Table 3: Content of triterpene acids in *Myrtaceae* leaf extracts after extraction with alkaline ethanol

Species	OA	BA	UA	Total acids
	A. Triterpene acid content in the *n*-hexane extract (%)			
EB	0.4±0.0	0.1±0.0	<QL	0.5±0.2
EF	0.2±0.1	0.4±0.1	0.7±0.1	1.3±0.2
EU	<QL	<QL	<QL	-
PC	<QL	<QL	<QL	-
PG	0.2±0.0	0.4±0.1	<QL	0.7±0.1
SC	<QL	<QL	<QL	-
	B. Triterpene acid content from whole leaves (%)			
EB	4.3±0.2	1.5±0.1	14.8±0.2	20.6±0.3
EF	2.4±0.5	38.8±0.3	9.0±0.1	50.2±0.3
EU	1.7±0.0	<QL	4.7±0.2	6.4±2.4
PC	5.7±0.1	<QL	20.4±1.2	26.1±1.3
PG	2.2±0.1	1.5±0.1	7.3±0.2	11.0±0.3
SC	4.8±0.4	3.5±0.1	8.8±1.0	17.1±1.5
	C. Triterpene acid content from defatted leaves (%)[a]			
EB	4.2±0.3	1.3±0.1	16.0±0.9	21.5±1.2
EF	2.5±0.0	42.9±0.3	9.5±0.1	54.8±0.3
EU	1.6±0.1	<QL	5.4±0.0	7.0±0.1
PC	5.7±0.2	<QL	21.4±1.7	27.1±1.8
PG	2.2±0.0	1.9±0.2	8.0±0.1	12.1±0.3
SC	5.5±0.4	3.9±0.2	10.0±1.3	19.4±1.9

[a]All values are mean of extraction experiments in triplicate and averaged from three sample injections. EB: *Eugenia brasiliensis*, EF: *Eugenia florida*, EU: *Eugenia uniflora*, PC: *Psidium cattleianum*, PG: *Psidium guajava*, SC: *Syzygium cumini*, OA: Oleanolic acid, BA: Betulinic acid, UA: Ursolic acid. QL: Quantitation limit

as initializing the purifications of such compounds. The inclusion of a previous leaf defatting procedure with the appropriate solvent should be regarded at the light of the process cost-effectiveness.

Once applied to leaves, this method also stands out for its sustainability aspect, since this part of the plant plays a renewable source of vegetal raw material. From selecting the proper species and aiming the production of valuable triterpene acids, this method is also useful to purify any of the three compounds assayed in this study. Due to the previous knowledge on the contents of triterpene acids, the leaves of *Myrtaceae* species were good matrices to verify the protocol efficiency. However, the scope of the method indeed exceeds the limits of any botanical group, since it may be applied to general plant substrates containing cutin (or suberin). Moreover, the method is cost-effective and environmentally friendly, and can be applied to recover triterpene acids that are resistant to the extraction conditions, as is the case of OA, BA and UA. In spite of this fact, molecules that would be more susceptible, as triterpene lactones and esters cannot be immediately excluded, since substrates containing them have not been assayed yet.

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