

## Supporting Information

### **Molecular Networking prospection and characterization of terpenoids and C<sub>15</sub>-acetogenins from the Brazilian seaweeds**

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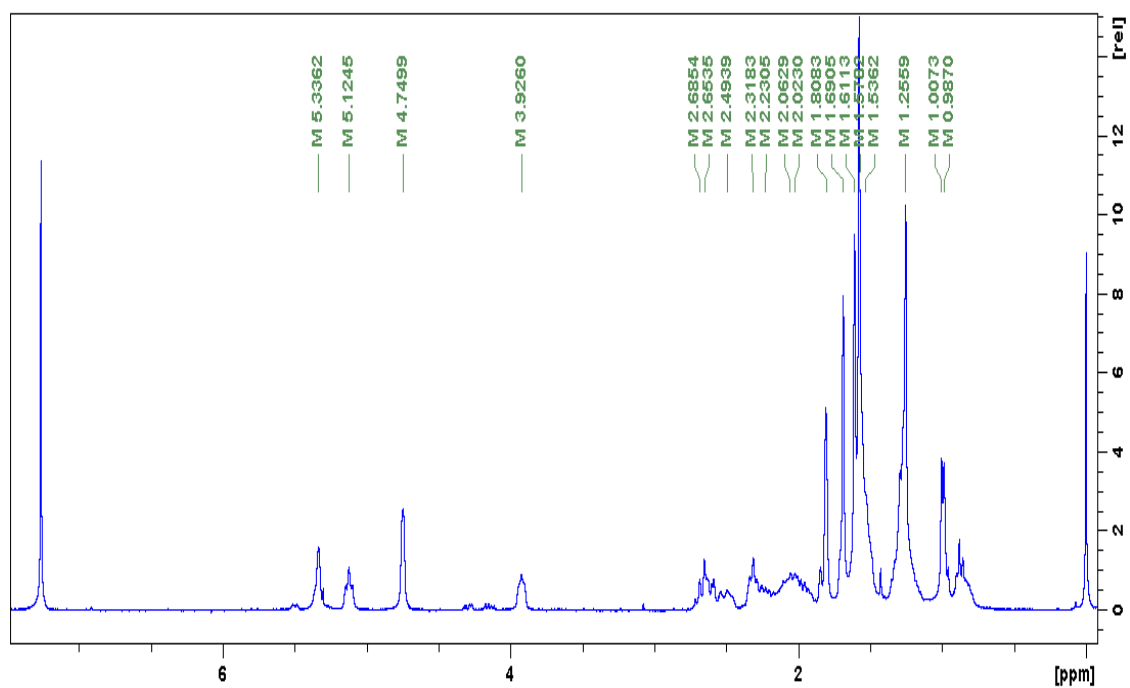


Figure S1.  $^1\text{H}$  (400 Hz) NMR Spectrum of pachydietylol A (**9**) in  $\text{CDCl}_3$ .

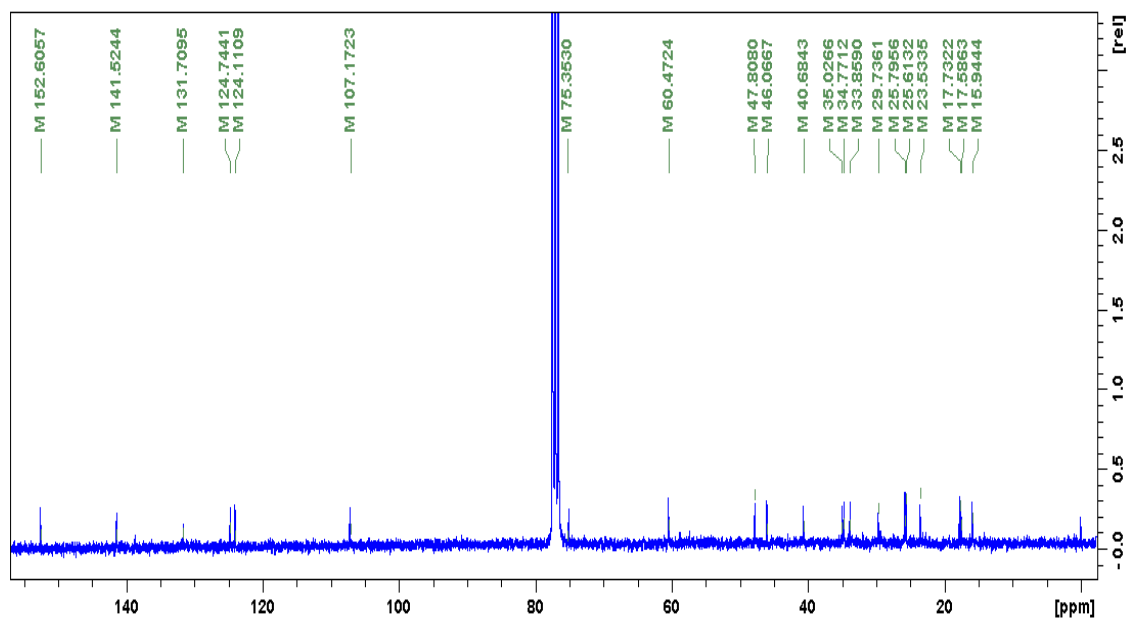


Figure S2.  $^{13}\text{C}$  (400 Hz) NMR Spectrum of pachydietylol A (**9**) in  $\text{CDCl}_3$ .

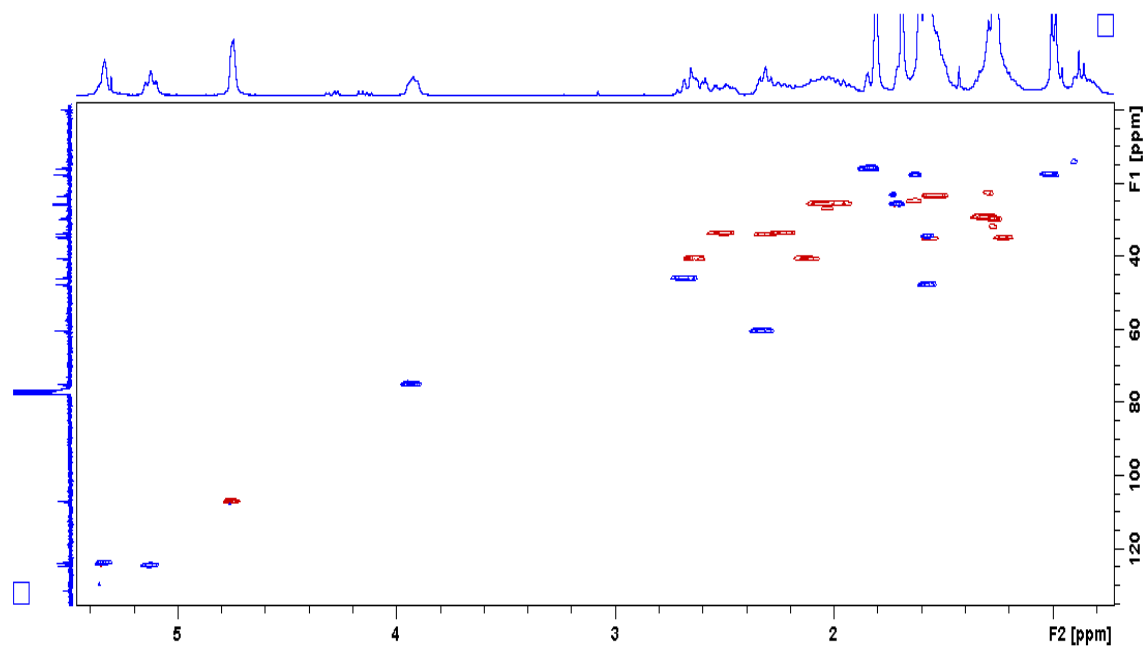


Figure S3. HSQC (400/100 Hz) NMR Spectrum of pachydictyol A (**9**) in CDCl<sub>3</sub>.

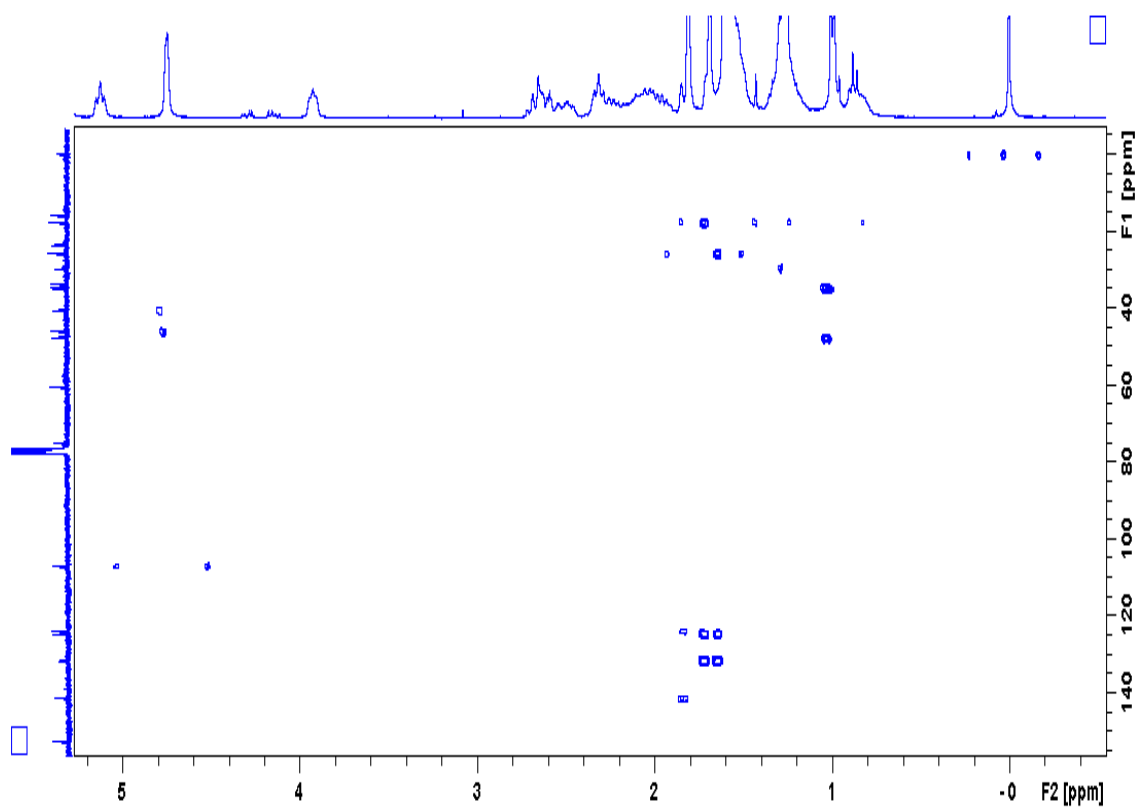


Figure S4. HMBC (400/100 Hz) NMR Spectrum of pachydictyol A (**9**) in CDCl<sub>3</sub>.

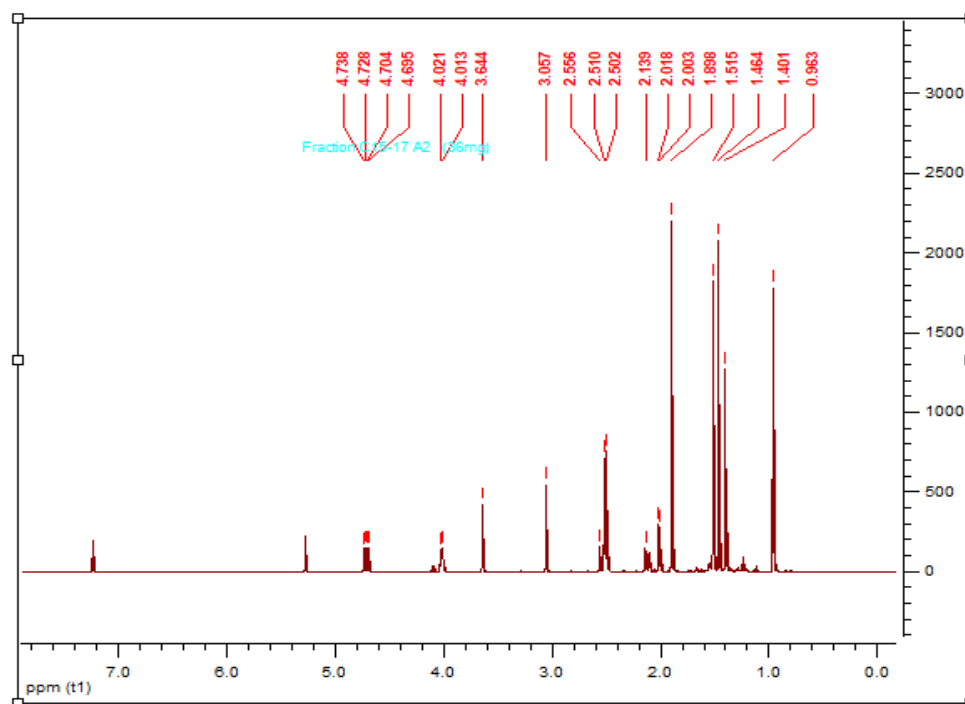


Figure S5.  $^1\text{H}$  (400 Hz) NMR Spectrum of prepacifenol epoxide (**20**) in  $\text{CDCl}_3$ .

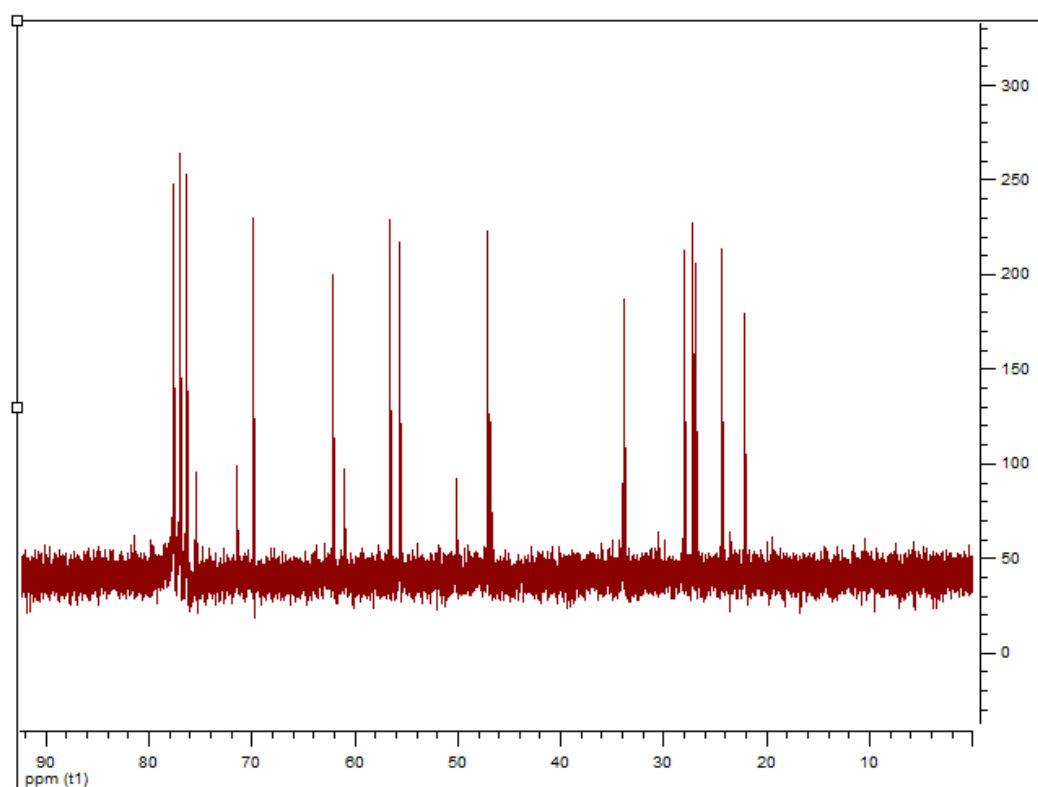


Figure S6.  $^{13}\text{C}$  (400 Hz) NMR Spectrum of prepacifenol epoxide (**20**) in  $\text{CDCl}_3$ .

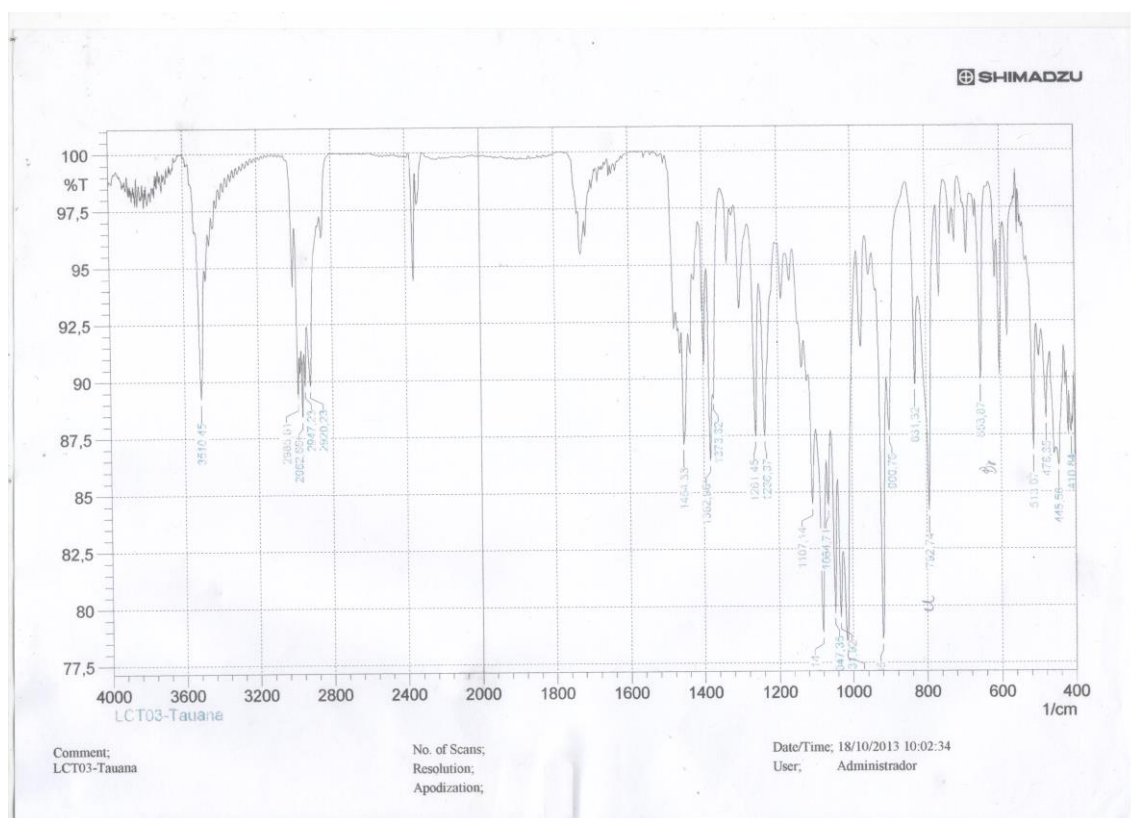


Figure S7. IR spectrum of prepacifenol epoxide (20)

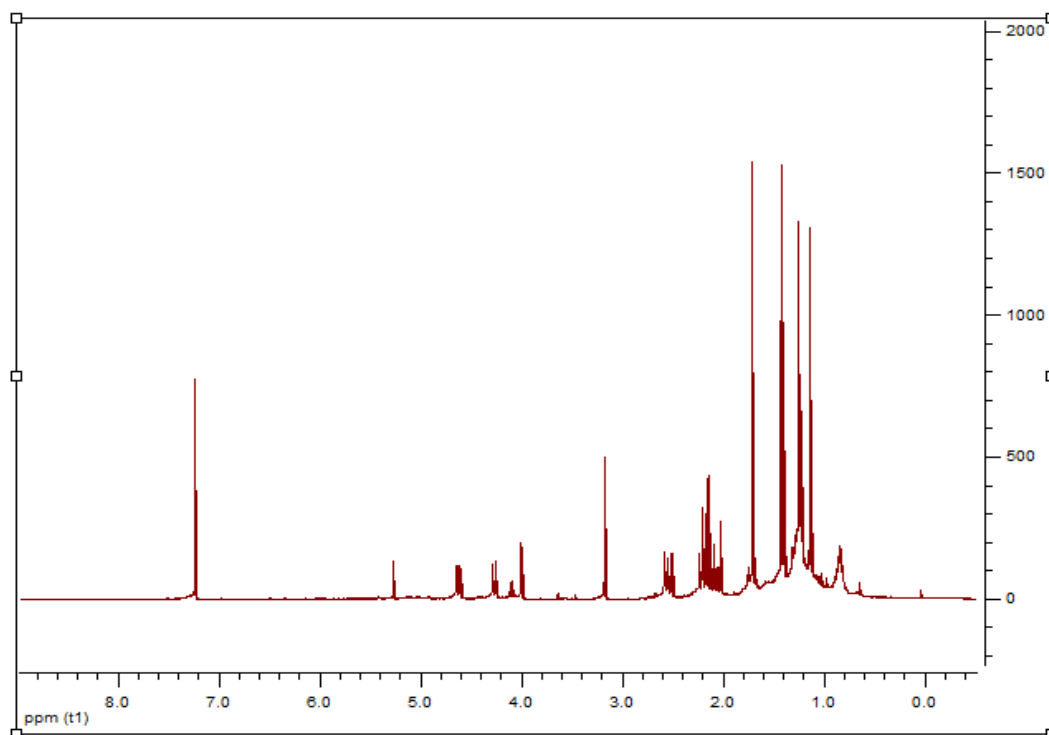


Figure S8.  $^1\text{H}$  (400 Hz) NMR Spectrum of johnstonol (**21**) in  $\text{CDCl}_3$ .

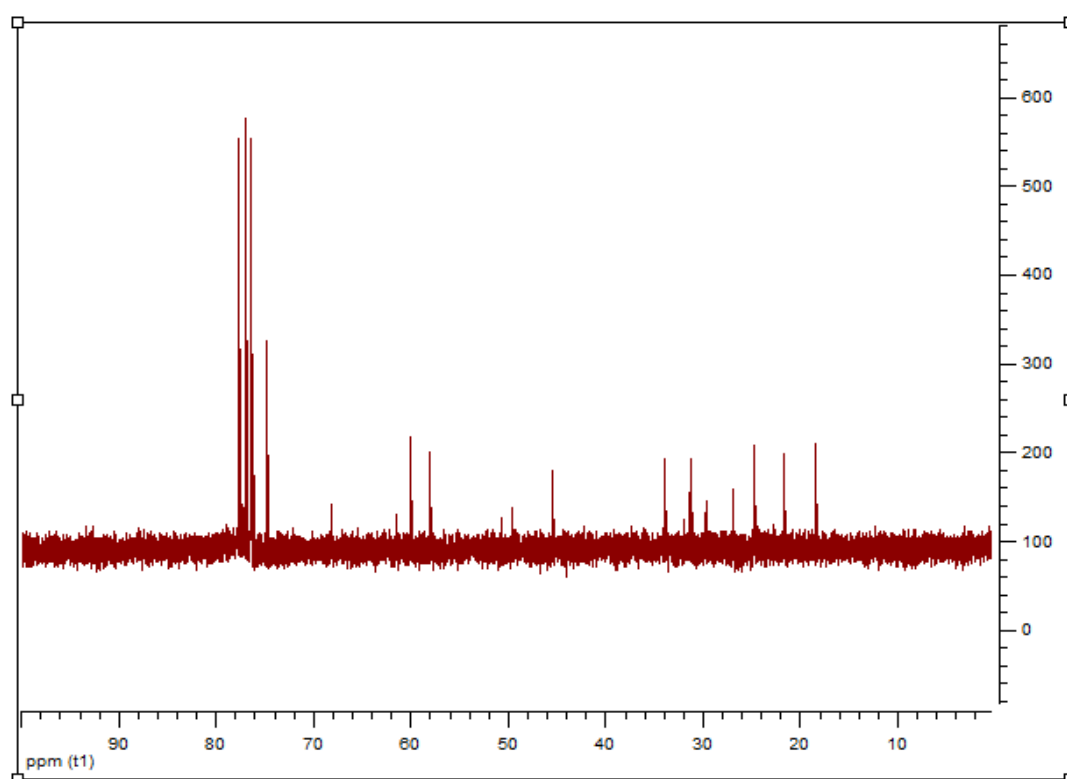


Figure S9.  $^{13}\text{C}$  (400 Hz) NMR Spectrum of johnstonol (**21**) in  $\text{CDCl}_3$

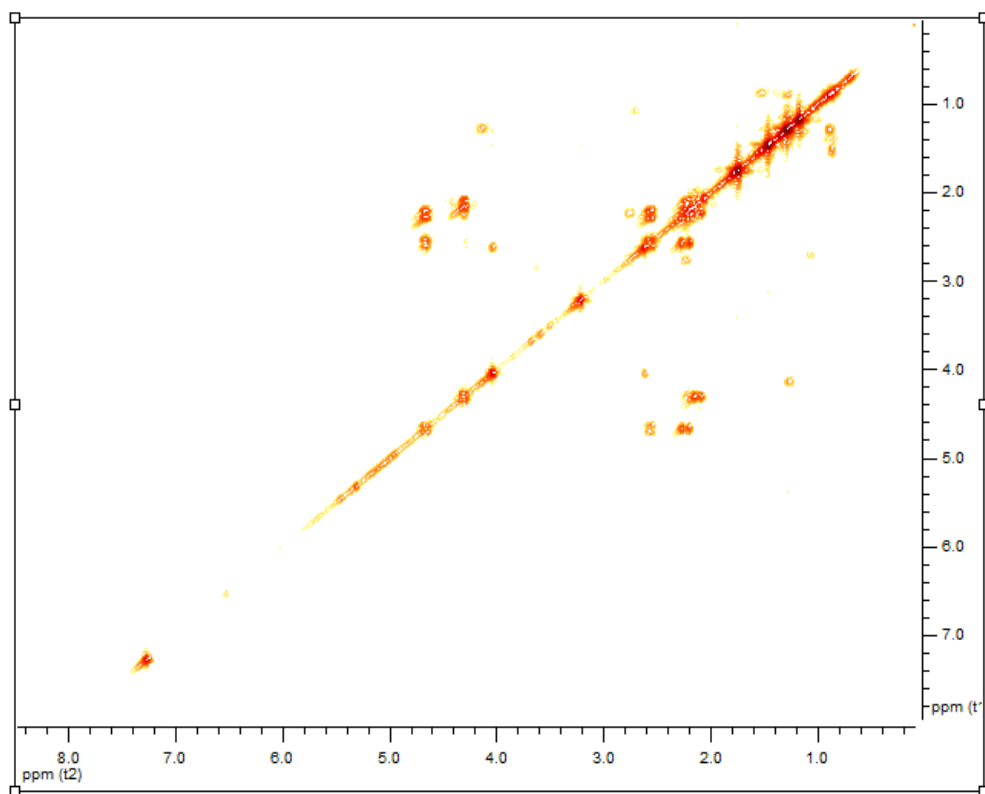


Figure S10.  $^1\text{H}$ - $^1\text{H}$  COSY (400 Hz) NMR Spectrum of johnstonol (**21**) in  $\text{CDCl}_3$ .

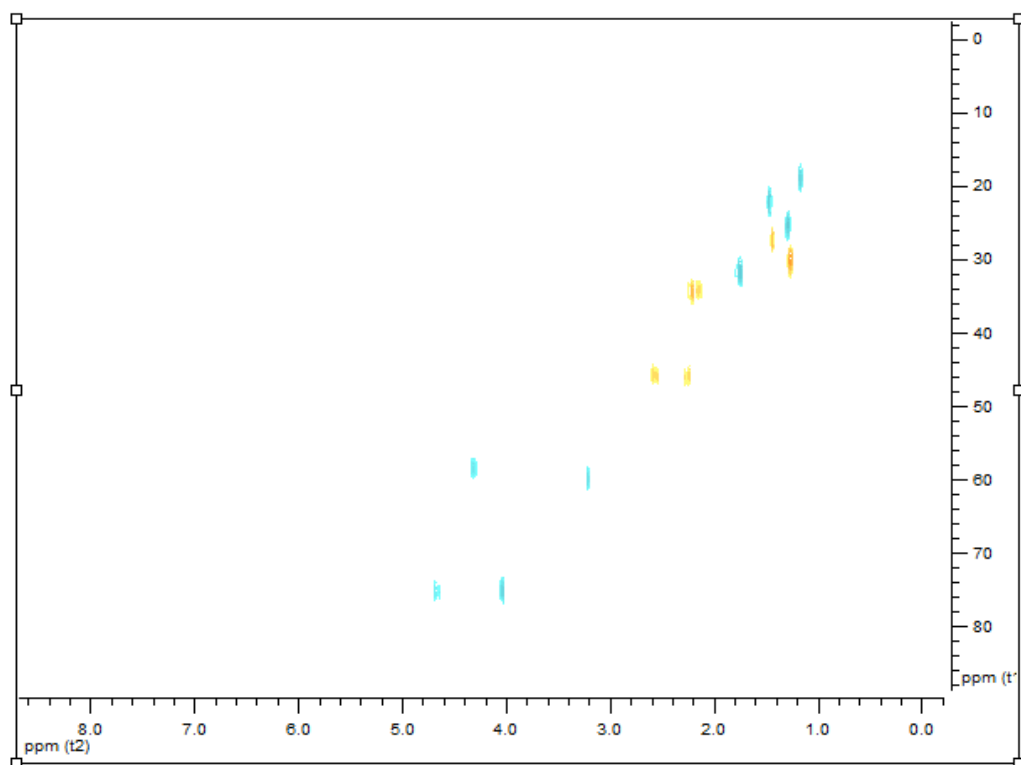


Figure S11. HSQC (400/100 Hz) NMR Spectrum of johnstonol (**21**) in  $\text{CDCl}_3$ .



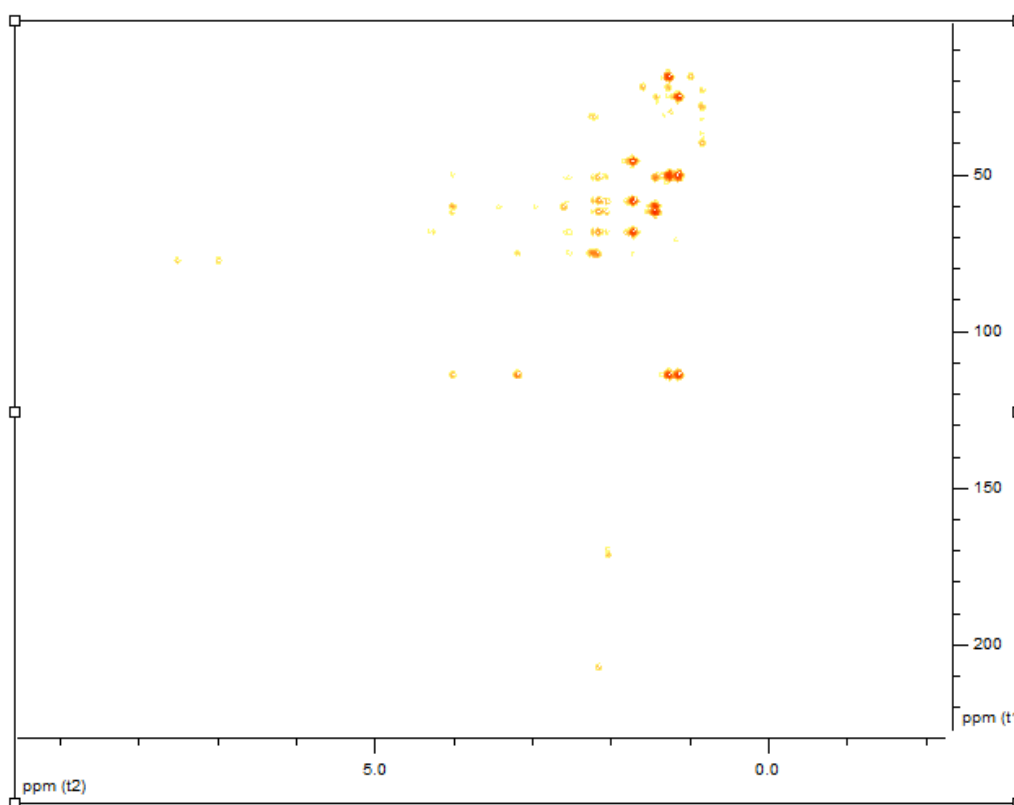


Figure S12. HMBC (400/100 Hz) NMR Spectrum of johnstonol (**21**) in  $\text{CDCl}_3$ .

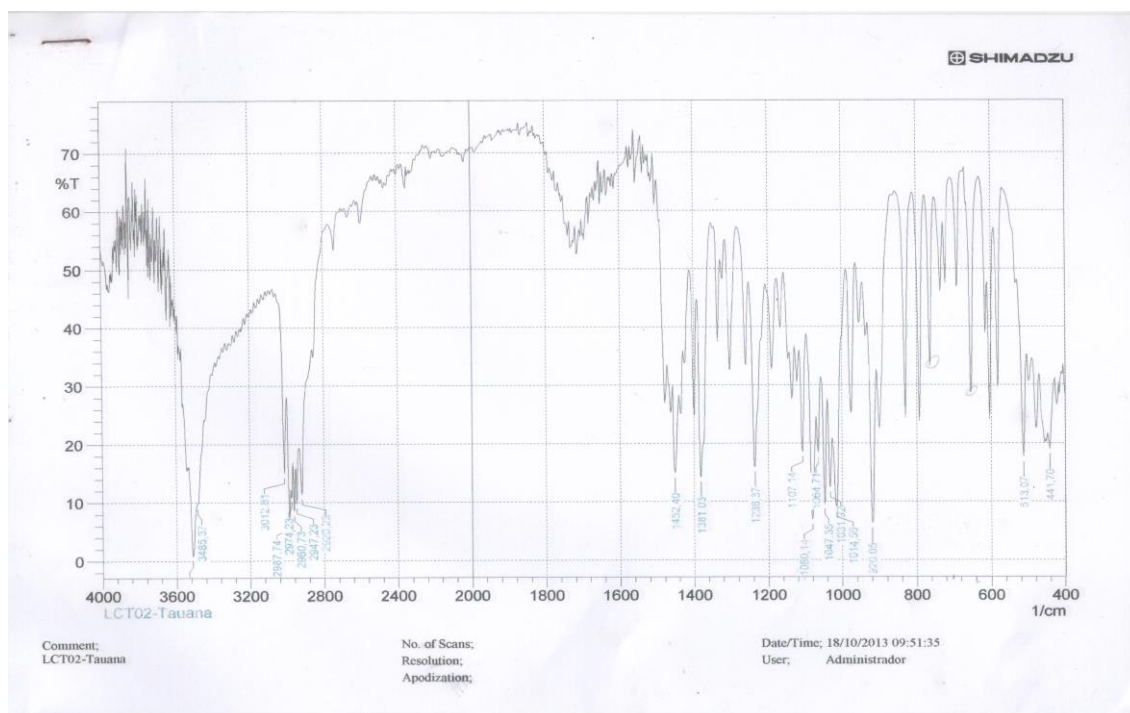


Figure S13. IR spectrum of johnstonol (**21**)

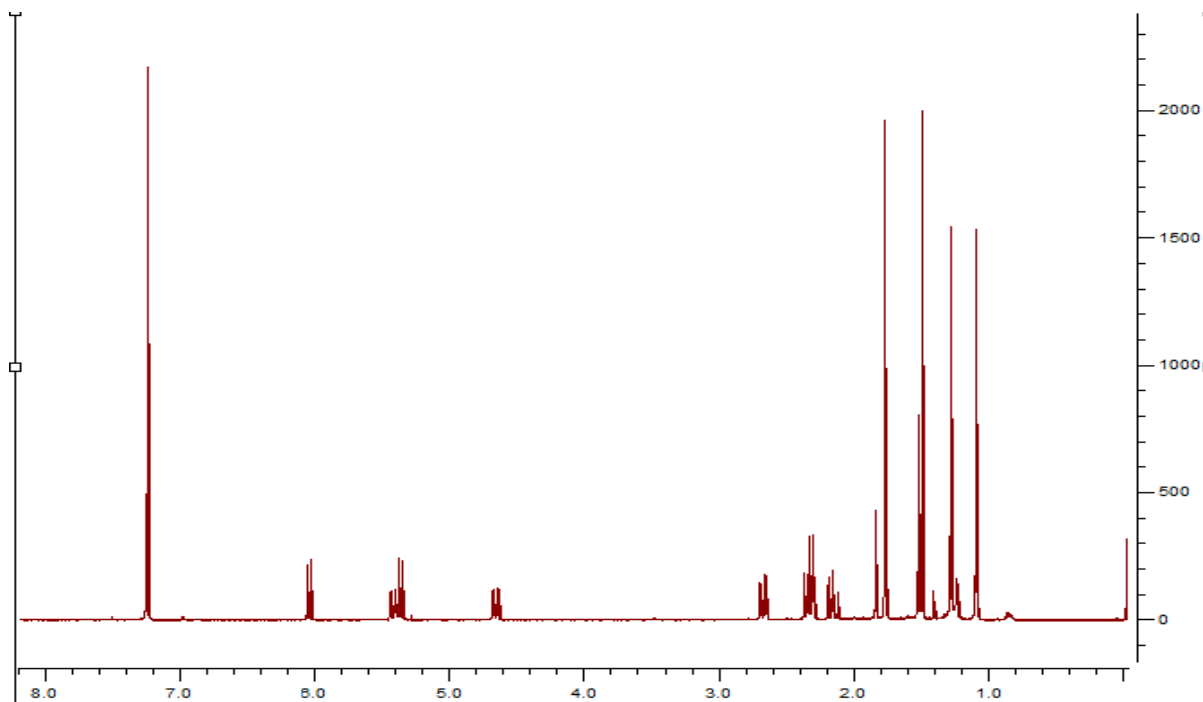


Figure S14.  $^1\text{H}$  (400 Hz) NMR Spectrum of pacifenol (**27**) in  $\text{CDCl}_3$ .

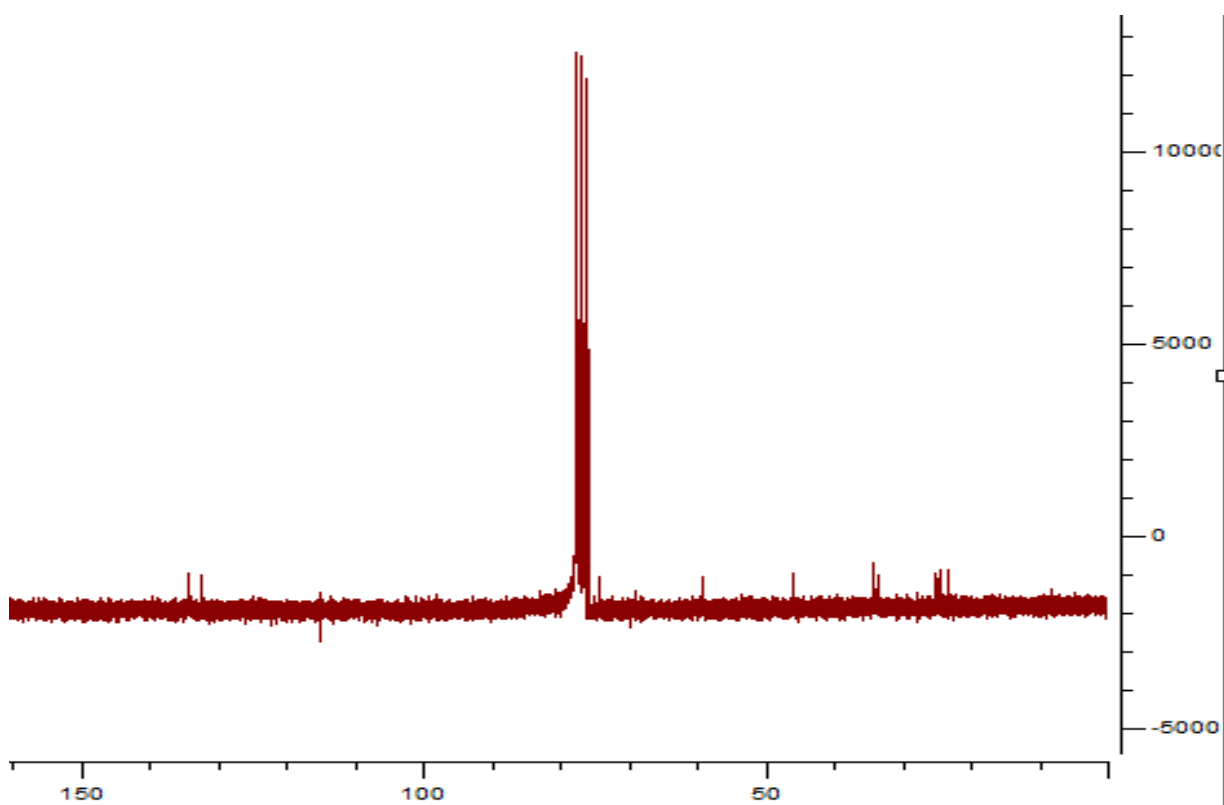


Figure S15.  $^{13}\text{C}$  (400 Hz) NMR Spectrum of pacifenol (**27**) in  $\text{CDCl}_3$ .

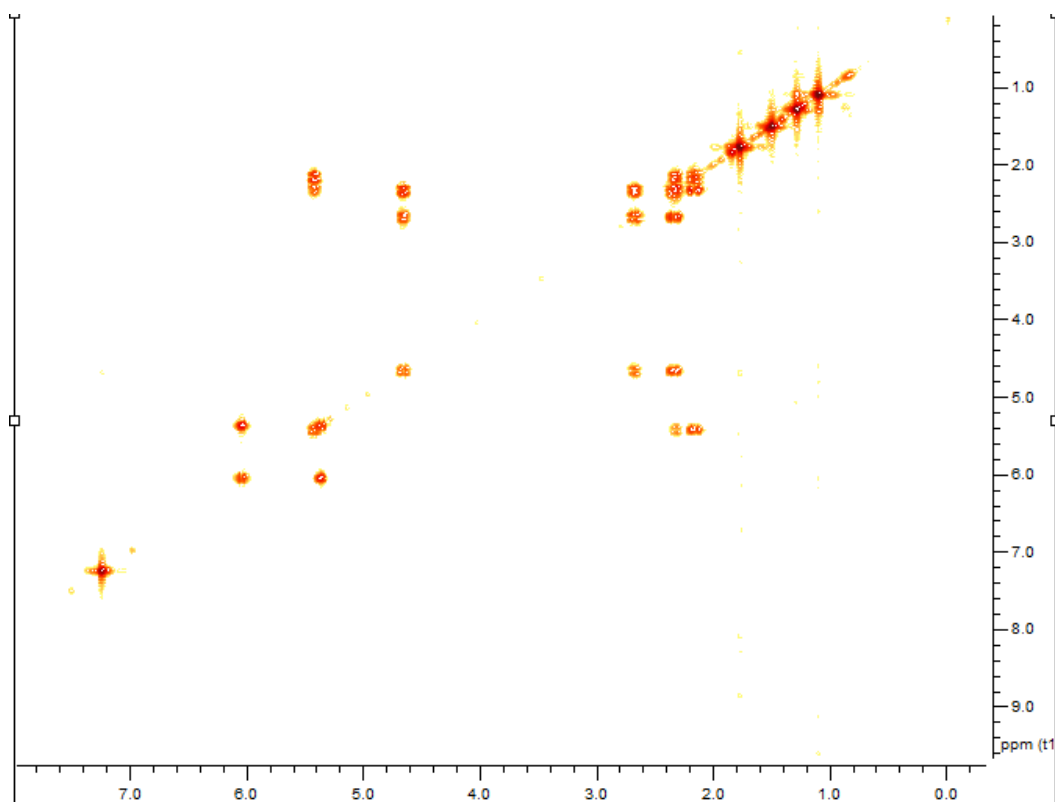


Figure S16.  $^1\text{H}$ - $^1\text{H}$  COSY (400 Hz) NMR Spectrum of pacifenol (**27**) in  $\text{CDCl}_3$ .

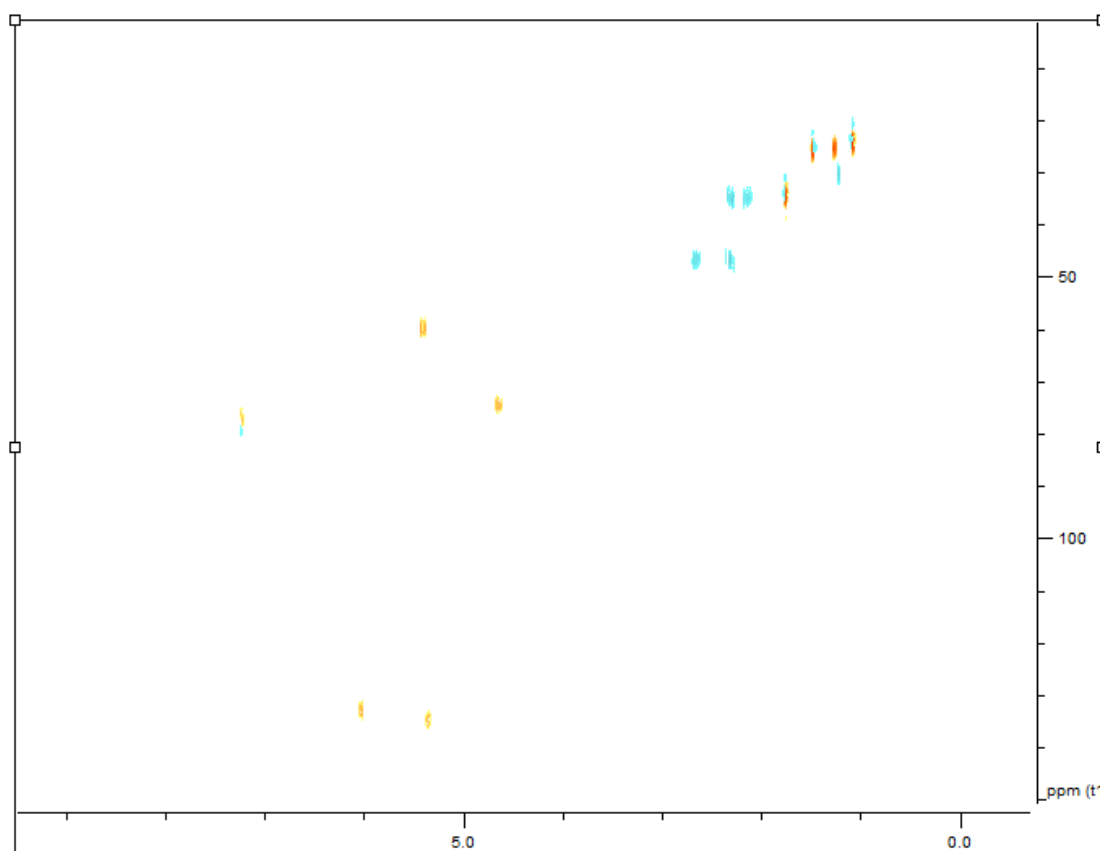


Figure S17. HSQC (400/100 Hz) NMR Spectrum of pacifenol (**27**) in  $\text{CDCl}_3$ .

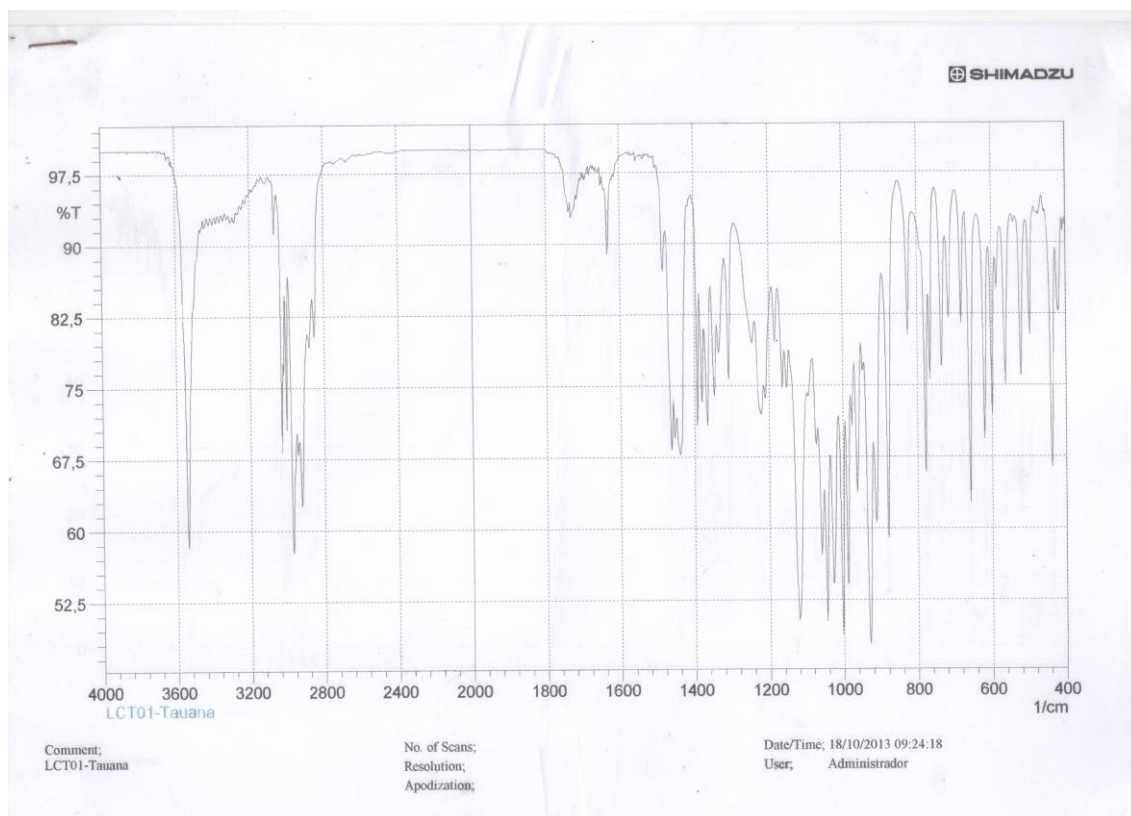


Figure S18. IR spectrum of pacifenol (27)

Box S1. Compounds related to nodes.

Family	Node	Extract Code	Compound	Class	Reference
<b>F1</b>	<i>m/z</i> 319.2274	CC1, CC2, DM1, DM3	4 $\beta$ -hydroxydictyodial ( <b>1</b> )	Xeniane diterpene	14
	<i>m/z</i> 361.2383 <i>m/z</i> 301.2167	CC1, DM1	4 $\beta$ -acetoxydictyodial A ( <b>2</b> )	Xeniane diterpene	13
	<i>m/z</i> 321.2441 <i>m/z</i> 303.2332	CC1, CC3, DM2, DM3	18,4-dihydroxydictyo-19-al A ( <b>3</b> )	Xeniane diterpene	14
	<i>m/z</i> 267.2134	CC3, DM1	18-acetoxy-4-hydroxydictyo-19-al A ( <b>4</b> )	Xeniane diterpene	14
	<i>m/z</i> 269.2265 <i>m/z</i> 270.2309	CC1, CC2, DM2	dictyotadiol ( <b>5</b> )	Prenylated guaiane  diterpene	15
			dictyol B ( <b>6</b> )	Prenylated guaiane diterpene	13
	<i>m/z</i> 369.2395	CC2, DM2	dictyol B acetate ( <b>7</b> )		
	<i>m/z</i> 271.2439 <i>m/z</i> 272.2452	CC1, CC2, DM2	dictyoxide ( <b>8</b> )	Prenylated guaiane diterpene	12
			pachydictyol A ( <b>9</b> )	Prenylated guaiane diterpene	12
	<b>F2</b>	-	CC2, CC3, DM2, DP1, DP3	-	-
<b>F3</b>	<i>m/z</i> 412.9883, <i>m/z</i> 414.9859 <i>m/z</i> 416.9840	LC2	9-hydroxy-4,10-dibromo-3- chlorochamigrene ( <b>10</b> )	Chamigrane sesquiterpene	21,22,23
			2,10-dibromo-3-chloro-8- hydroxychamigrene ( <b>11</b> )	Chamigrane sesquiterpene	24
			laucapyranoid A ( <b>12</b> )	Bisabolane sesquiterpene	25
<b>F4</b>	<i>m/z</i> 412.9717, <i>m/z</i> 414.9692 <i>m/z</i> 432.9804	LC2	laucapyranoid B ( <b>13</b> )	Bisabolane sesquiterpene	25
			laucapyranoid C ( <b>14</b> )	Bisabolane sesquiterpene	25
			4,10-dibromo-3-chloro-7,8- epoxy-9-hydroxychamigrene ( <b>15</b> )	Chamigrane sesquiterpene	25

			4,10-dibromo-3-chloro-7,8-epoxychamigrane ( <b>16</b> )	Chamigrane sesquiterpene	26
			4,10-dibromo-3-chloro-7,8-epoxy-5-hydroxychamigrane ( <b>17</b> )	Chamigrane sesquiterpene	27
<b>F5</b>	-	DM1, DM2, CC1, DP1	-	-	-
<b>F6</b>	-	DM1, DM3	-	-	-
<b>F7</b>	m/z 390.9736	LC1	lauredecumallene A ( <b>18</b> )	C <sub>15</sub> -acetogenin	29
			lauredecumallene B ( <b>19</b> )	C <sub>15</sub> -acetogenin	29
	m/z 408.9829	LC1	prepacifenol epoxide ( <b>20</b> )	Chamigrane sesquiterpene	30
			johnstonol ( <b>21</b> )	Chamigrane sesquiterpene	21
<b>F8</b>	-	CC2, DM2	-	-	-
<b>F9</b>	-	CC1	-	-	-
<b>Individual node</b>	m/z 392.9902	LC2	laureepoxide ( <b>22</b> )	C <sub>15</sub> -acetogenin	33
			(3E)-elatenyne ( <b>23</b> )	C <sub>15</sub> -acetogenin	29,34
			elatenyne ( <b>24</b> )	C <sub>15</sub> -acetogenin	29,34
			kumausallene ( <b>25</b> )	C <sub>15</sub> -acetogenin	24
			laurobtusin ( <b>26</b> )	C <sub>15</sub> -acetogenin	35
<b>Individual node</b>	m/z 408.9581 m/z 410.9542	LC2	pacifenol ( <b>27</b> )	Chamigrane sesquiterpene	37,38,39