Supporting Information

Limonoids with diverse frameworks from stem barks of
*Entandrophragma angolense* and their bioactivities

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Electronic Supplementary Material (ESI) for RSC Advances.
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Figure S2. Experimental ECD of 3, 7-11 (in MeCN).
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Figure S5. HRESIMS spectrum of 1.

Figure S6. $^1$H NMR spectrum of 1 in CDCl$_3$. 
Figure S7. $^{13}$C NMR spectrum of 1 in CDCl$_3$.

Figure S8. HSQC spectrum of 1 in CDCl$_3$. 
Figure S9. HMBC spectrum of 1 in CDCl₃.

Figure S10. ROESY spectrum of 1 in CDCl₃.
Figure S11. HRESIMS spectrum of 2.

Figure S12. $^1$H NMR spectrum of 2 in CDCl$_3$. 
Figure S13. $^{13}$C NMR spectrum of 2 in CDCl$_3$.

Figure S14. HSQC spectrum of 2 in CDCl$_3$. 
Figure S15. HMBC spectrum of 2 in CDCl₃.

Figure S16. ROESY spectrum of 2 in CDCl₃.
Figure S17. HRESIMS spectrum of 3.

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Figure S19. $^{13}$C NMR spectrum of 3 in CDCl$_3$.

Figure S20. HSQC spectrum of 3 in CDCl$_3$. 
Figure S21. HMBC spectrum of 3 in CDCl₃.

Figure S22. ROESY spectrum of 3 in CDCl₃.
Figure S23. HRESIMS spectrum of 4.

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Figure S26. HSQC spectrum of 4 in CDCl$_3$. 
Figure S27. HMBC spectrum of 4 in CDCl$_3$.

Figure S28. ROESY spectrum of 4 in CDCl$_3$. 
Figure S29. HRESIMS spectrum of 5.

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Figure S31. $^{13}$C NMR spectrum of 5 in CDCl$_3$.

Figure S32. HSQC spectrum of 5 in CDCl$_3$. 
Figure S33. HMBC spectrum of 5 in CDCl₃.

Figure S34. ROESY spectrum of 5 in CDCl₃.
Figure S35. HRESIMS spectrum of 6.

Figure S36. $^1$H NMR spectrum of 6 in CDCl$_3$. 
Figure S37. $^{13}$C NMR spectrum of 6 in CDCl$_3$.

Figure S38. HSQC spectrum of 6 in CDCl$_3$. 
Figure S39. HMBC spectrum of 6 in CDCl₃.

Figure S40. ROESY spectrum of 6 in CDCl₃.
Figure S41. HRESIMS spectrum of 7.

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Figure S43. $^{13}$C NMR spectrum of 7 in CDCl$_3$.

Figure S44. HSQC spectrum of 7 in CDCl$_3$. 
Figure S45. HMBC spectrum of 7 in CDCl₃.

Figure S46. ROESY spectrum of 7 in CDCl₃.
Figure S47. HRESIMS spectrum of 8.

Figure S48. $^1$H NMR spectrum of 8 in CDCl$_3$
Figure S49. $^{13}$C NMR spectrum of 8 in CDCl$_3$

Figure S50. HSQC spectrum of 8 in CDCl$_3$
Figure S51. HMBC spectrum of 8 in CDCl₃.

Figure S52. ROESY spectrum of 8 in CDCl₃.
Figure S53. HRESIMS spectrum of 9

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Figure S54. ¹H NMR spectrum of 9 in CDCl₃
Figure S55. $^{13}$C NMR spectrum of 9 in CDCl$_3$.

Figure S56. HSQC spectrum of 9 in CDCl$_3$. 
Figure S57. HMBC spectrum of 9 in CDCl₃.

Figure S58. ROESY spectrum of 9 in CDCl₃.
Figure S59. HRESIMS spectrum of 10.

Figure S60. $^1$H NMR spectrum of 10 in CDCl₃.
Figure S61. $^{13}$C NMR spectrum of 10 in CDCl$_3$

Figure S62. HSQC spectrum of 10 in CDCl$_3$
Figure S63. HMBC spectrum of 10 in CDCl₃

Figure S64. ROESY spectrum of 10 in CDCl₃
Figure S65. HRESIMS spectrum of 11.

Figure S66. $^1$H NMR spectrum of 11 in CD$_3$OD
Figure S67. $^{13}$C NMR spectrum of 11 in CD$_3$OD

Figure S68. HSQC spectrum of 11 in CD$_3$OD
Figure S69. HMBC spectrum of 11 in CD$_3$OD

Figure S70. ROESY spectrum of 11 in CD$_3$OD
Figure S71. HRESIMS spectrum of 12

Figure S72. $^1$H NMR spectrum of 12 in CDCl$_3$
Figure S73. $^{13}$C NMR spectrum of 12 in CDCl$_3$

Figure S74. HSQC spectrum of 12 in CDCl$_3$
Figure S75. HMBC spectrum of 12 in CDCl₃.

Figure S76. ROESY spectrum of 12 in CDCl₃.
Figure S77. HRESIMS spectrum of 13

Figure S78. $^1$H NMR spectrum of 13 in CDCl$_3$
Figure S79. $^{13}$C NMR spectrum of 13 in CDCl$_3$

Figure S80. HSQC spectrum of 13 in CDCl$_3$
Figure S81. HMBC spectrum of 13 in CDCl₃

Figure S82. ROESY spectrum of 13 in CDCl₃
Figure S83. HRESIMS spectrum of 14

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C30H4NO9

Figure S84. ^1H NMR spectrum of 14 in CDCl₃
Figure S85. $^{13}$C NMR spectrum of 14 in CDCl$_3$

Figure S86. HSQC spectrum of 14 in CDCl$_3$
Figure S87. HMBC spectrum of 14 in CDCl$_3$.

Figure S88. ROESY spectrum of 14 in CDCl$_3$. 
Figure S89. HRESIMS spectrum of 15

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Figure S90. $^1$H NMR spectrum of 15 in CDCl$_3$
Figure S91. $^{13}$C NMR spectrum of 15 in CDCl$_3$

Figure S92. HSQC spectrum of 15 in CDCl$_3$
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Figure S94. ROESY spectrum of 15 in CDCl₃
Figure S95. HRESIMS spectrum of 16

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Figure S98. HSQC spectrum of 16 in CDCl$_3$
Figure S99. HMBC spectrum of 16 in CDCl₃

Figure S100. ROESY spectrum of 16 in CDCl₃