

5th International Conference & Exhibition on

Herbal & Traditional Medicine

November 05-06, 2018 | London, UK

Novel ionosides from *Corchorus olitorius* L. (Tiliaceae)

Taiwo Bamigboye J, Fisusi Funmilola A and Ogundaini Abiodun O
Obafemi Awolowo University, Nigeria

The term drug repurposing, has gained considerable ground over the past decade and it is anticipated that this paradigm shift with respect to finding novel indications for drugs already in use might also be relevant to herbal medicines and vegetables currently in use, especially in many traditional societies. *Corchorus olitorius* (L.) (Tiliaceae) has been used for decades in South-Western Nigeria as a leafy vegetable while it is reportedly used in other traditional societies to treat gonorrhoea, chronic cystitis, pain, fever and tumours. Cardiac glycosides, ionones, flavonoids and chlorogenic acid have been reported from the whole plant species. The whole plant was collected in October 2014, air dried and milled. The powdered plant part was extracted with 50% v/v aqueous ethanol. The crude extract was subjected to repeated chromatographic purification on both silica gel and Sephadex LH-20 to isolate two compounds. The structures were elucidated through the data generated from NMR (1 and 2 D experiments), ESI MS and low energy-induced dissociation tandem mass spectrometry (TOF MSMS) as 3-O- β -glucopyranosyl-5, 6, 9-trihydroxyionol (Corchoionoside D, 1) and 3-O- β -glucopyranosyl-6, 9-dihydroxyionol (Corchoionoside E, 2). These compounds are reported in nature for the first time and belong to the megastigmane class of natural products. The class have been demonstrated to induce apoptosis in human melanoma cell lines by inhibiting NF- κ B activity. The presence of the compounds in *C. olitorius* may justify its inclusion in many anti-inflammatory herbal remedies.

bamit@oauife.edu.ng