i> ,4,5,6,7,8,8 <i>α</i> -octahydroazulen-5-yl]-6-hydroxy-6-methylhept-4-en-3-yl acetate	<i>D. dichotoma</i> var. <i>volubilis</i>	Diterpene	-	[87]
<b>218</b>	6-Methyl-2-[(3 <i>αR</i> ,4 <i>R</i> ,5 <i>S</i> ,7 <i>R</i> ,8 <i>αR</i> )-3,4,7-trihydroxy-3-methyl-8-methylidene-3,3 <i>α</i> ,4,5,6,7,8,8 <i>α</i> -octahydroazulen-5-yl]hept-5-en-3-yl acetate	<i>D. dichotoma</i> var. <i>volubilis</i>	Diterpene	-	[87]
<b>219</b>	Dilophol	<i>D. dichotoma</i> var. <i>volubilis</i>	Diterpene	-	[87]

220	Neodictyolactone	<i>D. fasciola</i>	Diterpene	-	[92]
221	18-Hydroxy-2,7-dolabelladiene	<i>D. fasciola</i>	Diterpene	-	[92]
222	Secospatane	<i>D. fenestrata</i>	Diterpene	-	[93]
223	2-Acetoxy-13(15),17-dien-10-ol	<i>D. fenestrata</i>	Diterpene	-	[93]
224	Dolabelladienetriol	<i>D. friabilis</i>	Diterpene	Antiviral	[94]
225	Pachydictyol-A epoxide	<i>D. furcellata</i>	Diterpene	-	[95]
226	Dictyodiol	<i>D. furcellata</i>	Diterpene	-	[96]
227	6,7-Diacetoxydolasta-1(15),8-dien-14-ol	<i>D. furcellata</i>	Diterpene	-	[98]
228	Hauckiosterol	<i>D. hauckiana</i>	Sterol	-	[100]
229	Hydroxydilophol	<i>D. masonii</i>	Diterpene	-	[102]
230	Dictyol K	<i>D. menstrualis</i>	Diterpene	Anti-inflammatory, Antimicrobial	[103]
231	Dictyol M	<i>D. menstrualis</i>	Diterpene	Anti-inflammatory,	[103]
232	Dictyol N	<i>D. menstrualis</i>	Diterpene	Antimicrobial	[103]
233	Isoacetoxycrenulatin	<i>D. menstrualis</i>	Diterpene	Anti-inflammatory,	[103]
234	4-Hydroxycrenulide	<i>D. menstrualis</i>	Diterpene	Antimicrobial	[103]
235	(6 <i>R</i> )-6-Hydroxydichotoma-3,14-diene-1,17-dial	<i>D. menstrualis</i>	Diterpene	Antiviral	[104]
236	(6 <i>R</i> )-6-Acetoxidichotoma-3,14-diene-1,17-dial	<i>D. menstrualis</i>	Diterpene	Antiviral	[104]
237	Dichotomanol	<i>D. menstrualis</i>	Diterpene	Anticoagulant, Antiviral	[105]
238	8,10,18-Trihydroxy-2,6-dolabelladiene	<i>D. menstrualis</i>	Diterpene	Antiviral	[106]
239	Dictyol L	<i>D. pinnatifida</i>	Diterpene	Antimicrobial	[113]
240	6-Epipachydictyol A	<i>D. pinnatifida</i>	Diterpene	Anti-microbial	[113]
241	6-Epidictyol C	<i>D. pinnatifida</i>	Diterpene	Anti-microbial	[113]
242	18-Acetoxy-xenianol	<i>D. pinnatifida</i>	Diterpene	Anti-microbial	[113]
243	4 $\alpha$ -Hydroxyisodictyohemiacetal	<i>D. plectens</i>	Diterpene	Antiviral	[114]
244	4 $\alpha$ -Hydroxyisodictyoacetal	<i>D. plectens</i>	Diterpene	Antiviral	[114]
245	13,18-Diacetoxy-4-hydroxyisodictyo-19-al	<i>D. plectens</i>	Diterpene	Antiviral	[114]
246	4 $\alpha$ -Hydroxypachylactone	<i>D. plectens</i>	Diterpene	Antiviral	[114]
247	Isodictyohemiacetal	<i>D. plectens</i>	Diterpene	Antiviral	[114]
248	Isodictyoacetal	<i>D. plectens</i>	Diterpene	Antiviral	[114]
249	(2 <i>S</i> ,3 <i>S</i> ,4 <i>R</i> ,10 <i>R</i> ,19 <i>R</i> )-19-Deoxy-4-hydroxy-19-methoxydictyolactone	<i>D. plectens</i>	Diterpene	Antiviral	[114]
250	4-Hydroxydictyolactone	<i>D. plectens</i>	Diterpene	Antiviral	[114]

<b>251</b>	(1 <i>S</i> ,2 <i>S</i> ,3 <i>E</i> ,5 <i>Z</i> ,7 <i>E</i> ,11 <i>R</i> ,12 <i>R</i> )-2-Acetoxy-12-hydroxydolabella-3,5,7-trien-9-one	<i>D. plectens</i>	Diterpene	-	[115]
<b>252</b>	(1 <i>S</i> ,2 <i>S</i> ,3 <i>E</i> ,5 <i>Z</i> ,7 <i>Z</i> ,11 <i>R</i> ,12 <i>R</i> )-2-Acetoxy-12-hydroxydolabella-3,5,7-trien-9-one	<i>D. plectens</i>	Diterpene	-	[115]
<b>253</b>	(1 <i>S</i> ,2 <i>S</i> ,3 <i>S</i> ,4 <i>Z</i> ,6 <i>Z</i> ,8 <i>R</i> ,11 <i>R</i> ,12 <i>R</i> )-2-Acetoxy-12-hydroxydolasta-4,6-dien-9-one	<i>D. plectens</i>	Diterpene	-	[115]
<b>254</b>	9 $\alpha$ -Hydroxydictyol E	<i>D. plectens</i>	Diterpene	-	[115]
<b>255</b>	Isodictyol E	<i>D. plectens</i>	Diterpene	-	[115]
<b>256</b>	3 $\beta$ -Acetoxydilophol	<i>D. plectens</i>	Diterpene	-	[115]
<b>257</b>	19-Acetyl-4-hydroxydictyodiol	<i>D. plectens</i>	Diterpene	-	[115]
<b>258</b>	Hydroxydictyodial	<i>D. spinulosa</i>	Diterpene	Antifeedant	[118]
<b>259</b>	Spiralyde A	<i>D. spiralis</i>	Diterpene	Anti-leishmanial, Anti-trypanosomal	[119]
<b>260</b>	(1 <i>R</i> ,3 <i>S</i> ,4 <i>S</i> ,7 <i>E</i> ,11 <i>S</i> ,12 <i>S</i> )-3,4-Epoxy-7,18-dolabelladiene	<i>D. spiralis</i>	Diterpene	Anti-leishmanial, Anti-trypanosomal	[119]
<b>261</b>	(1 <i>R</i> ,3 <i>S</i> ,4 <i>S</i> ,7 <i>E</i> ,11 <i>S</i> ,12 <i>S</i> ,14 <i>S</i> )-3,4-Epoxy-14-hydroxy-7,18-dolabelladiene	<i>D. spiralis</i>	Diterpene	Anti-leishmanial, Anti-trypanosomal	[119]
<b>262</b>	(1 <i>R</i> ,3 <i>S</i> ,4 <i>S</i> ,7 <i>E</i> ,11 <i>S</i> ,12 <i>S</i> )-3,4-Epoxy-14-oxo-7,18-dolabelladiene	<i>D. spiralis</i>	Diterpene	Anti-leishmanial, Anti-trypanosomal	[119]
<b>263</b>	(1 <i>R</i> ,3 <i>E</i> ,7 <i>E</i> ,11 <i>S</i> ,12 <i>S</i> )-14-Oxo-3,7,18-dolabellatriene	<i>D. spiralis</i>	Diterpene	Anti-leishmanial, Anti-trypanosomal	[119]
<b>264</b>	(1 <i>R</i> ,3 <i>Z</i> ,7 <i>E</i> ,11 <i>S</i> ,12 <i>S</i> )-14-Oxo-3,7,18-dolabellatriene	<i>D. spiralis</i>	Diterpene	Anti-leishmanial, Anti-trypanosomal	[119]
<b>265</b>	Dolabellane	<i>Dictyota sp.</i>	Diterpene	-	[120]
<b>266</b>	Xenicane	<i>Dictyota sp.</i>	Diterpene	-	[120]
<b>267</b>	Prenylated guaiane	<i>Dictyota sp.</i>	Diterpene	-	[120]
<b>268</b>	3,4-Epoxy-14-oxo-7,18-dolabelladiene	<i>Dictyota sp.</i>	Diterpene	Antimicrobial	[120]
<b>269</b>	Acetoxycrenulide	<i>Dictyota sp.</i>	Diterpene	Antimicrobial	[120]
<b>270</b>	10,18-Dihydroxydolabella-2,7-diene	<i>Dictyota sp.</i>	Diterpene	-	[120]
<b>271</b>	10-Acetoxy-18-hydroxydolabella-2,7-diene	<i>Dictyota sp.</i>	Diterpene	Antimicrobial	[120]
<b>272</b>	1- <i>O</i> -Octadecenoylglycerol	<i>Dictyota sp.</i>	Diterpene	Antimicrobial	[120]
<b>273</b>	sn-3- <i>O</i> -(Geranylgeranyl)glycerol	<i>Dictyota sp.</i>	Diterpene	Antimicrobial	[120]
<b>274</b>	Dictyotadimer A	<i>Dictyota sp.</i>	Diterpene	-	[121]
<b>275</b>	Joalin	<i>Dictyota sp.</i>	Diterpene	-	[122]
<b>276</b>	16-Acetoxy-1 <i>R</i> ,11 <i>S</i> ,12 <i>R</i> -dolabella-triene	<i>Dictyota sp.</i>	Diterpene	-	[123]

<b>277</b>	3 <i>S</i> -Acetoxy-1 <i>R</i> ,11 <i>S</i> ,12 <i>R</i> -dolabella-triene	<i>Dictyota sp.</i>	Diterpene	-	[123]
<b>278</b>	Dictyotriol C	<i>Dictyota sp.</i>	Diterpene	-	[124]
<b>279</b>	Dictyotriol D	<i>Dictyota sp.</i>	Diterpene	-	[124]
<b>280</b>	Dictyotriol E	<i>Dictyota sp.</i>	Diterpene	-	[124]
<b>281</b>	$\alpha$ -Dictalediol monoacetate	<i>Dictyota sp.</i>	Diterpene	-	[125]

**Table S2:** Biological assays related to therapeutic potential of *Dictyota* extracts

<b>No.</b>	<b>Name</b>	<b>Species</b>	<b>Activity</b>	<b>References</b>
<b>1</b>	Chloroform and acetone extract	<i>D. acutiloba</i>	Antimicrobial	[12]
<b>2</b>	Methanol and hexane extract	<i>D. acutiloba</i>	-	[12]
<b>3</b>	Aqueous extract	<i>D. bartayresiana</i>	Antifungal	[14]
<b>4</b>	Methanol extract	<i>D. bartayresiana</i>	Antimicrobial	[15]
<b>5</b>	Methanol extract	<i>D. bartayresiana</i>	Larvicidal	[15]
<b>6</b>	Methanol extract	<i>D. bartayresiana</i>	Antioxidant	[16]
<b>7</b>	SiO <sub>2</sub> -ZnO nanoparticles	<i>D. bartayresiana</i>	Antimicrobial, Antiproliferative	[17]
<b>8</b>	Sulfated polysaccharides	<i>D. caribaea</i>	Antiproliferative, Immunostimulatory	[19, 20]
<b>9</b>	Ethanol extract	<i>D. coriacea</i>	Hypopigmentation	[27]
<b>10</b>	Hexane and ethyl acetate fractions	<i>D. coriacea</i>	Anti-alopecia	[28]
<b>11</b>	Ethanol extract	<i>D. coriacea</i>	Anti-inflammatory	[29]
<b>12</b>	Polysaccharides	<i>D. dichotoma</i>	Antiproliferative, Immunomodulator, Antiviral	[36-38]
<b>13</b>	Ethanol extract	<i>D. dichotoma</i>	Larvicidal, Antioxidant	[39, 42]
<b>14</b>	Chloroform fraction	<i>D. dichotoma</i>	Antioxidant Antiproliferative	[42]
<b>15</b>	Dichloromethane extract	<i>D. dichotoma</i>	Antioxidant	[65]
<b>16</b>	Palladium oxide nanoparticles	<i>D. dichotoma</i> var. <i>indica</i>	-	[79]
<b>17</b>	Gold nanoparticles	<i>D. dichotoma</i>	Antimicrobial	[81]
<b>18</b>	Methanol extract	<i>D. dichotoma</i> var. <i>divaricata</i> <i>D. dichotoma</i> var. <i>linearis</i>	Cytotoxic	[84]
<b>19</b>	Aqueous and ethanolic extracts	<i>D. dichotoma</i>	Antioxidant, Plant growth promotion	[88, 89]
<b>20</b>	Methanol extract	<i>D. dichotoma</i> var. <i>intricata</i> , <i>D. dichotoma</i> var. <i>indica</i> , <i>D. dumosa</i>	Antimicrobial	[90]
<b>21</b>	Dichloromethane and dichloromethane/methanol extracts	<i>D. fasciola</i>	Antimicrobial	[92]
<b>22</b>	<i>n</i> -Butanol extract	<i>D. flabellate</i>	Antimicrobial, Antioxidant	[97]

23	Ethanol extract	<i>D. dichotoma</i> var. <i>indica</i> , <i>D. hauckiana</i>	Larvicidal	[101]
24	Dichloromethane/methanol-soluble fraction	<i>D. menstrualis</i>	Antiviral	[104]
25	Methanol extract	<i>D. cilliolata</i> , <i>D. menstrualis</i>	Antiproliferative	[107]
26	Sulfated polysaccharides	<i>D. menstrualis</i>	Anticoagulant, Antinociceptive, Anti-inflammatory	[108, 109]
27	Dichloromethane extract	<i>D. menstrualis</i>	Antiviral	[110]
28	Sulfated polysaccharides	<i>D. mertensii</i>	Antiproliferative, Immunomodulatory, Anti-inflammatory	[111]
29	Dichloromethane methanol extract	<i>D. pulchella</i>	Cardioprotective	[116]
30	Dichloromethane extract	<i>D. spiralis</i>	Anti-leishmanial, Anti-trypanosomal	[119]
31	Organic extract	<i>D. spiralis</i>	Anti-leishmanial, Anti-trypanosomal	[126]
32	Organic extract	<i>Dictyota</i> sp.	Antioxidant, Neuroprotective	[127]