

E2-24 : BIO ACTIVE ACETOGENINS FROM *Annona reticulata*
(ANNONACEAE)

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The family Annonaceae is known to contain extremely potent class of compounds called "acetogenins" which exhibit strong anti-tumor properties and provide biodegradable insecticides. In the course of screening family Annonaceae for bio-active secondary metabolites, we started bio activity directed chemical investigation of *Annona reticulata* (Weli Anoda). The chloroform soluble fraction obtained from the hot methanol extract of the stem bark of *A. reticulata*, showed cytotoxic and larvicidal activities.

Bio-assay monitored chromatographic separation of the chloroform soluble fraction afforded two active compounds. The less polar compound, m.p. 103-104°C, was identified as isoannonacin-10-one (1) and the other m.p. 69-70°C was identified as 4-hydroxy-25-desoxyrollinacin (2) from their physical and spectral data. Both the compounds showed 100% lethality to brine shrimps at a concentration of 2µg/ml. Compound 1 exhibited 60% mortality at a concentration of 4 ppm and compound 2 exhibited 90% at the same concentration on mosquito larvae, *Aedes aegypti*.

