B083 Polyoxygenated leaf flavonoids of *Eugenia edulis*

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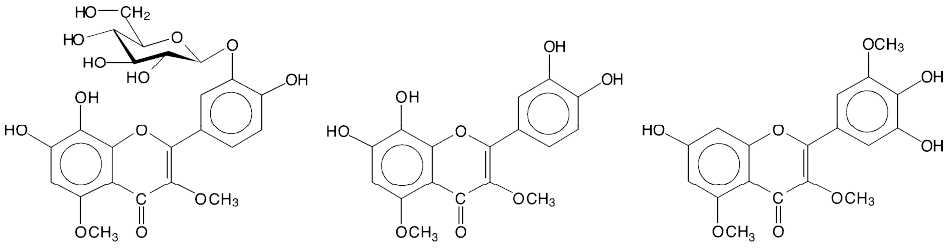
Extracts of *Eugenia edulis* (Myrtaceae) are used in Egyptian folk medicine to treat infectious diseases. In the present study, the aqueous alcoholic leaf extract which showed anti-bacterial activity, was fractionated over Sephadex LH-20 columns to afford 14 phenolics, among which three were new. They were identified as gossypetin-3,5-dimethyl ether-3'-*O*-β-glucopyranoside (**1**), gossypetin-3,5-dimethyl ether (**2**) and myricetin-3,5,3'-trimethyl ether (**3**). Structures were established by conventional methods and confirmed by ESI-mass and NMR spectral analysis. The three compounds exhibited diagnostic ^{13}C-NMR spectral patterns which reflected the presence of a 3,5-dimethyl etherification of the flavonoid moieties. This followed from the characteristic upfield shifts of the resonances (172.3, 173.1 and 172.7 ppm, respectively) of the carbonyl carbons C – 4 and from the down field shifts of the resonances of the C – 3 carbons (δ values 139.4; 140.0 and 140.4 ppm, respectively) of the aglycones in comparison with the corresponding resonances in the spectra of gossypetin and myricetin.



1 **2** **3**

B084 Pelargoniin E, a new ellagitannin, and accompanying phenols from *Pelargonium reniforme* Curt.

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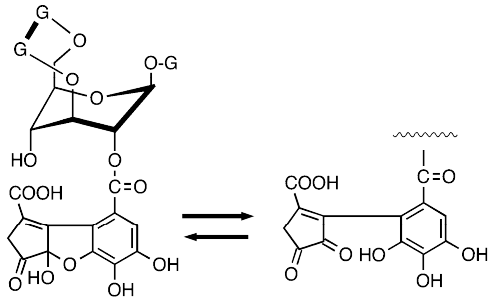
Pelargonium reniforme Curt. (Geraniaceae) is highly estimated by traditional practitioners and the native population in areas of southern Africa for its curative properties. The therapeutic significance of this plant is also documented by its present utilisation in modern phytotherapy for the treatment of respiratory tract infections (1).

Further investigation of the aerial parts of *P. reniforme* led to the isolation of the new ellagitannin pelargoniin E (**1**). Identification of **1** not only extends the series of ellagitannins based on a glucose core which itself adopts the less favourably ^{1}C$_4$ conformation, but also introduces another example of rarely found dehydroellagitannins having an oxidatively modified DHHDP moiety attached to just C-2 of the glucose core. Besides the presence of common phenolics, the extract also yielded the new natural product gallic acid *n*butyl ester (**2**), and a series of sporadically found metabolites. These include 4,6-dihydroxy-2β-glucopyranosyloxyacetophenone, 1-O-galloylglycerd, 6"-O-galloyl-salidroside and (α,β)-3,4-di-O-galloylglucose. The structures of these compounds were established from spectroscopic studies.



1 (G = galloyl)

References: 1. Kolodziej, H. (2000) Curr. Topics Phytochem. 3: 77.