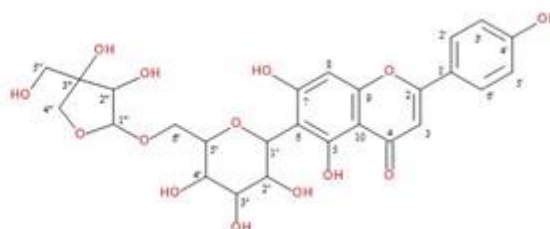


Abstract

Flavonoids are a class of biologically active compounds with various proven nutraceutical benefits. In flavonoid C-glycosides, the aglycones are attached to sugar residues *via* cleavage-resistant C-C bonds which alter typical flavonoid pharmacokinetic properties. In these compounds, the combination of biological activities from the flavonoid moieties and sugar residues create unique and more diverse biological functions than those of O-glycosylated and unsubstituted flavonoids. Through a series of reverse phase chromatography techniques and various spectroscopic methods, the phytochemical investigation of *Drimia altissima* (L.F.) Ker Gawl., a specie from the *Asparagaceae* family, led to the isolation and chemical characterisation of a novel C-glucosylflavonoid, altissimin, with a unique apioglucoside arrangement to the apigenin aglycone. Altissimin was found to possess strong *in vitro* anti-proliferative activity against HeLa cervical cancer cells.



Keywords:

Drimia altissima altissimin flavonoid C-glycoside apigenin anti-proliferative