E2-15: Chemical constituents of *Wrighitia zeylanica*

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During the search for biologically active metabolites from endemic Sri Lanka Medicinal plants some of the constituents present in the aerial parts of *Wrighitia Zeylanica* were characterized.

The finely ground aerial parts of *Wrighitia zeylanica* were extracted with cold methanol and initially separated on a flash column. The 50% methylene chloride in hexane flash column fraction after repeated column chromatography on silica gel yielded **I** and a mixture of fatty acids. The 100% methylene chloride flash column fraction after column chromatography yielded Compound **II**, Compounds **I & II** were characterized from their ^{1}H NMR, ^{13}C NMR and mass spectrum as well as from their melting points. The mixture of fatty acids was analysed by GC/MS.

The ^{1}H NMR and ^{13}C NMR spectrum of **I** was characteristic of a triterpenoid containing one double bond. The ^{1}H NMR showed the presence of methyl singlets. The mass spectrum showed peaks at m/e 456 (M^{+}), 248(97) and 203(base peak, 248 - CO_2H). M/e 248 arises from a retro Diels Alder type cleavage in ring C and is characteristic of Δ^{12} triterpenes containing a carboxylic function in ring C or D. Compound **I** was identified as Oleanolic acid by rigorous comparison of the ^{13}C NMR data with that of reported data. The melting point (305-306^{0}C was in agreement with that of oleanolic acid.

The ^{1}H NMR spectrum of **II** was characteristic of a triterpenoid containing one double bond. Two of the methyl signals appeared as doublets. The mass spectrum showed peaks at 456(M^{+}), 248(100) and 203(72), confirming the presence of a carboxylic function in ring D or E of a$_{\Delta}^{12}$ triterpene. Compound **II** was acidulated with AC_2O/pyridine and the ^{13}C NMR data of acidulated-**II** was in agreement with that of Ursolic acid monoacetate. The melting point of **II** (282-285^{0}C) was in agreement with that of
ursolic acid.

The mixture of fatty acids on analysis by GC/MS revealed the presence of nonanoic acid (0.36%), pentadecanoic acid (12.3%), hexadecanoic acid (19.4%), heptadecanoic acid (63.1%), octadecanoic acid (2.7%) and oleic acid (2.2%).