ABSTRACT

PHYTOCHEMICAL STUDIES ON ANNONA GLABRA, ANNONA PURPUREA
AND SWIETENIA AUBREVILLEANA

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This dissertation deals with the chemical studies of three local plants. Part One examines the phytochemistry of *Annona glabra* and *Annona purpurea* (Annonaceae) and Part Two investigates *Swietenia aubrevilleana* (Meliaceae).

From *Annona glabra*, the known compound (-)-kaur-16-en-19-olc acid, was re-isolated and identified. This diterpene has previously been found in other members in this family.

From *Annona purpurea*, the known compound 24-methylenecycloartan-3β,21-diol, was isolated and identified. It is the first time that this triterpene has been reported from this family. This particular compound is also fully characterised by $^{1}$H-$^{13}$C correlation data for the first time.

Finally the isolation and identification of two known limonoids, swietenolide and swietenolide diacetate as well as the isolation and structure of a new mexicanolide type limonoid, 3-desacetoxy-3-
tigolylhuminolide D (compound IV), from *Swietenia aubrevilleana* is discussed. This new compound represents another example of the rare mexicanolide type limonoid bearing oxygenated functionalities simultaneously at C2, C3 and C6.