ABSTRACT

Phytochemical investigation of the leaves of *Anthurium hookeri*, *Anthurium jenmanii* and *Anthurium aripoense* from Trinidad

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The *Anthurium* genus is the largest of the Araceae family and is located in tropical and temperate regions. Previous investigations of this genus revealed the presence of polyphenols (mainly flavonoids), terpenoids, a cyanogenic glycoside and volatile aromatic compounds. The leaves of three *Anthurium* species from Trinidad, namely *Anthurium hookeri*, *Anthurium jenmanii* and *Anthurium aripoense*, were selected for extraction, isolation and structural elucidation of secondary metabolites. The structures of these secondary metabolites were determined using data acquired from various spectroscopic and spectrometric methods which include ^{1}H NMR, ^{13}C NMR, DEPT, HSQC, ^{1}H-^{1}H COSY, HMBC, T-ROESY, IR, UV-vis and HRESIMS. The phytochemical investigation of the three aforementioned *Anthurium* species yielded fourteen secondary metabolites of

which one was a novel halogenated bibenzyl. This is the first reported isolation of these metabolites from the *Anthurium* genus.

Keywords: *Anthurium*, norisoprenoid, flavonoid, ionones, bibenzyl