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• 中文關鍵字	生物鹼；化學合成		
• 英文關鍵字	Alkaloid；Chemical synthesis		
• 中文摘要	Annonelliptine(1)及 Anomoline(2)爲自番荔枝屬植物分離之新化學結構之第二及第三級生物鹼,其化學結構式僅依光譜數據分析判定。今欲確認其構造式,擬以化學全合成製備(.plmin.)-annonelliptine 及(.plmin.)-anomoline,與同分異構物之(.plmin.)-thalmeline(3)及(.plmin.)-northalmeline(4)。結果顯示化學合成之 1 及 2 與天然物 Annonelliptine 與 Anomoline 確認完全一致,故以 COSY 與 COLOC NMR 光譜來判定第五及六位 Methoxy 基及第七位的 Hydroxy 基的位置取代,前述四種生物鹼係首次以化學合成,而 4 亦未曾於天然界被分離發現過。		
• 英文摘要	Annonelliptine (1) and anomoline (2) were isolated from Annona plant by two laboratories and their structures were elucidated entirely by spectral data. In order to confirm the structures of these alkaloids, a total chemical synthesis of compound 1 and 2 was performed by Bischler-Napieralski Reaction. In addition, two other isomeric alkaloids, compound 3 and thalmeline (4) were also prepared by the similar approach. By comparison of the spectral data of 1 and 2 with natural samples, the structures of annonelliptine (1) and anomoline (2) were confirmed unequivocally. The COLOG and NOE spectra were applied to confirm their chemical structures.		