Supplementary Information

Figure S1. $^1$H-NMR spectrum of $N$-(2-hydroxyphenyl)-acetamide (11) in DMSO-$d_6$.

Figure S2. $^1$H-NMR spectrum of 1,6-dihydroxyphenazine (12) in DMSO-$d_6$. 
Figure S3. $^1$H-NMR spectrum of 5a,6,11a,12-tetrahydro-5a,11a-dimethyl[1,4]benzoxazino [3,2-\textit{b}][1,4]benzoxazine (13a) in DMSO-$d_6$. 

Figure S4. $^{13}$C-NMR spectrum 5a,6,11a,12-tetrahydro-5a,11a-dimethyl[1,4]benzoxazino [3,2-\textit{b}][1,4]benzoxazine (13a) in DMSO-$d_6$. 
Figure S5. $^1$H-NMR spectrum of 5a,6,11a,12-tetrahydro-5a,11a-dimethyl[1,4]benzoxazino[3,2-\textit{b}][1,4]benzoxazine (13a) in pyridine-$d_5$.

Figure S6. $^{13}$C-NMR spectrum of 5a,6,11a,12-tetrahydro-5a,11a-dimethyl[1,4]benzoxazino[3,2-\textit{b}][1,4]benzoxazine (13a) in pyridine-$d_5$. 
Figure S7. Edited gHSQC spectrum of 5a,6,11a,12-tetrahydro-5a,11a-dimethyl[1,4]benzoxazino[3,2-b][1,4]benzoxazine (13a) in pyridine-$d_5$.

Figure S8. HMBC spectrum of 5a,6,11a,12-tetrahydro-5a,11a-dimethyl[1,4]benzoxazino[3,2-b][1,4]benzoxazine (13a) in pyridine-$d_5$. 
Figure S9. NMR titration of 1,6-dihydroxyphenazine (12) in fraction 24 sourced from Actinokineospora sp. EG49 in DMSO-d6.

Figure S10. $^1$H NMR fingerprints of HPLC fractions 26 (A) and 27 (B) sourced from the EtOAc extracts of the Nocardiopsis sp. and Actinokineospora sp. co-culture (black) and the Actinokineospora sp. monoculture (blue) and Nocardiopsis sp. monoculture (red).
Figure S10. Cont.

(B)

Figure S11. Biological activity of compounds 11, 12 and 13 against Bacillus sp. P21, with the white arrow showing the inhibition zone diameter.
**Figure S12.** Biological activity of compounds 11, 12 and 13 against *Actinokineospora* sp. EG49, with the white arrow showing the inhibition zone diameter.