MATERIAL SUPLEMENTAR

Alkaloids from leaves of *Guatteria pogonopus* (Annonaceae) and their cytotoxicities

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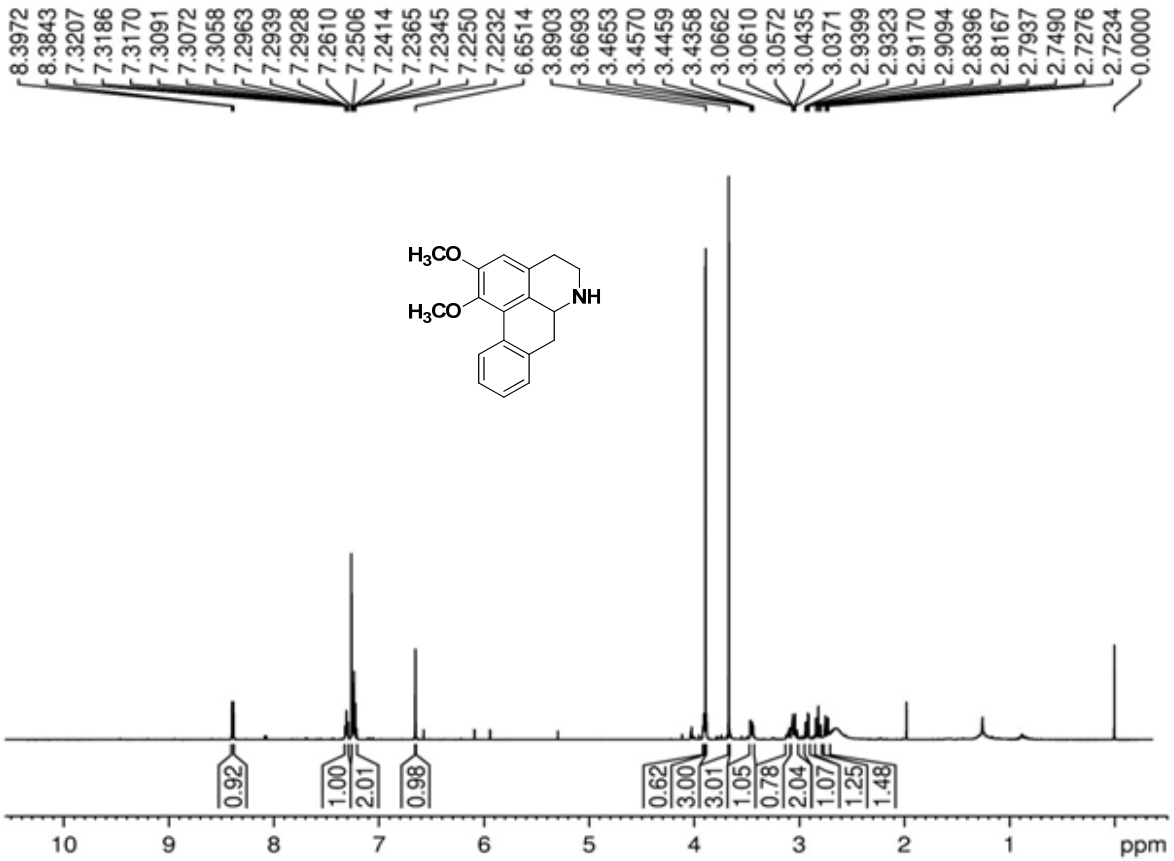

Figure 1S. *^{1}H NMR spectrum of alkaloid (+)-nornuciferine (**1**) (600 MHz, $CDCl_3$)*

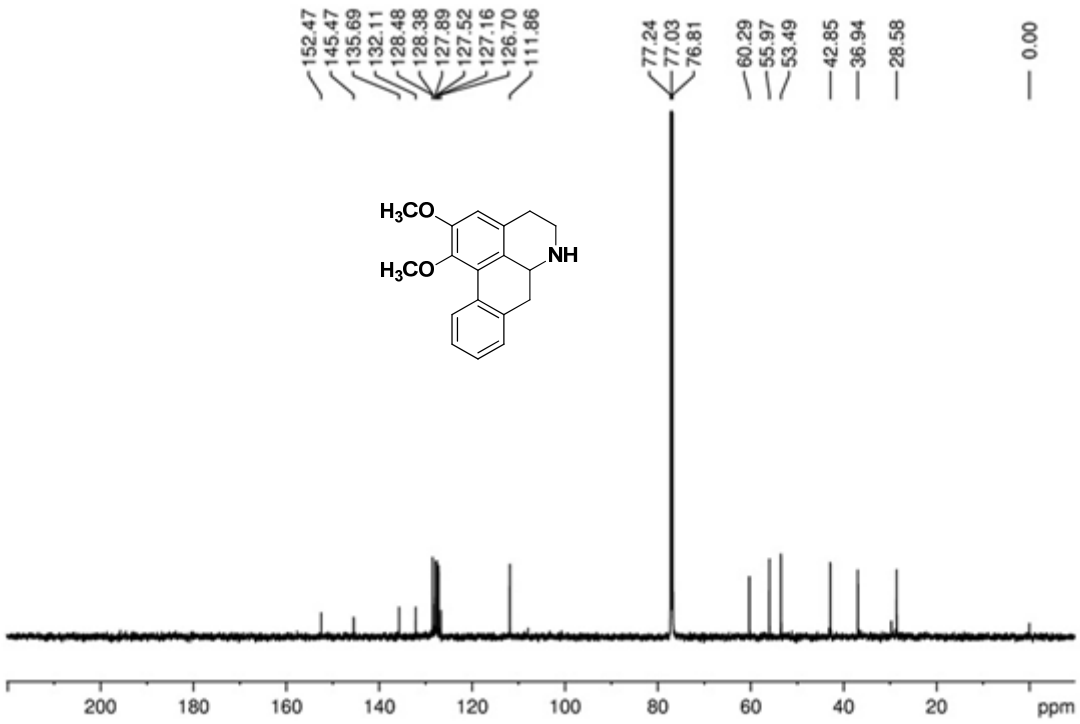

Figure 2S. *$^{13}C\{^{1}H\}$ NMR spectrum of alkaloid (+)-nornuciferine (**1**) (150 MHz, $CDCl_3$)*

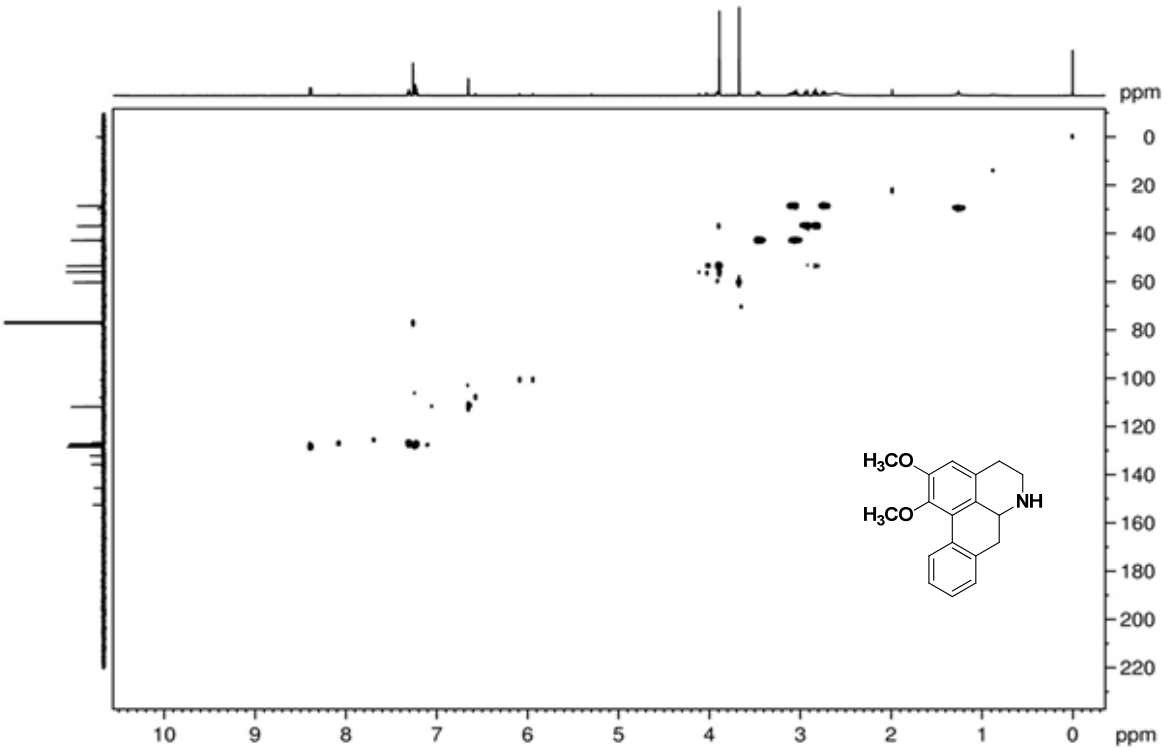

Figure 3S. *^{1}H-^{13}C one-bond correlation map from HMBC NMR experiment of alkaloid (+)-nornuciferine* ***(1)*** *(600 and 150 MHz, $CDCl_3$)*

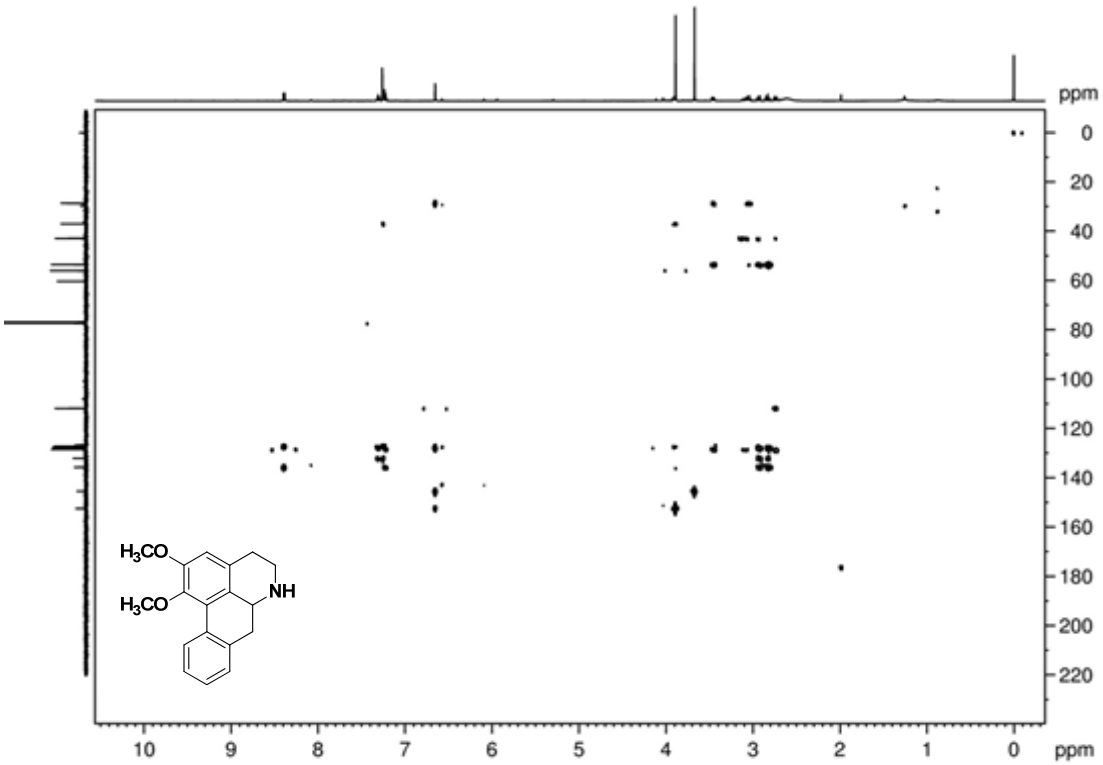

Figure 4S. *^{1}H-^{13}C long-range correlation map from HMBC NMR experiment of alkaloid (+)-nornuciferine* ***(1)*** *(600 and 150 MHz, $CDCl_3$)*

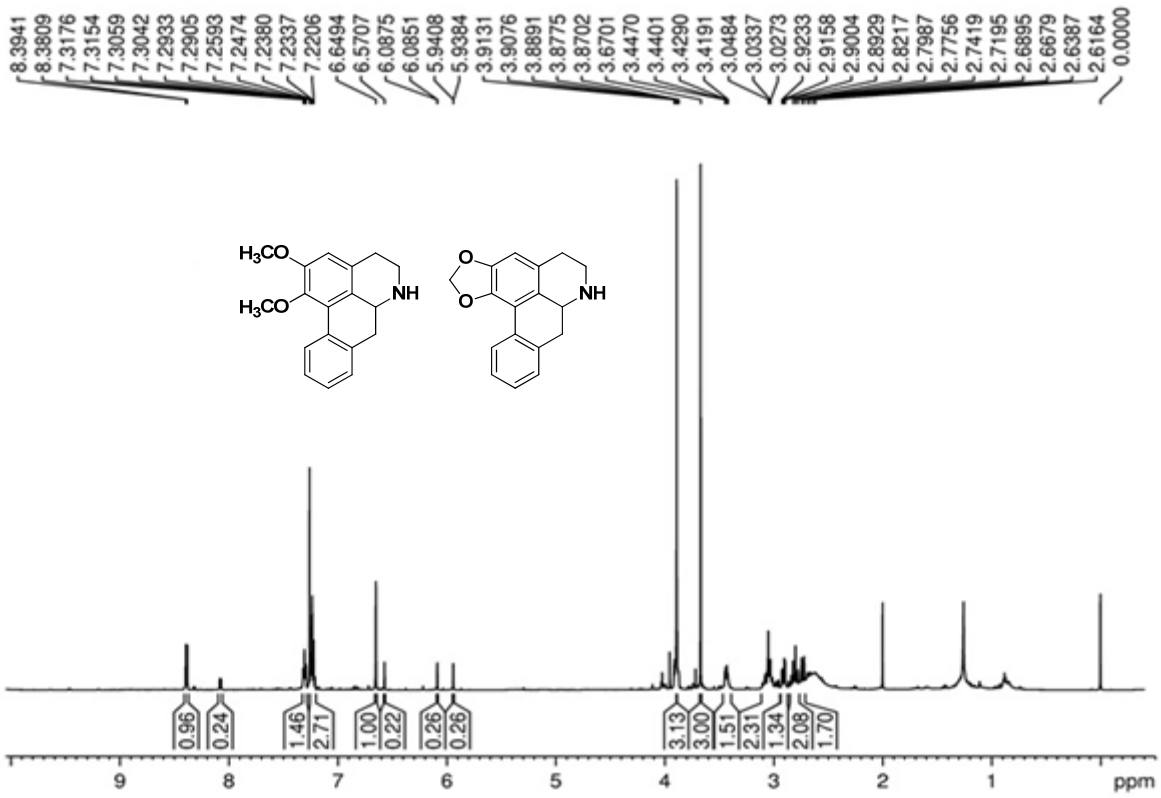

Figure 5S. *^{1}H NMR spectrum of alkaloids (+)-nornuciferine (**1**) and (+)-anonaine (**2**) (600 MHz, $CDCl_3$)*

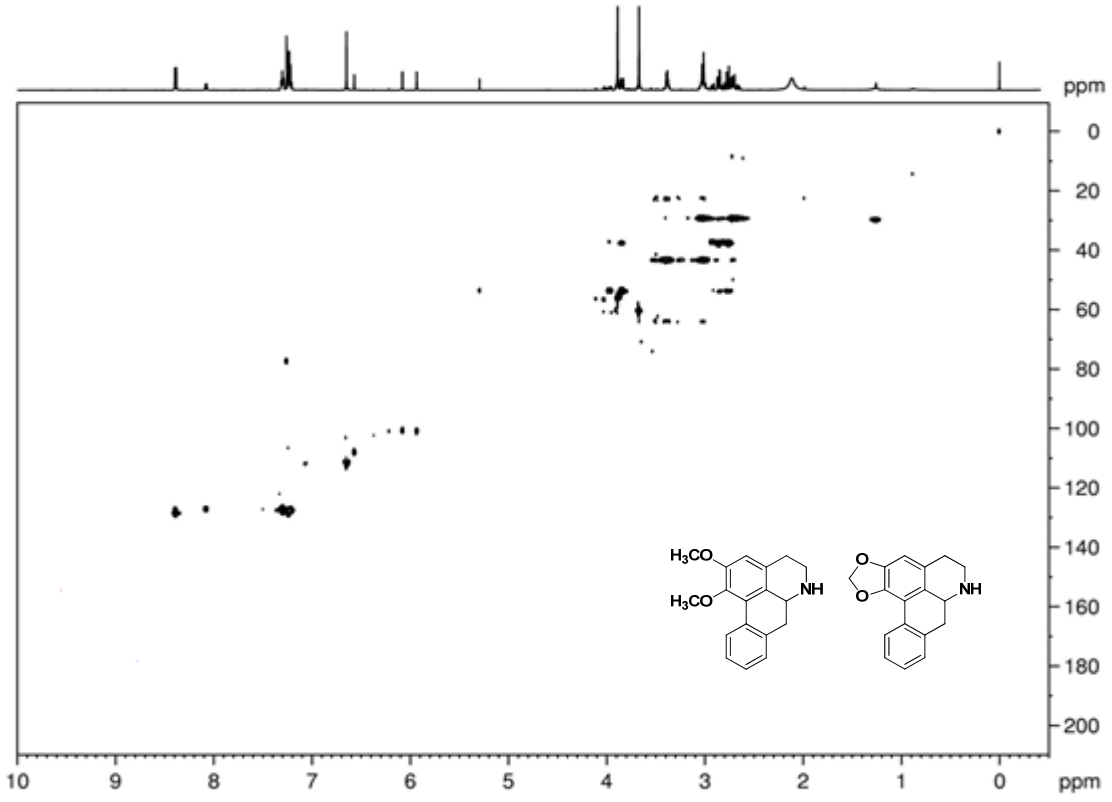

Figure 6S. *^{1}H-^{13}C one-bond correlation map from HSQC NMR experiment of alkaloids (+)-nornuciferine (**1**) and (+)-anonaine (**2**) (600 and 150 MHz, $CDCl_3$)*

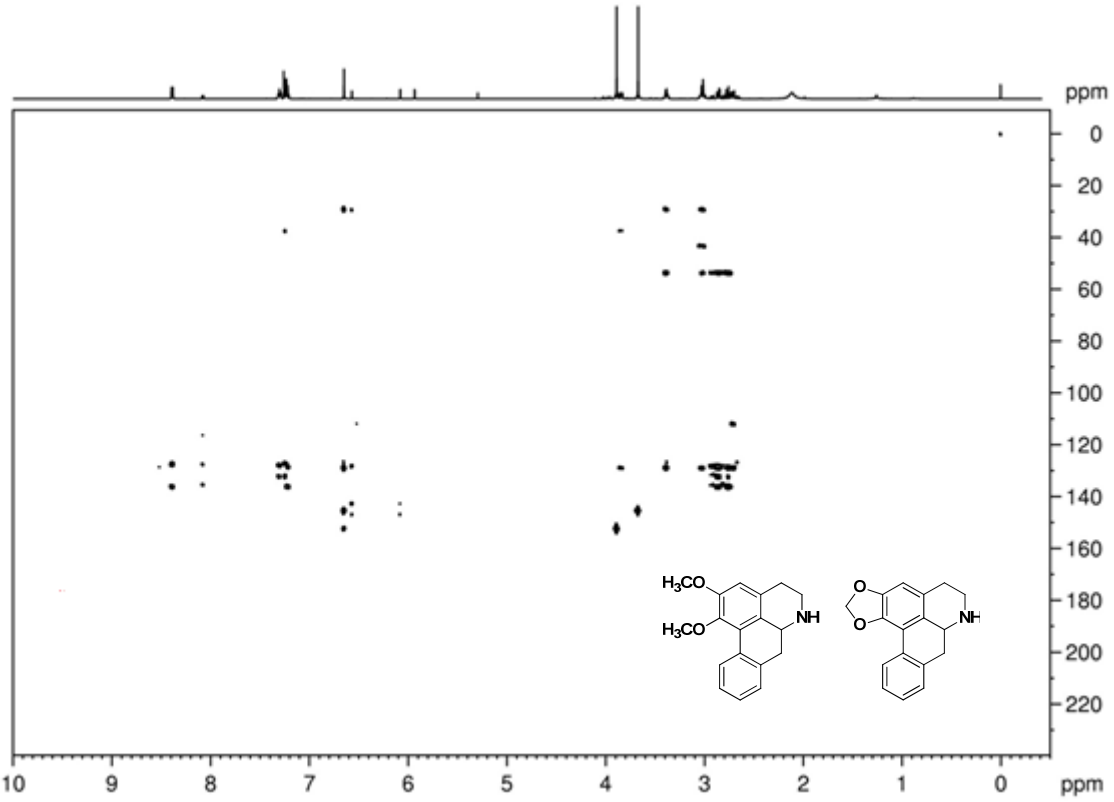

Figure 7S. ^{1}H-^{13}C *long-range correlation map from HMBC NMR experiment of alkaloids (+)-nornuciferine (**1**) and (+)-anonaine (**2**) (600 and 150 MHz, $CDCl_3$)*

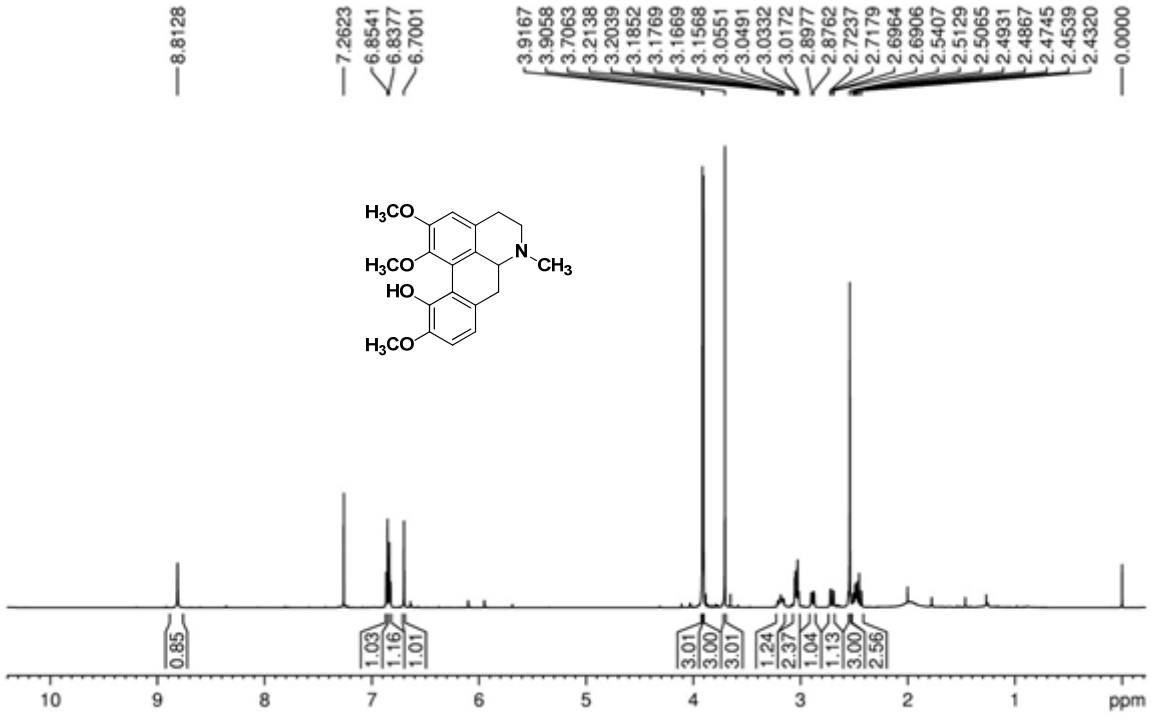

Figure 8S. ^{1}H *NMR spectrum of alkaloid (+)-isocorydine (**3**) (600 MHz, $CDCl_3$)*

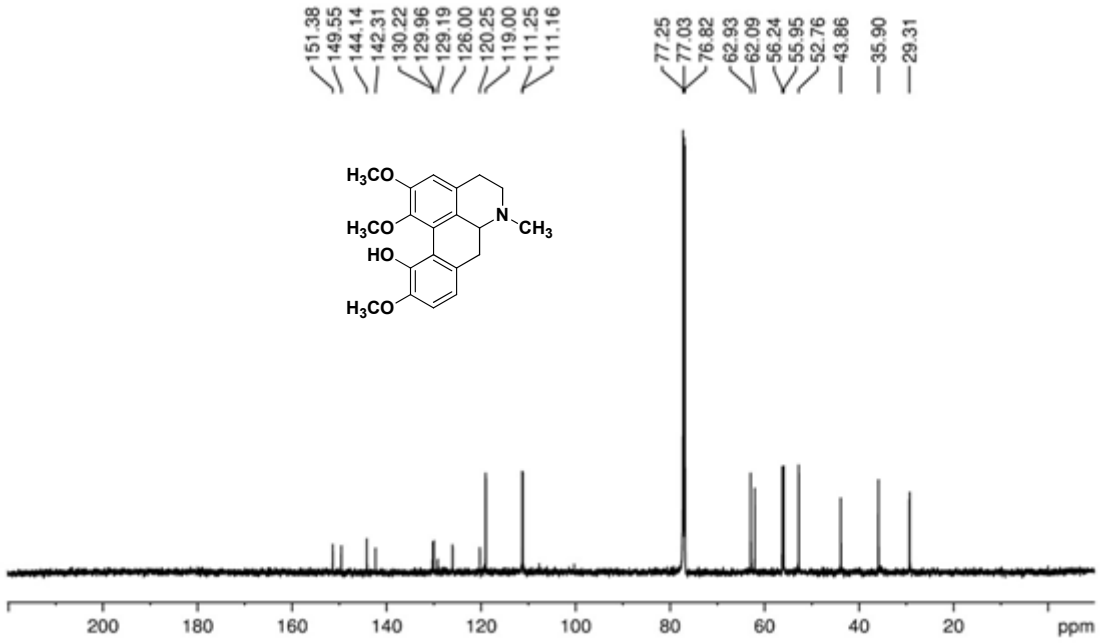

Figure 9S. $^{13}C\{^{1}H\}$ *NMR spectrum of alkaloid (+)-isocorydine (**3**) (150 MHz, $CDCl_3$)*

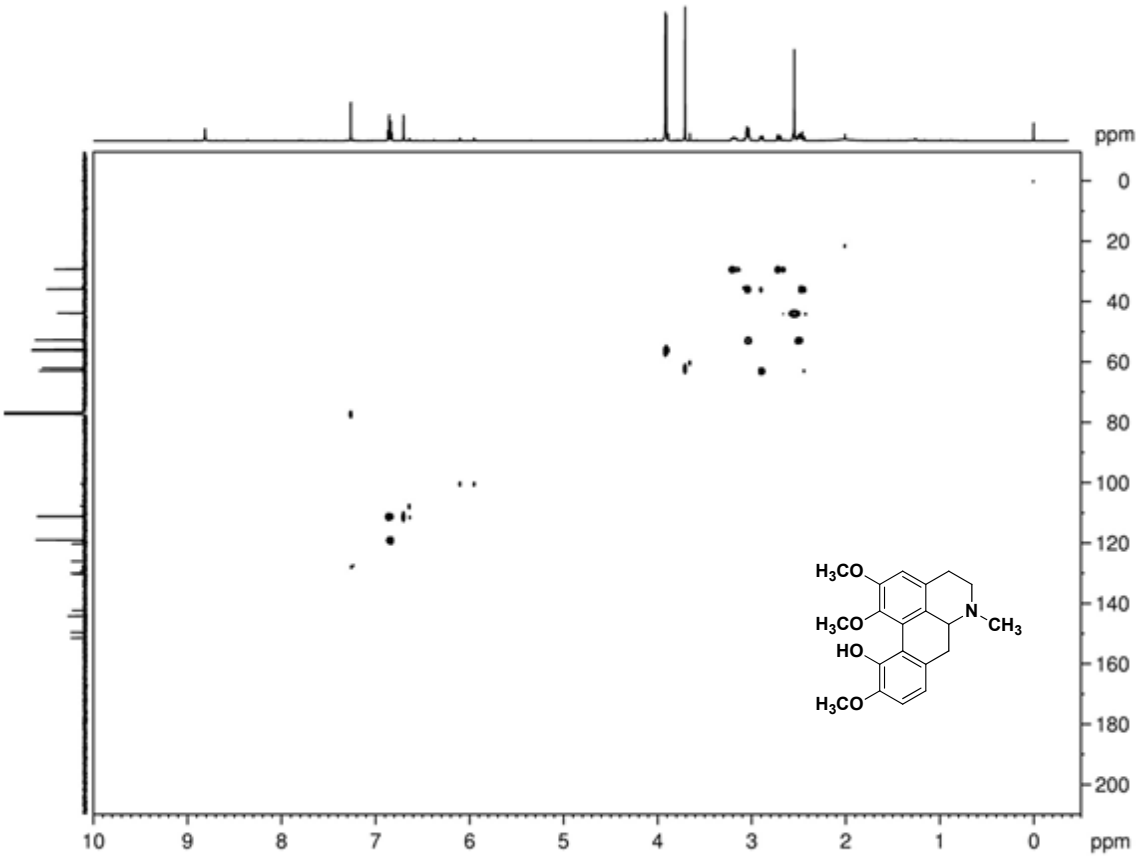

Figure 10S. ^{1}H-^{13}C *one-bond correlation map from HSQC NMR experiment of alkaloid (+)-isocorydine (**3**) (600 and 150 MHz, $CDCl_3$)*

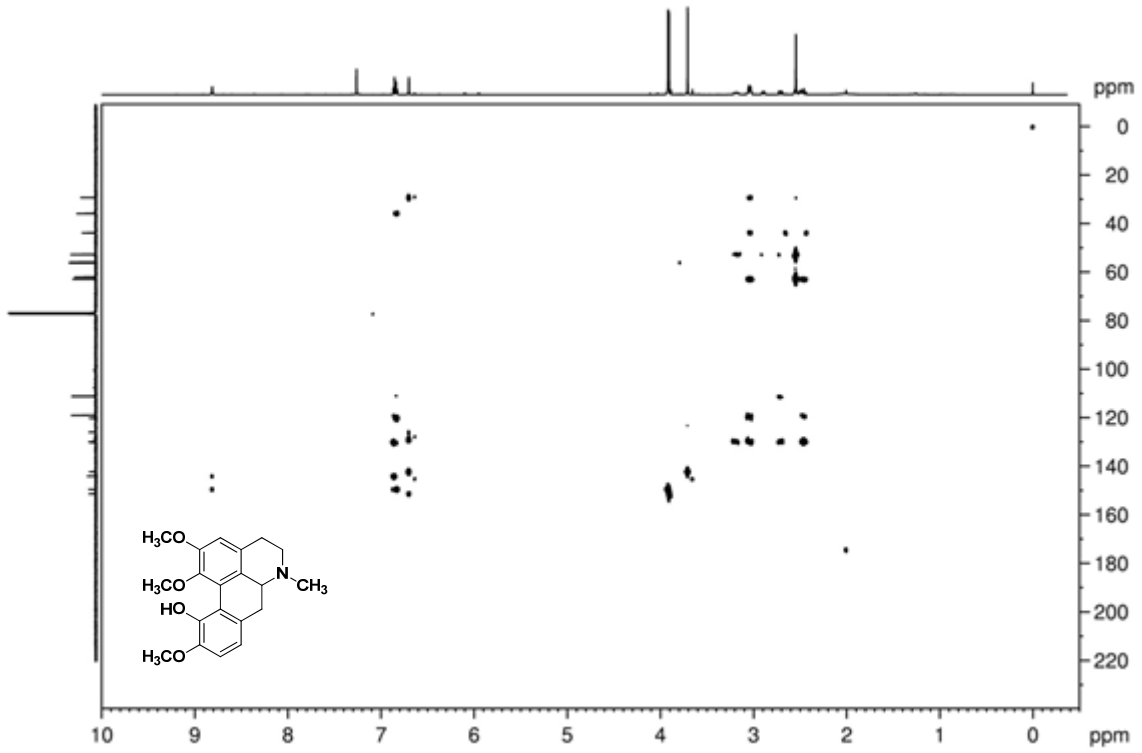

Figure 11S. *^{1}H-^{13}C long-range correlation map from HMBC NMR experiment of alkaloid (+)-isocorydine (**3**) (600 and 150 MHz, $CDCl_3$)*

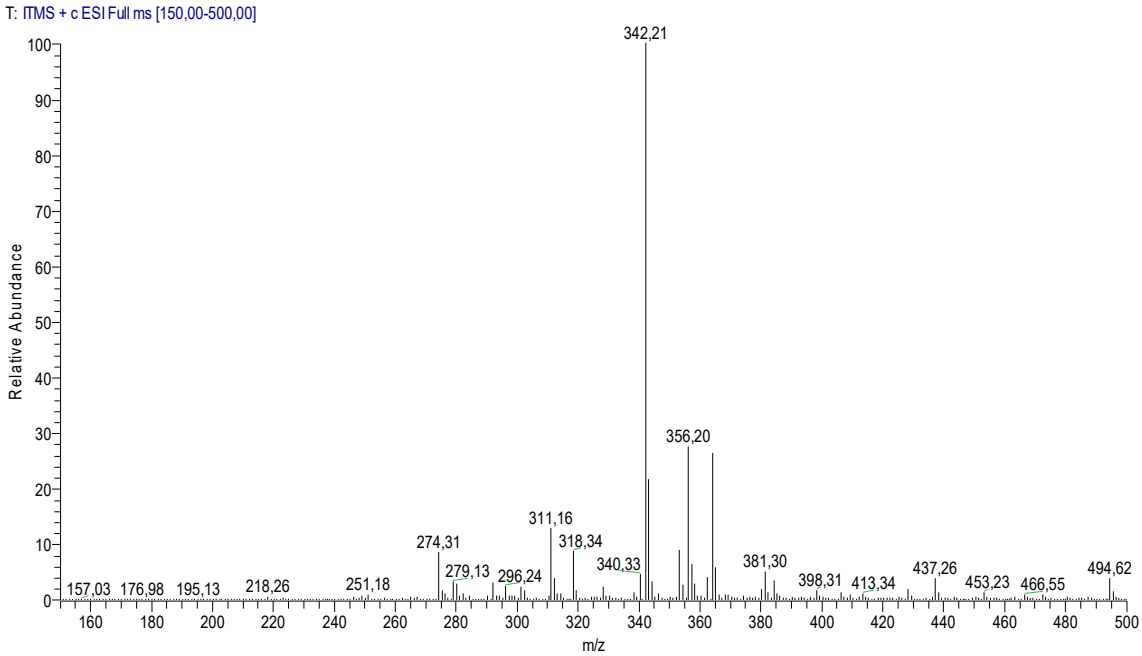

Figure 12S. *MS of alkaloid (+)-isocorydine (**9**) (m/z 342.21 $[M+H]^+$)*

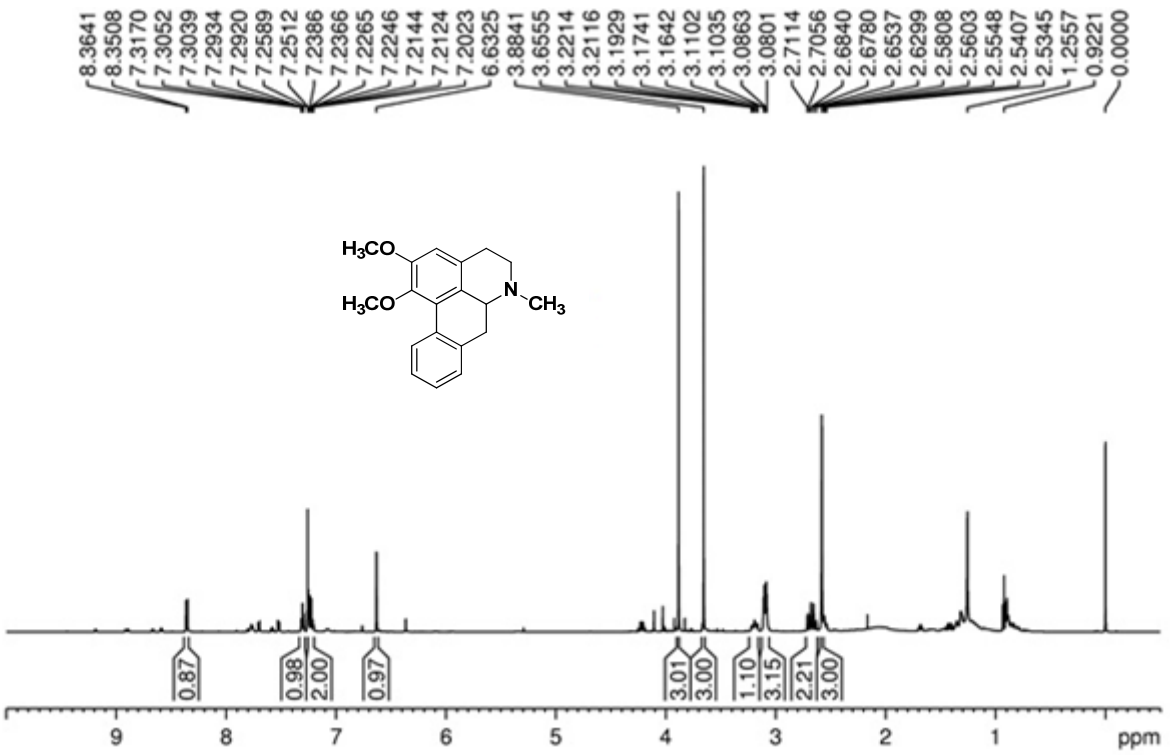

Figure 13S. *^{1}H NMR spectrum of alkaloid (+)-nuciferine (**4**) (600 MHz, $CDCl_3$)*

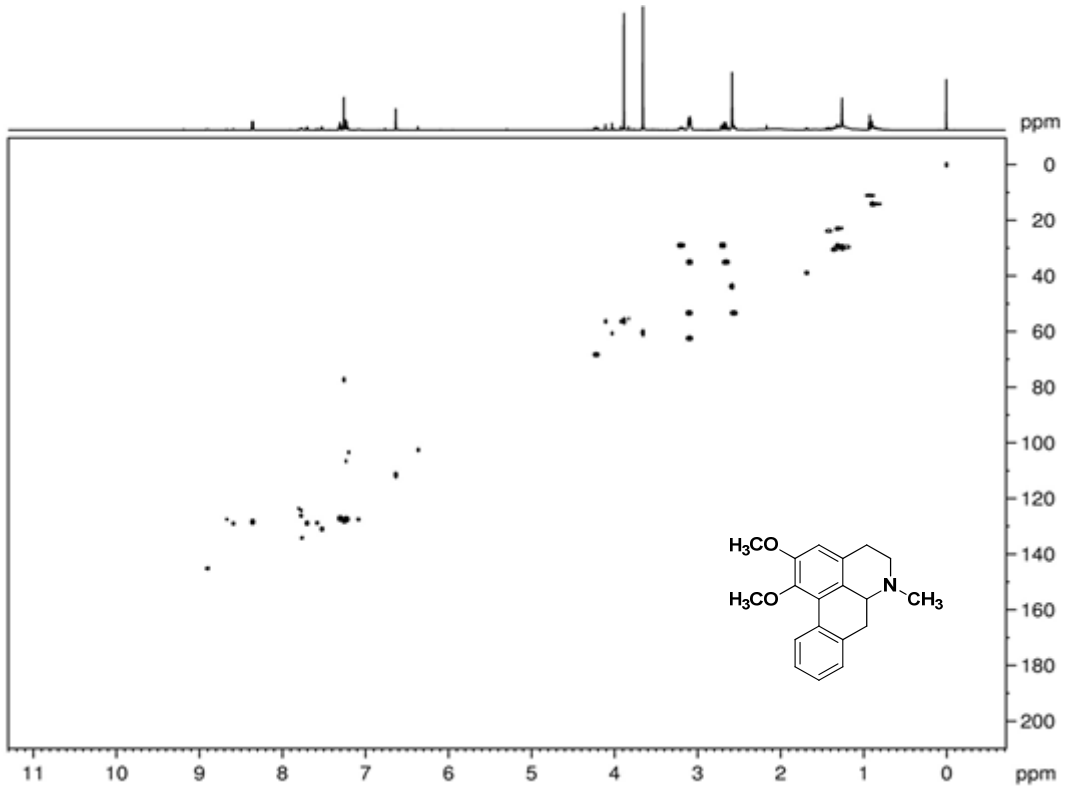

Figure 14S. *^{1}H-^{13}C one-bond correlation map from HSQC NMR experiment of alkaloid (+)-nuciferine (**4**) (600 and 150 MHz, $CDCl_3$)*

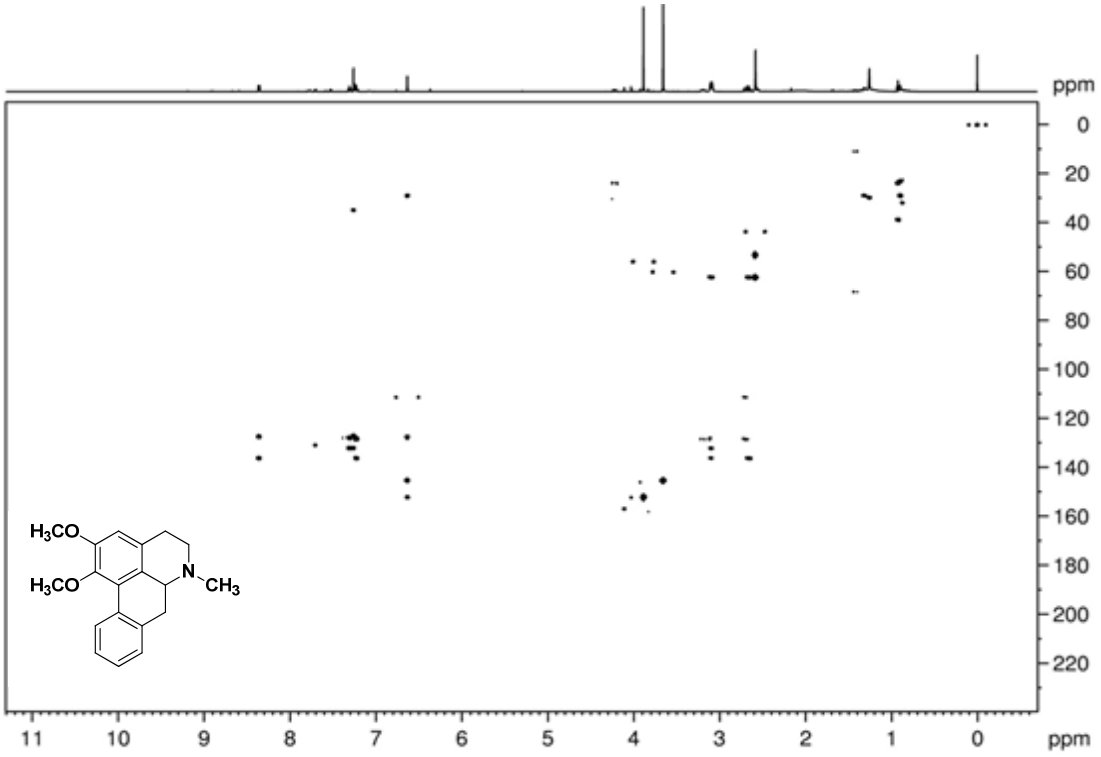

Figure 15S. *^{1}H-^{13}C long-range correlation map from HMBC NMR experiment of alkaloid (+)-nuciferine (**4**) (600 and 150 MHz, $CDCl_3$)*

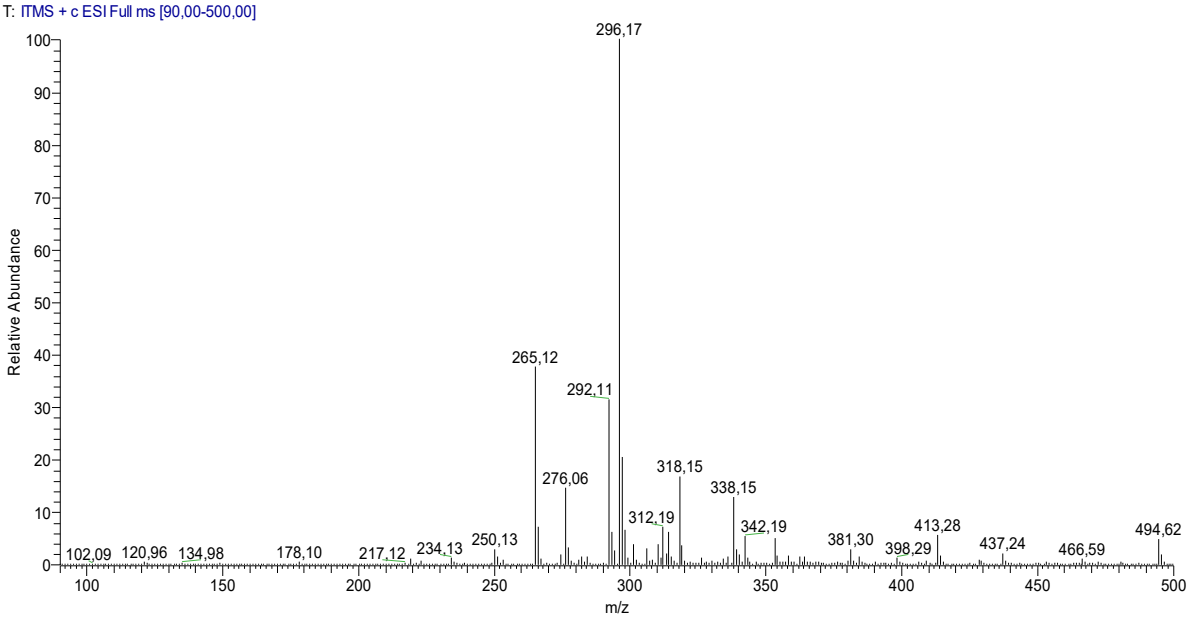

Figure 16S. *MS of alkaloid (+)-nuciferine (**4**) (m/z 296.17 $[M+H]^+$)*

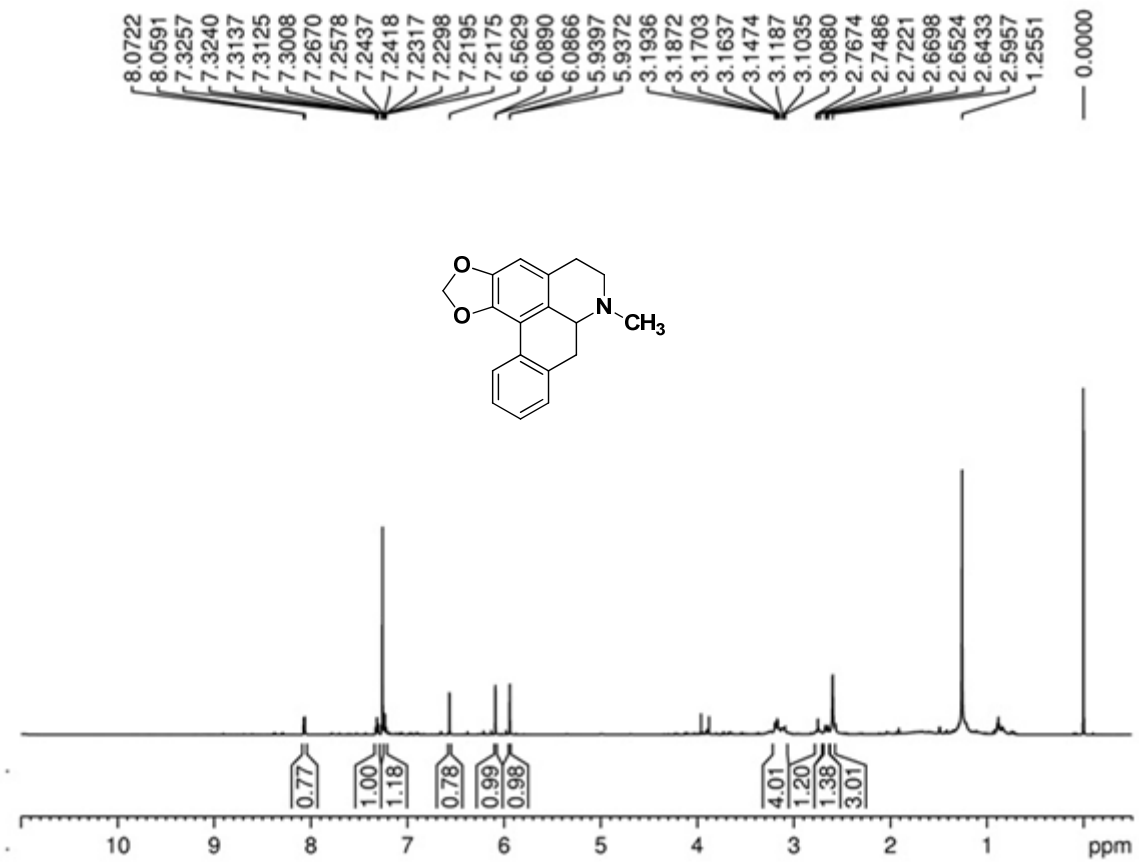

***Figure 17S**.[1]H NMR spectrum of alkaloid (+)-roemerine (**5**) (600 MHz, $CDCl_3$)*

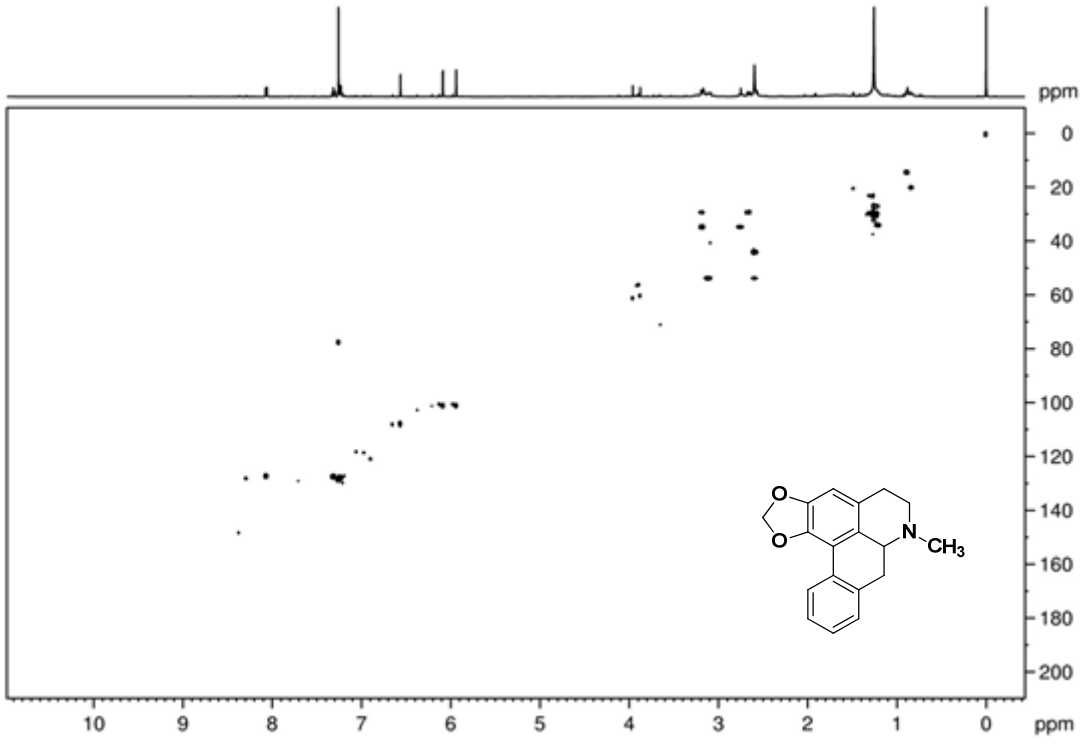

***Figure 18S**. [1]H-[13]C one-bond correlation map from HSQC NMR experiment of alkaloid (+)-roemerine (**5**) (600 and 150 MHz, $CDCl_3$)*

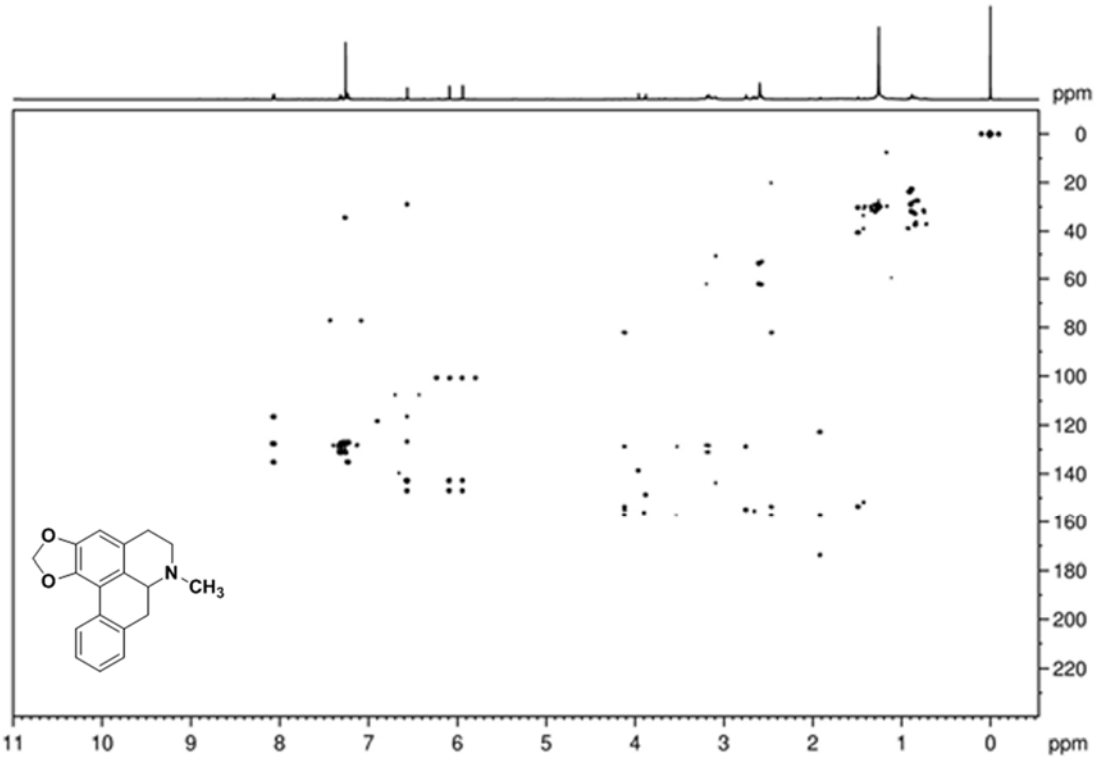

Figure 19S. *^{1}H-^{13}C long-range correlation map from HMBC NMR experiment of alkaloid (+)-roemerine (**5**) (600 and 150 MHz, $CDCl_3$)*

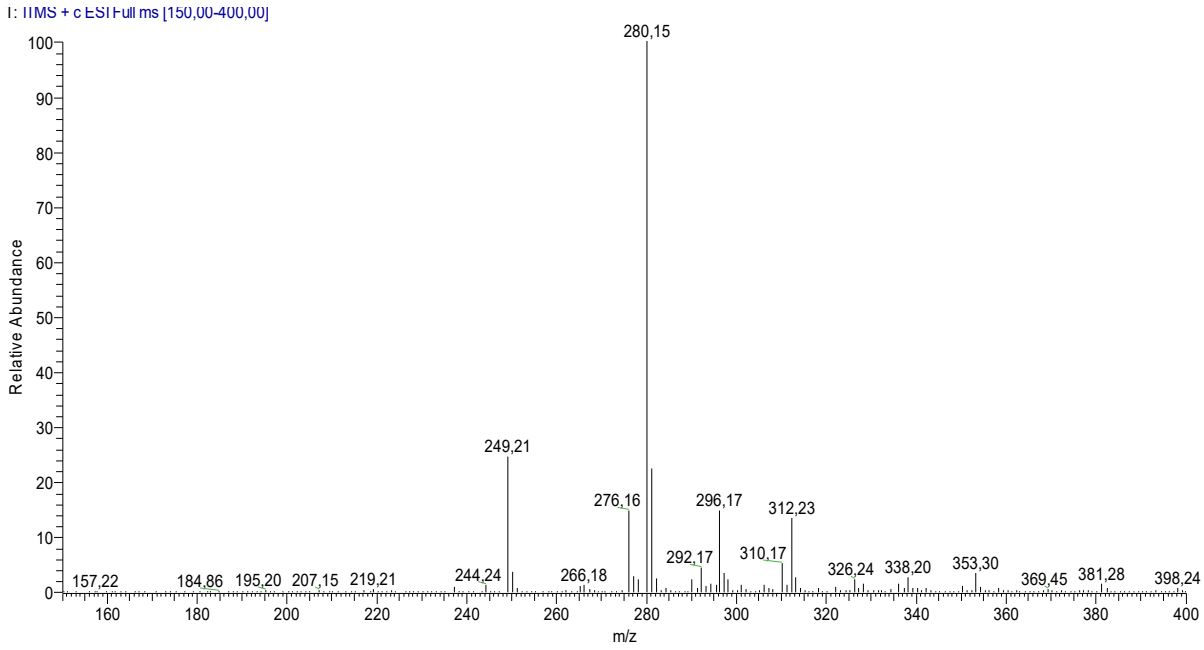

Figure 20S. *MS of alkaloid (+)-roemerine (**5**) (m/z 280.15 $[M+H]^+$)*

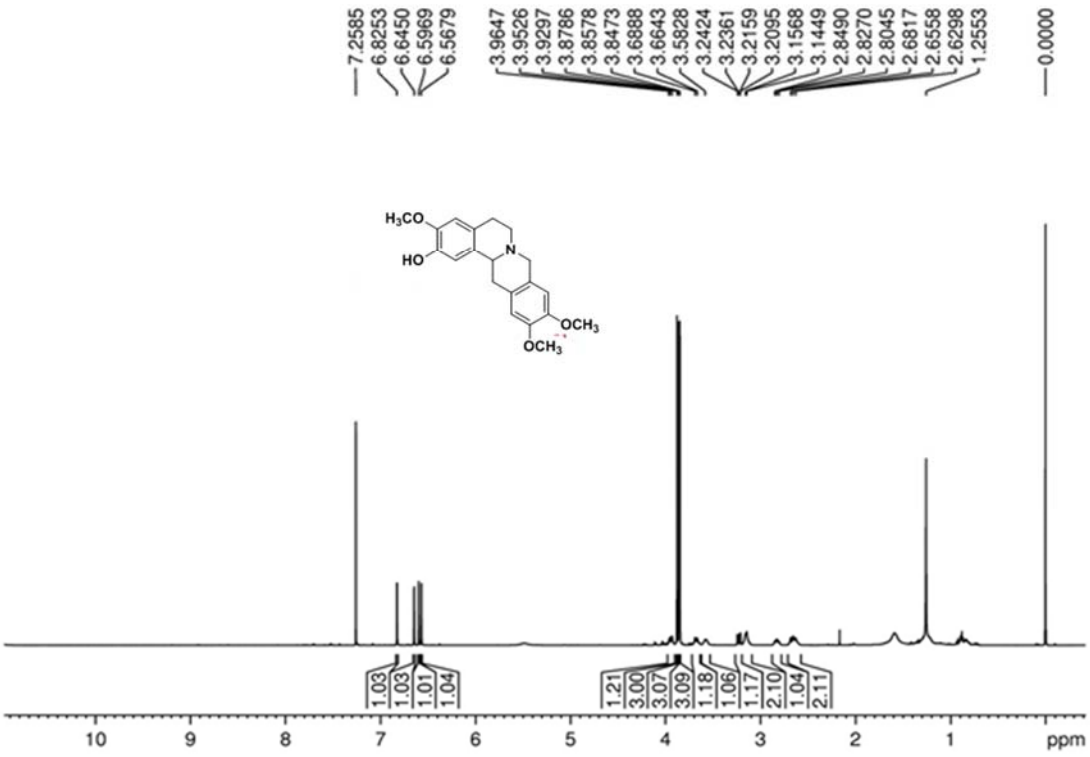

Figure 21S. *[1] H NMR spectrum of alkaloid (–)-tetrahydropseudocolumbamine (**6**) (600 MHz, $CDCl_3$)*

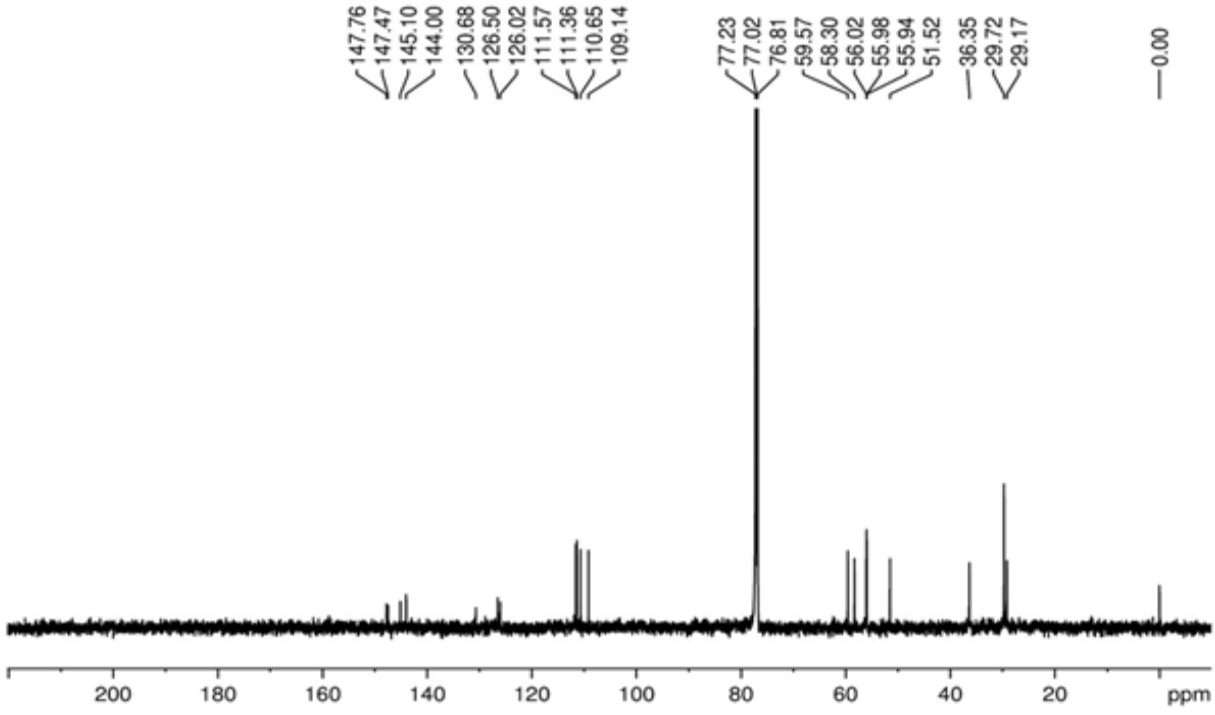

Figure 22S. *[13]C{[1]H} NMR spectrum of alkaloid (–)-tetrahydropseudocolumbamine (**6**) (150 MHz, $CDCl_3$)*

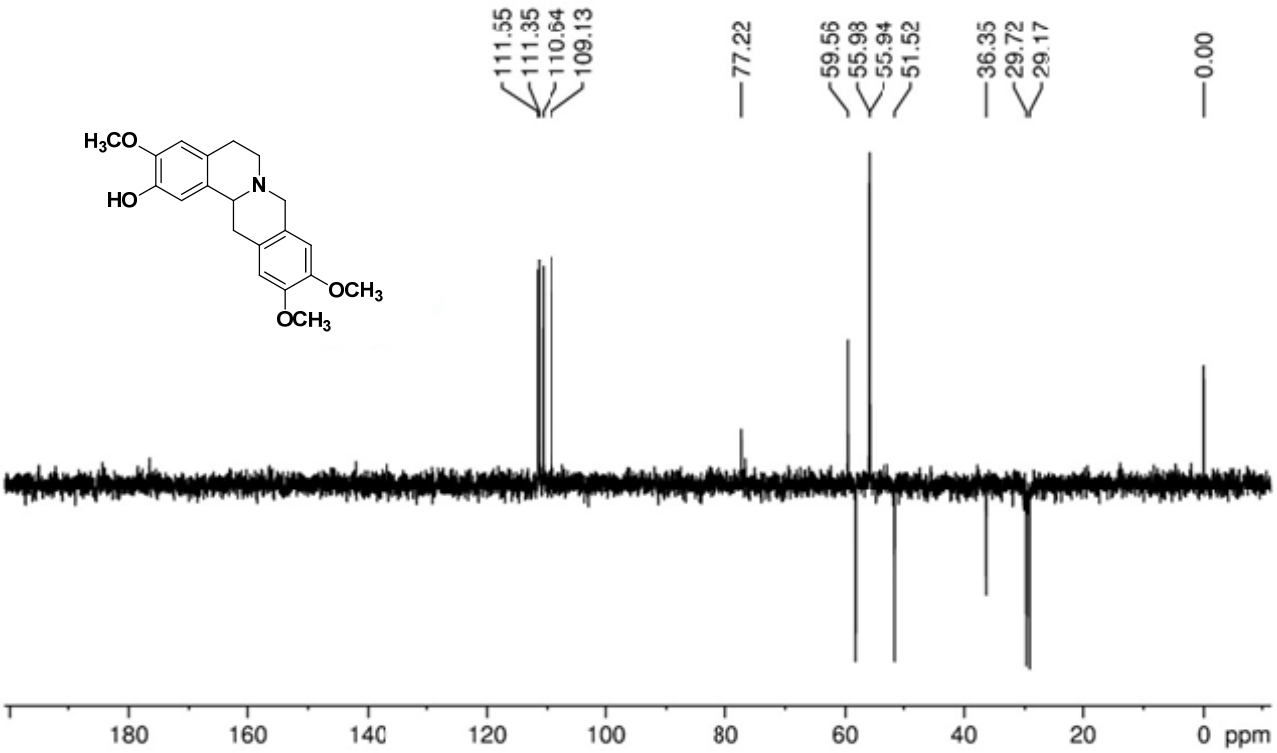

Figure 23S. *DEPT 135 NMR spectrum of alkaloid (–)-tetrahydropseudocolumbamine (**6**) (150 MHz, $CDCl_3$)*

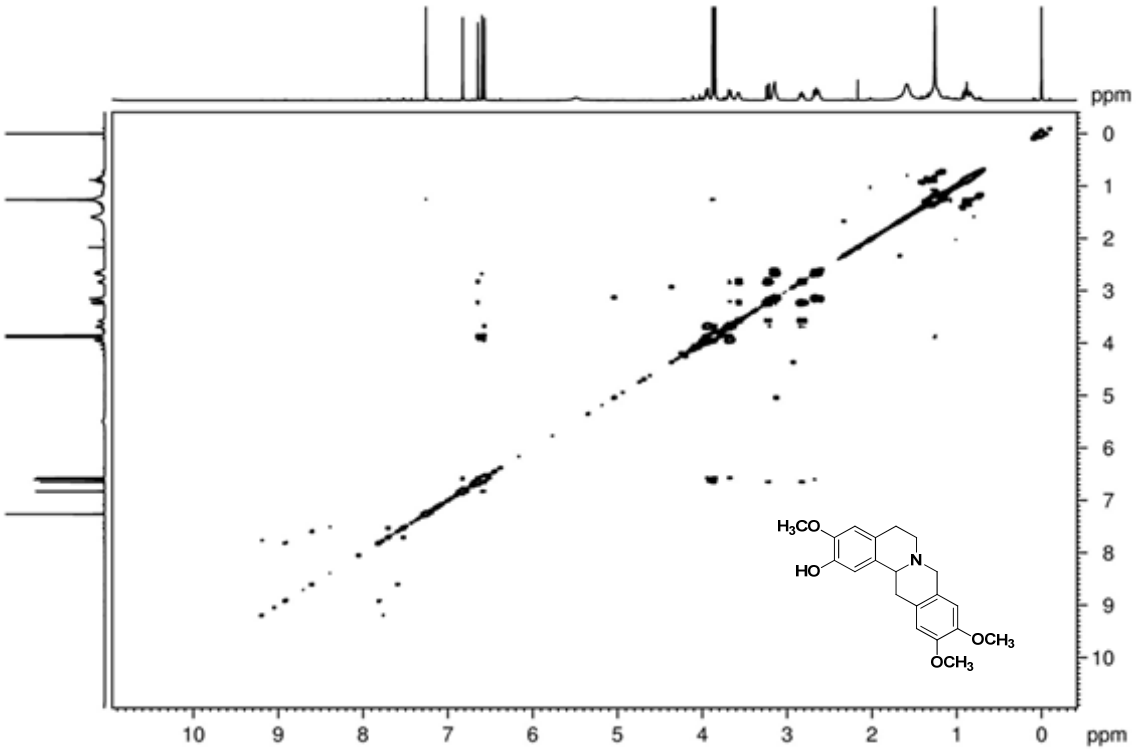

Figure 24S. *^1H-^1H correlation map from COSY NMR experiment of alkaloid (–)-tetrahydropseudocolumbamine (**6**) (600 MHz, $CDCl_3$)*

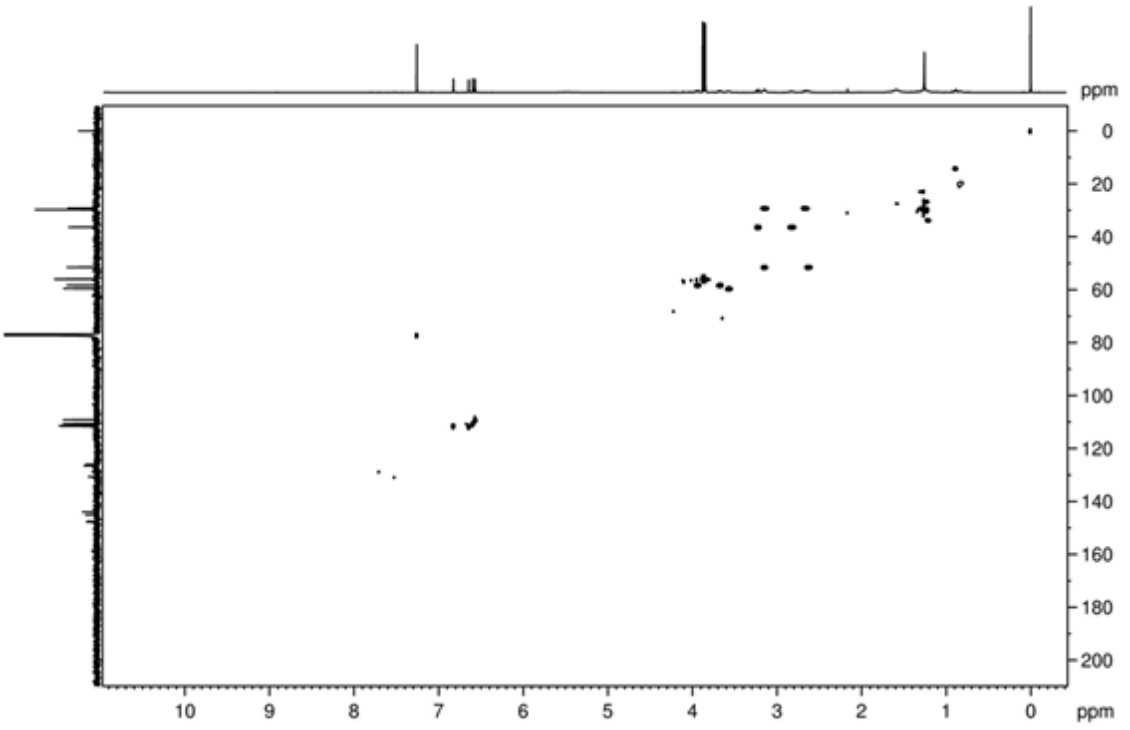

Figure 25S. *^{1}H-^{13}C one-bond correlation map from HSQC NMR experiment of (–)-tetrahydropseudocolumbamine (**6**) (600 and 150 MHz, $CDCl_3$)*

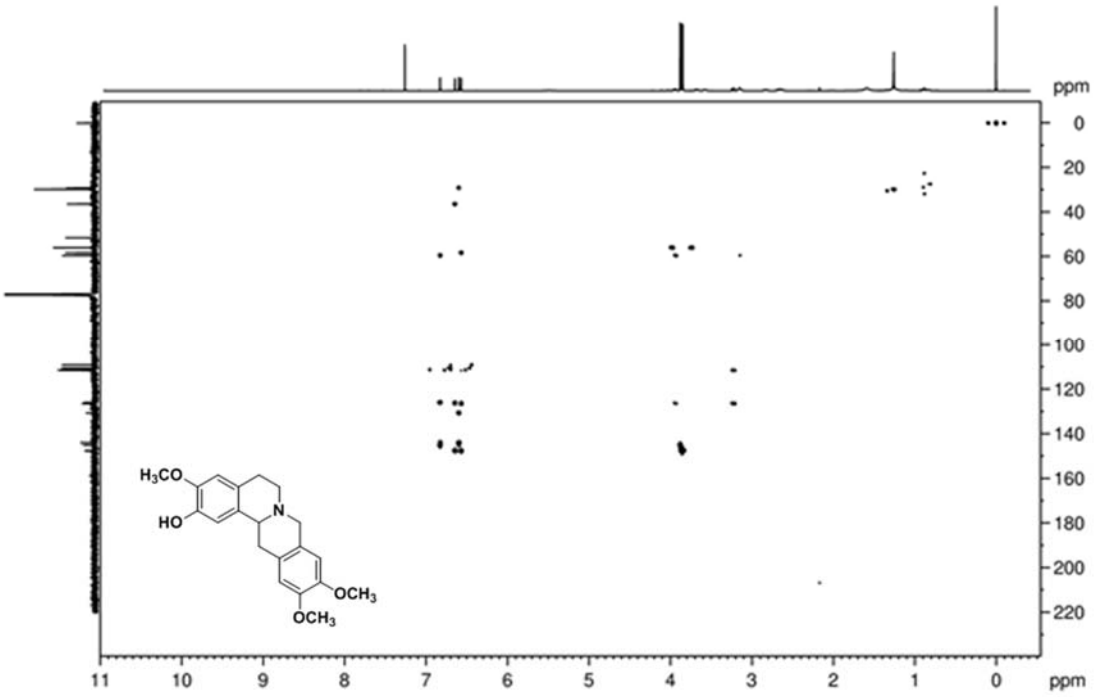

Figure 26S. *^{1}H-^{13}C long-range correlation map from HMBC NMR experiment of alkaloid (–)-tetrahydropseudocolumbamine (**6**) (600 and 150 MHz, $CDCl_3$)*

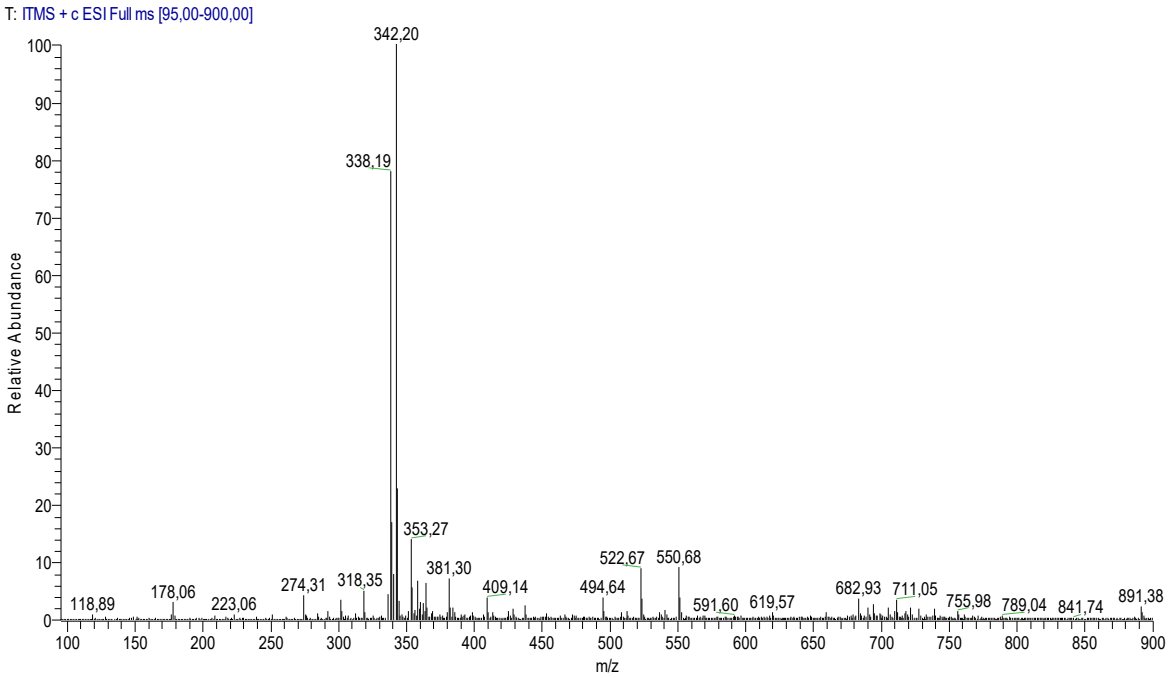

Figure 27S. *MS of alkaloid (–)-tetrahydropseudocolumbamine (**6**) (m/z 342.20 [M+H]$^+$)*

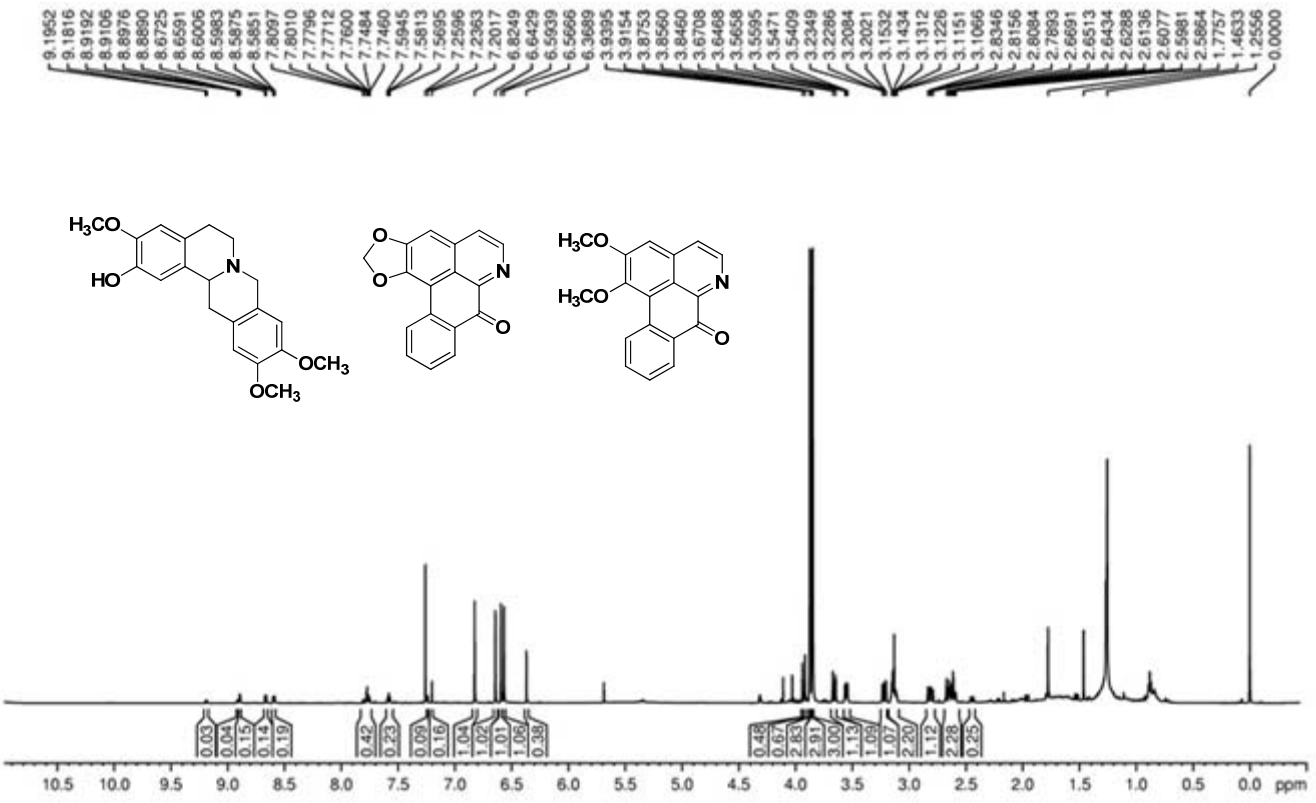

Figure 28S. *^{1}H NMR spectrum of alkaloids tetrahydropseudocolumbamine (**6**), liriodenine (**9**) and lysicamine (**10**) (600 MHz, $CDCl_3$)*

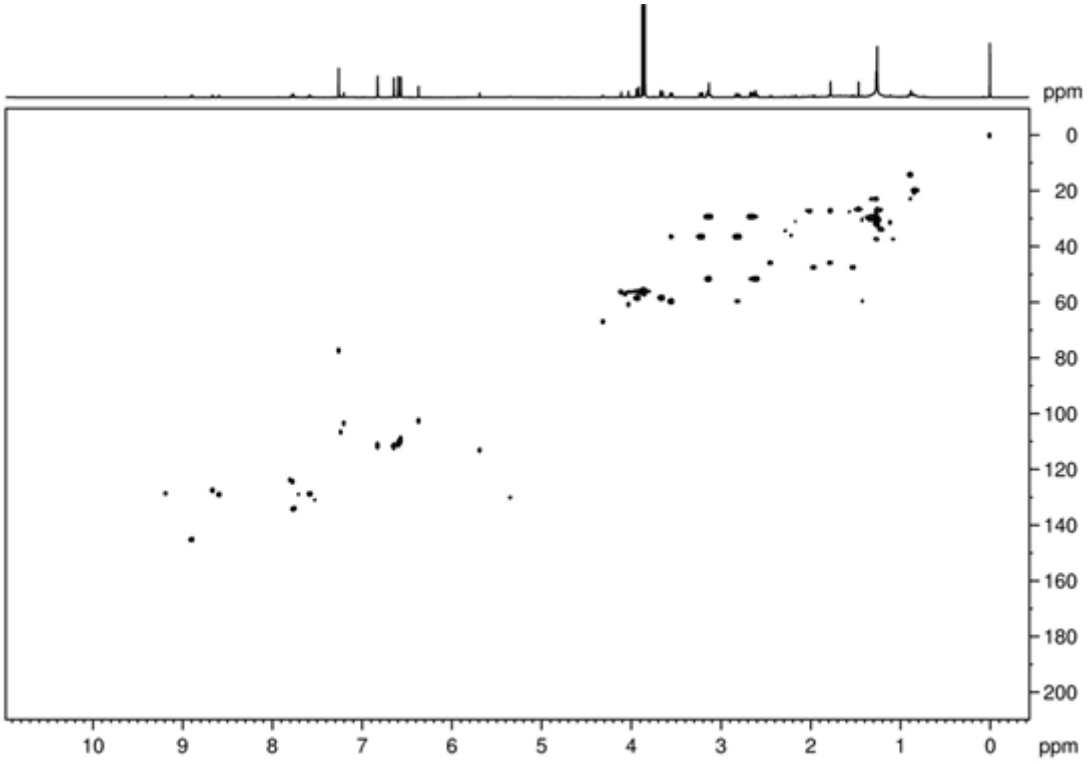

Figure 29S. *^{1}H-^{13}C one-bond correlation map from HSQC NMR experiment of alkaloids tetrahydropseudocolumbamine (**6**), liriodenine (**9**) and lysicamine (**10**) (600 and 150 MHz, $CDCl_3$)*

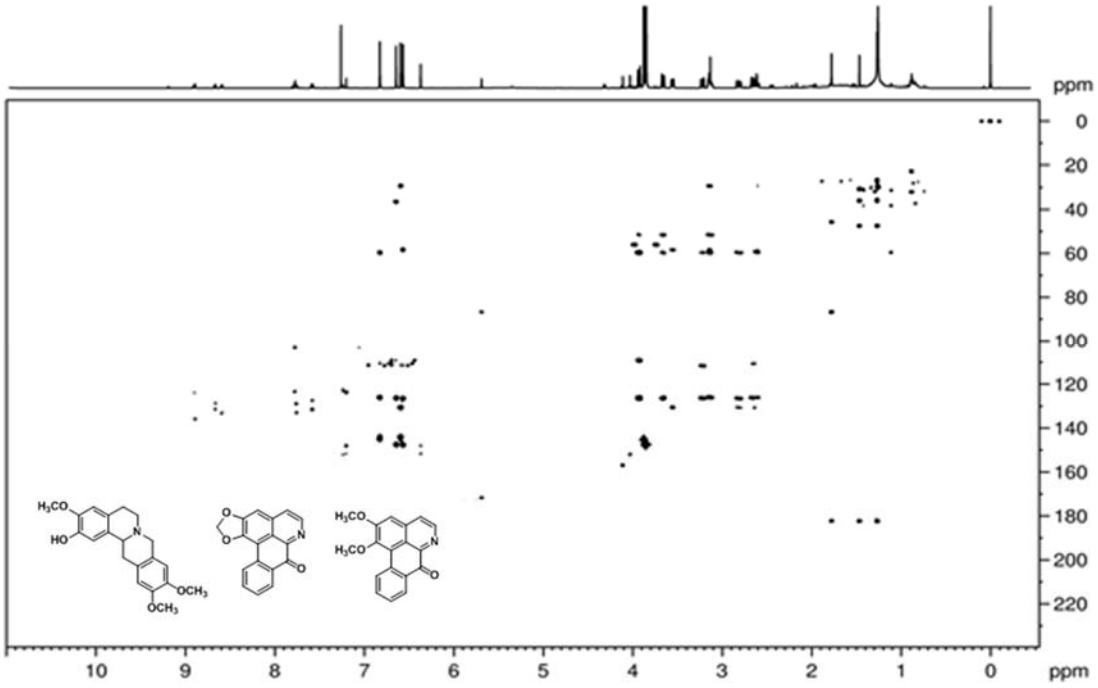

Figure 30S. *^{1}H-^{13}C long-range correlation map from HMBC NMR experiment of alkaloids (–)-tetrahydropseudocolumbamine (**6**), liriodenine (**9**) and lysicamine (**10**) (600 and 150 MHz, $CDCl_3$)*

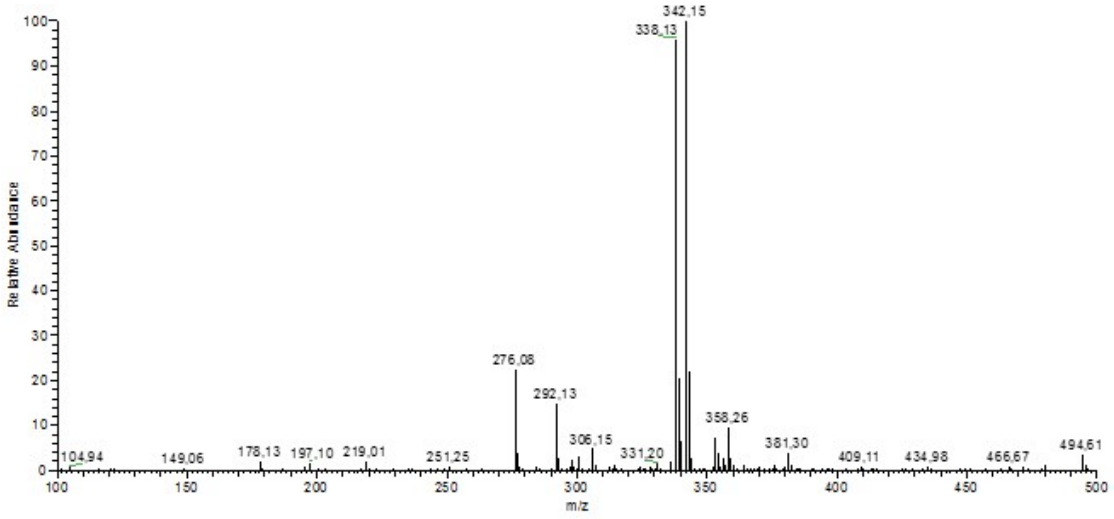

Figure 31S. *MS of alkaloids (–)-tetrahydropseudocolumbamine (**6**), liriodenine (**9**) and lysicamine (**10**) (m/z 342.15, 292,13 and 276.08 [M+H]$^+$, respectively)*

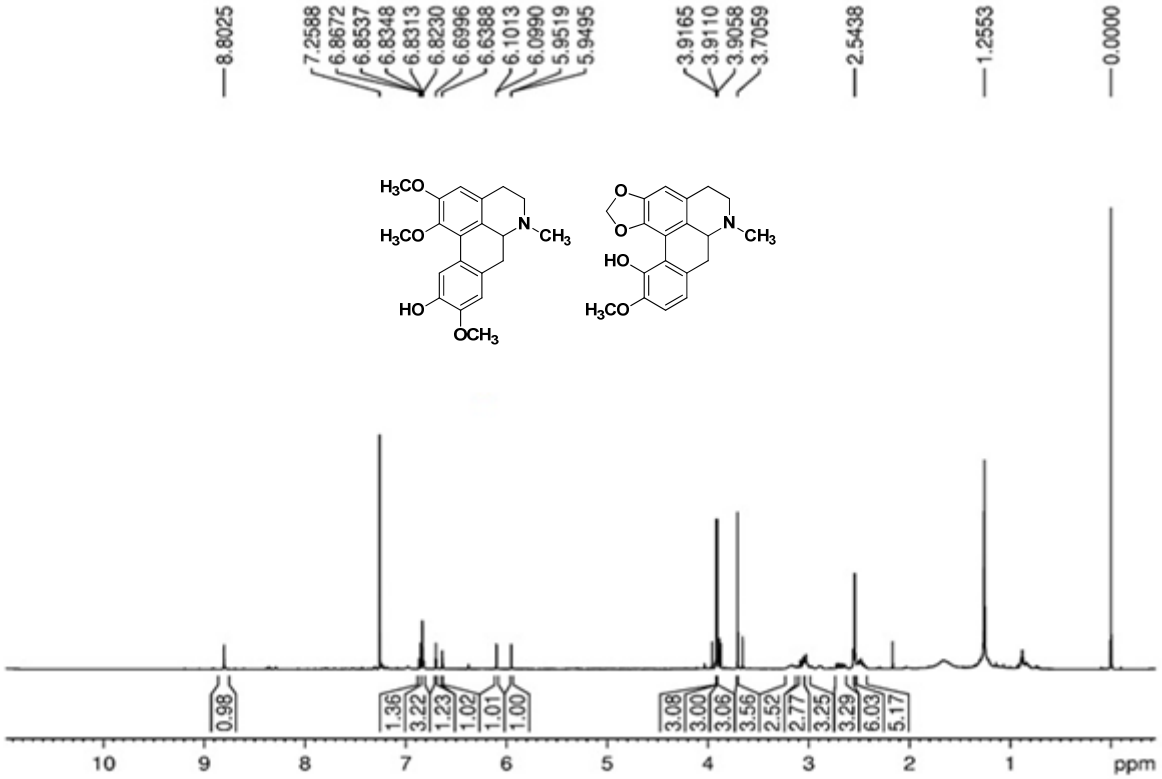

Figure 32S. *^{1}H NMR spectrum of alkaloids 1,2,9-trimethoxy-10-hydroxyaporphine (**7**) and bulbocapnine (**8**) (600 MHz, $CDCl_3$)*

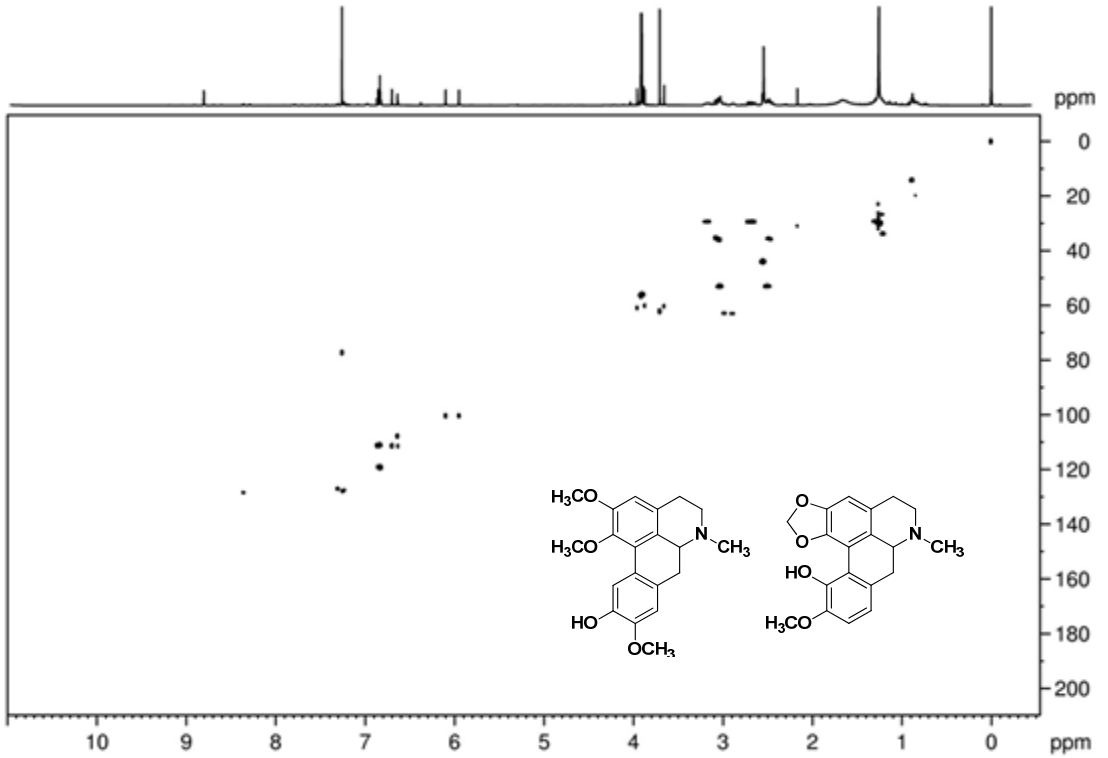

Figure 33S. *^{1}H-^{13}C one-bond correlation map from HSQC NMR experiment of alkaloids 1,2,9-trimethoxy-10-hydroxyaporphine (7) and bulbocapnine (8) (600 and 150 MHz, $CDCl_3$)*

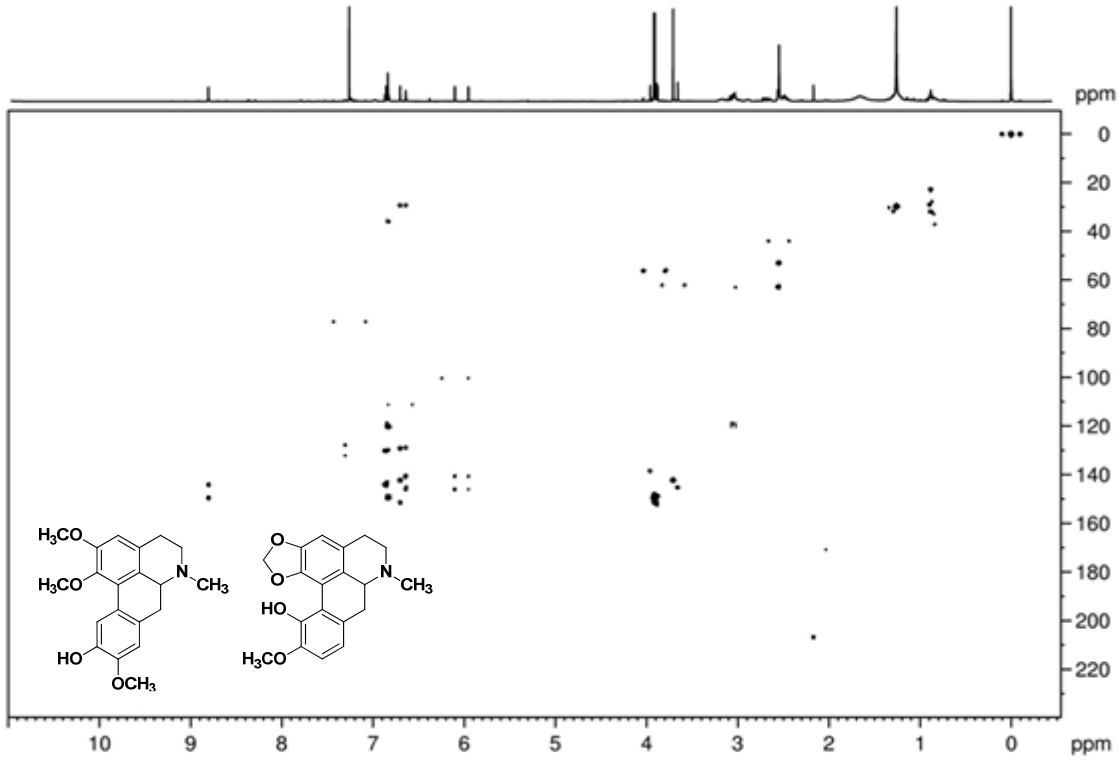

Figure 34S. *^{1}H-^{13}C long-range correlation map from HMBC NMR experiment of alkaloids 1,2,9-trimethoxy-10-hydroxyaporphine (**7**) and bulbocapnine (**8**) (600 and 150 MHz,$CDCl_3$)*

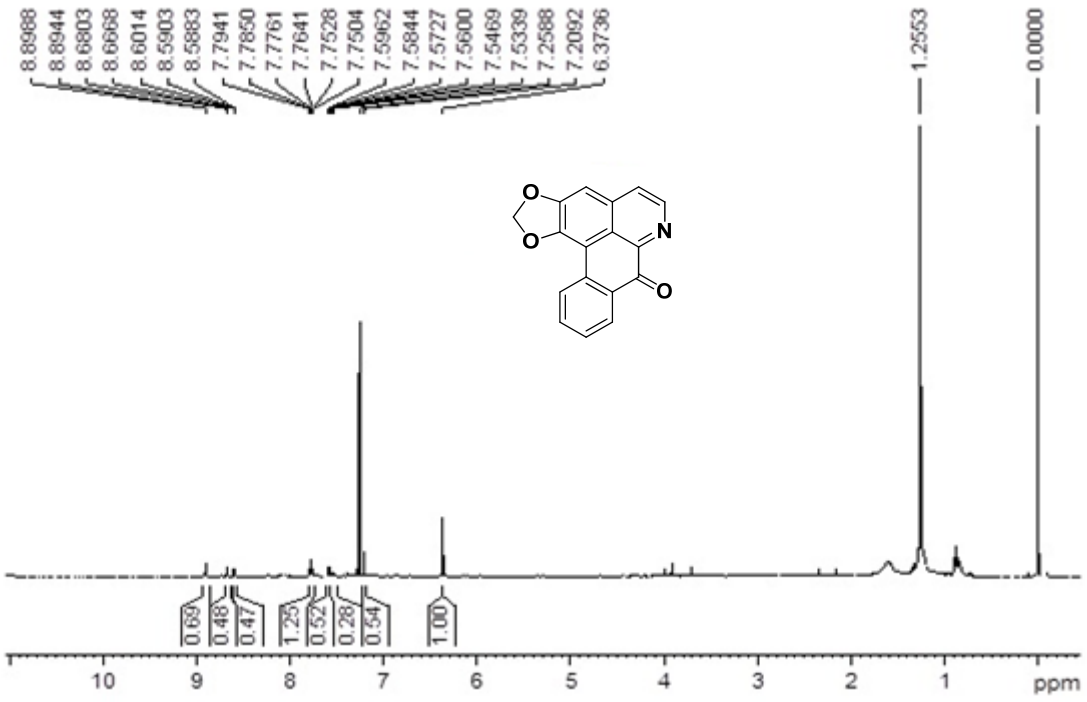

Figure 35S. *^{1}H NMR spectrum of alkaloid liriodenine (**9**) (600 MHz, $CDCl_3$)*

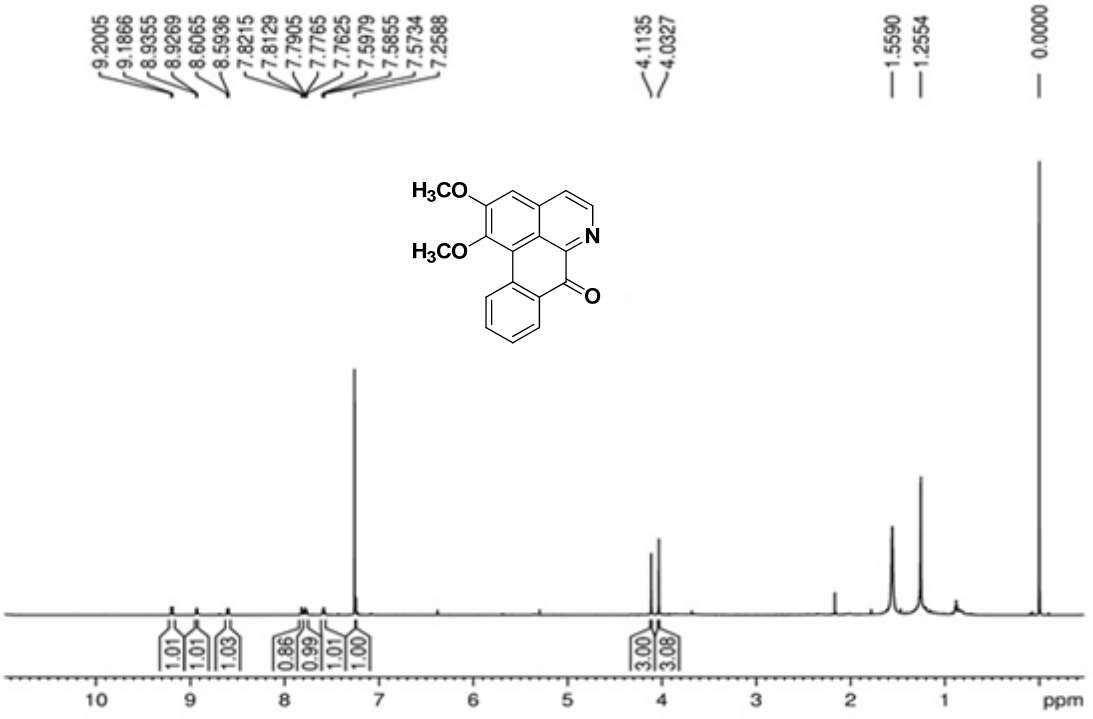

Figure 36S. *^{1}H NMR spectrum of alkaloid lysicamine (**10**) (600 MHz, $CDCl_3$)*

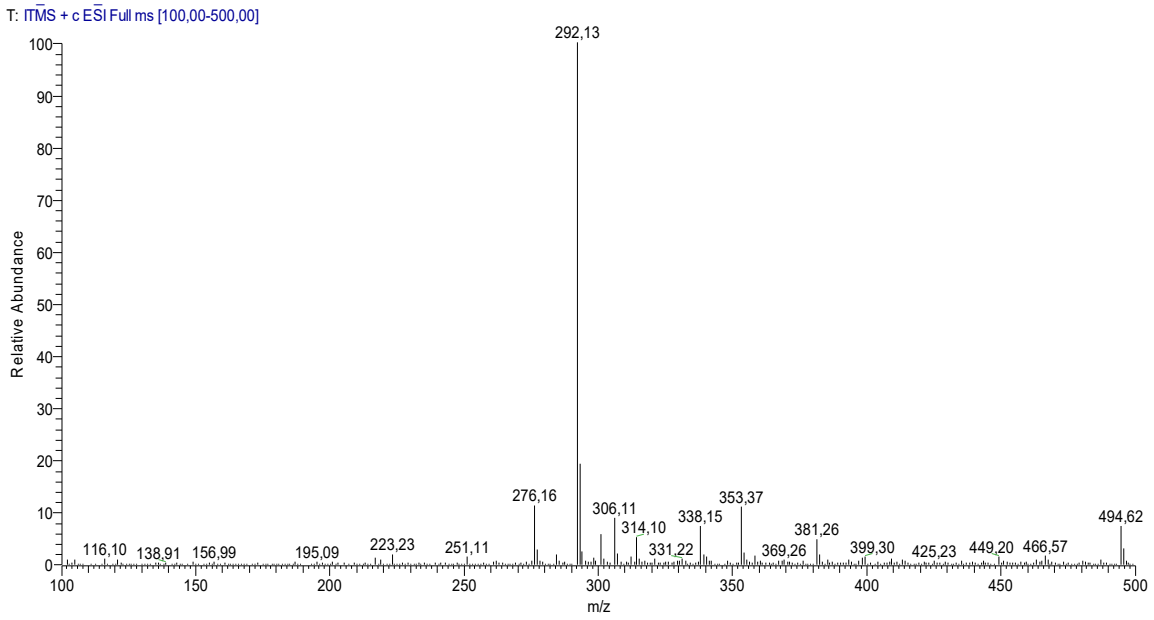

Figure 37S. *MS of alkaloid lysicamine* ***(10)*** *(m/z 292.13 [M+H]⁺)*

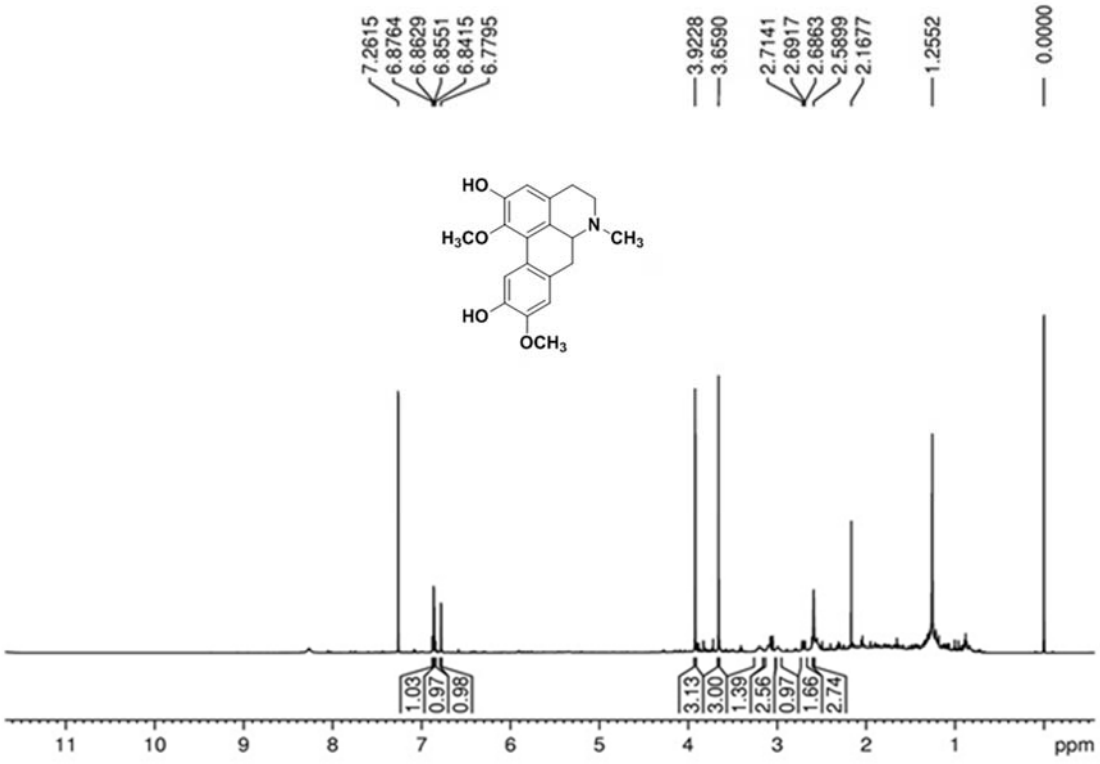

Figure 38S. *^{1}H NMR spectrum of alkaloid (+)-N-methyllincarpine* ***(11)*** *(600 MHz, $CDCl_3$)*

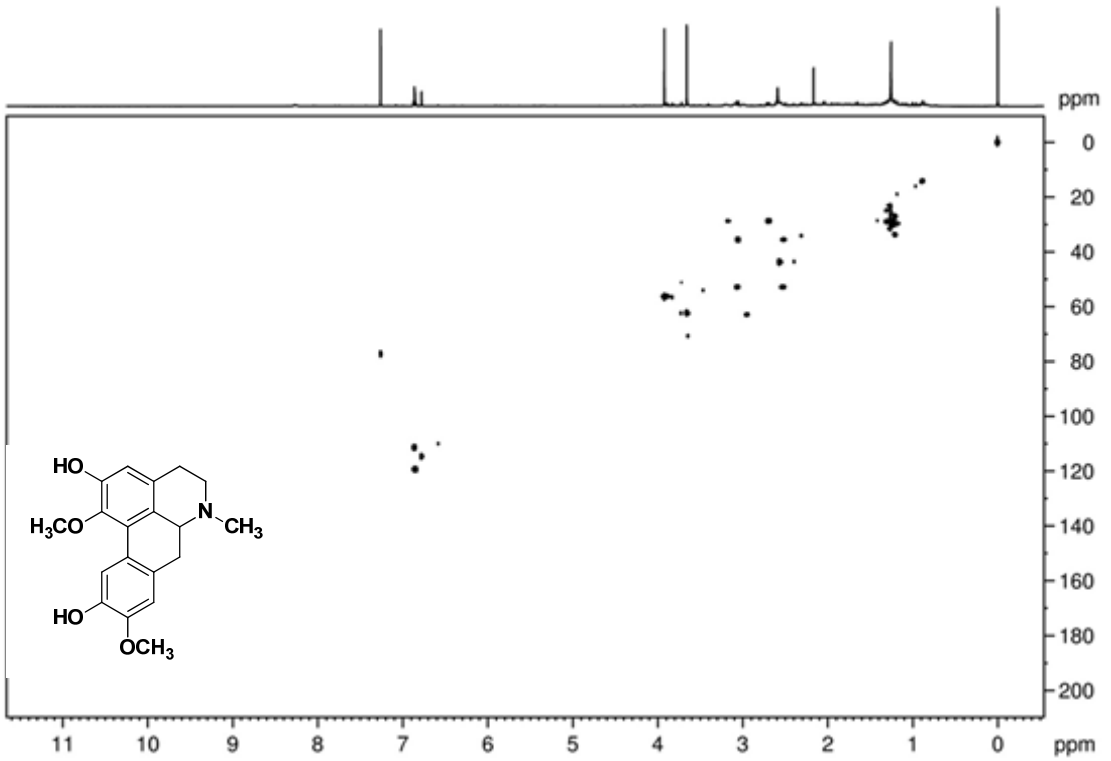

Figure 39S. *^{1}H-^{13}C one-bond correlation map from HSQC NMR experiment of alkaloid (+)-N-methyllincarpine* ***(11)*** *(600 and 150 MHz, $CDCl_3$)*

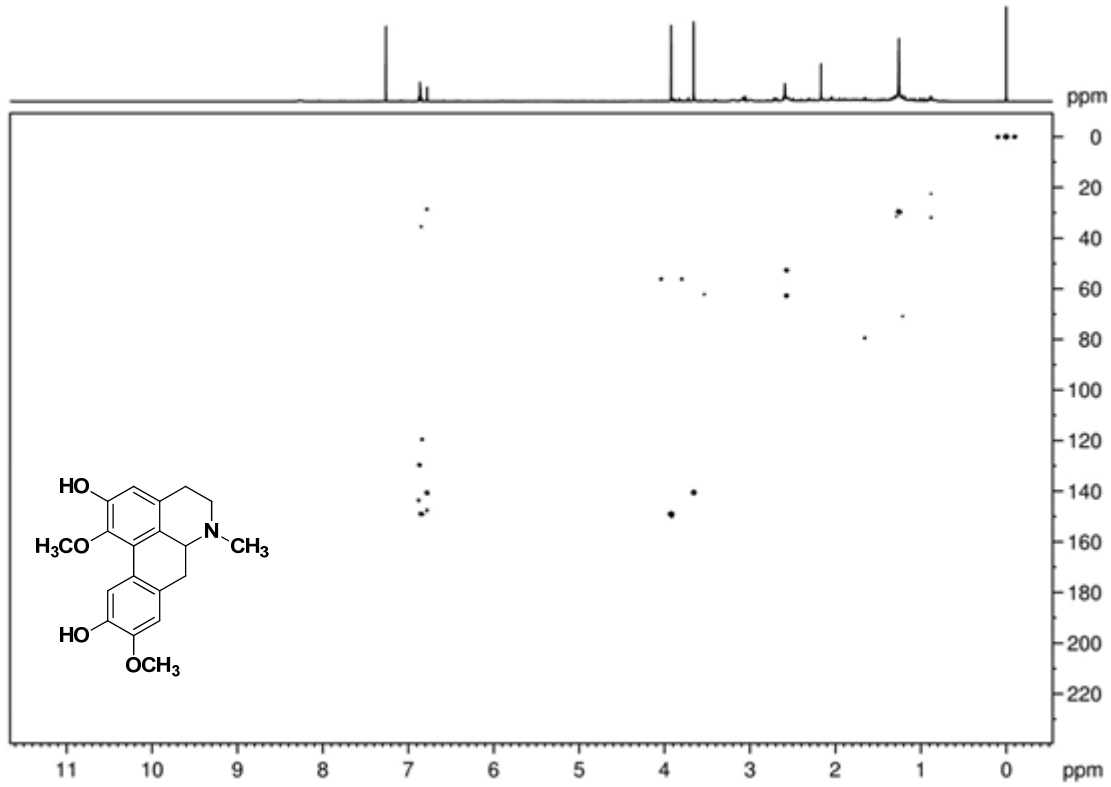

Figure 40S. *^{1}H-^{13}C long-range correlation map from HMBC NMR experiment of alkaloid (+)-N-methyllincarpine* ***(11)*** *(600 and 150 MHz, $CDCl_3$)*