Supplementary Table S1. Percentage inhibition of DPPH free radical by *Eugenia* extracts. Data are represented as Mean±SD of triplicate determinations (n=3). Values in same row or column with different letters are significantly different (P<0.05).

Eugenia species	Solvent systems / % inhibition / 100 µL crude extract		
	DCM only	**DCM:MeOH**	**MeOH only**
***E.*spp (big leaves)**	$19.73 \pm 0.16_{f}$	$91.88 \pm 0.02_{d}$	$93.49 \pm 0.01_{c}$
E.crassipetala	$91.50 \pm 0.05_{d}$	$95.28 \pm 0.02_{ab}$	$95.02 \pm 0.02_{ab}$
E. kanakana	$7.85 \pm 0.23_{h}$	$93.69 \pm 0.04_{c}$	$94.06 \pm 0.02_{bc}$
***E.*spp(small leaves)**	$12.96 \pm 0.11_{g}$	$95.50 \pm 0.02_{a}$	$94.56 \pm 0.02_{abc}$
E. tinifolia	$77.29 \pm 0.02_{e}$	$95.02 \pm 0.02_{ab}$	$95.11 \pm 0.02_{ab}$

Supplementary Table S2. MIC values for *Eugenia* species extracts against *Escherichia coli*, *Proteus mirabilis* and *Staphylococcus aureus*.

	MIC (mg/mL)								
Bacteria	***Escherichia coli***			***Proteus mirabilis***			***Staphylococcus aureus***		
Extracts	**DCM**	**H**	**M**	**DCM**	**H**	**M**	**DCM**	**H**	**M**
***E.* spp (big leaves)**	2.53	3.14	3.13	2.53	3.14	6.25	0.63	1.57	1.56
E.crassipetala	2.61	3.15	1.56	2.61	3.15	3.13	1.31	1.57	1.56
E.kanakana	2.21	3.13	6.26	0.55	3.13	6.26	0.55	3.13	3.13
***E.*spp (small leaves)**	3.42	3.14	3.13	0.86	6.27	6.26	0.43	1.57	3.13
E.tinifolia	2.98	3.13	1.57	5.96	6.25	6.28	0.74	0.78	0.78
Chloramphenicol	3.13			6.25			1.56		

DCM.: DCM crude extract, **H**: Hexane fraction, **M**: Methanol fraction

Supplementary Table S3. RAPD markers and polymorphism.

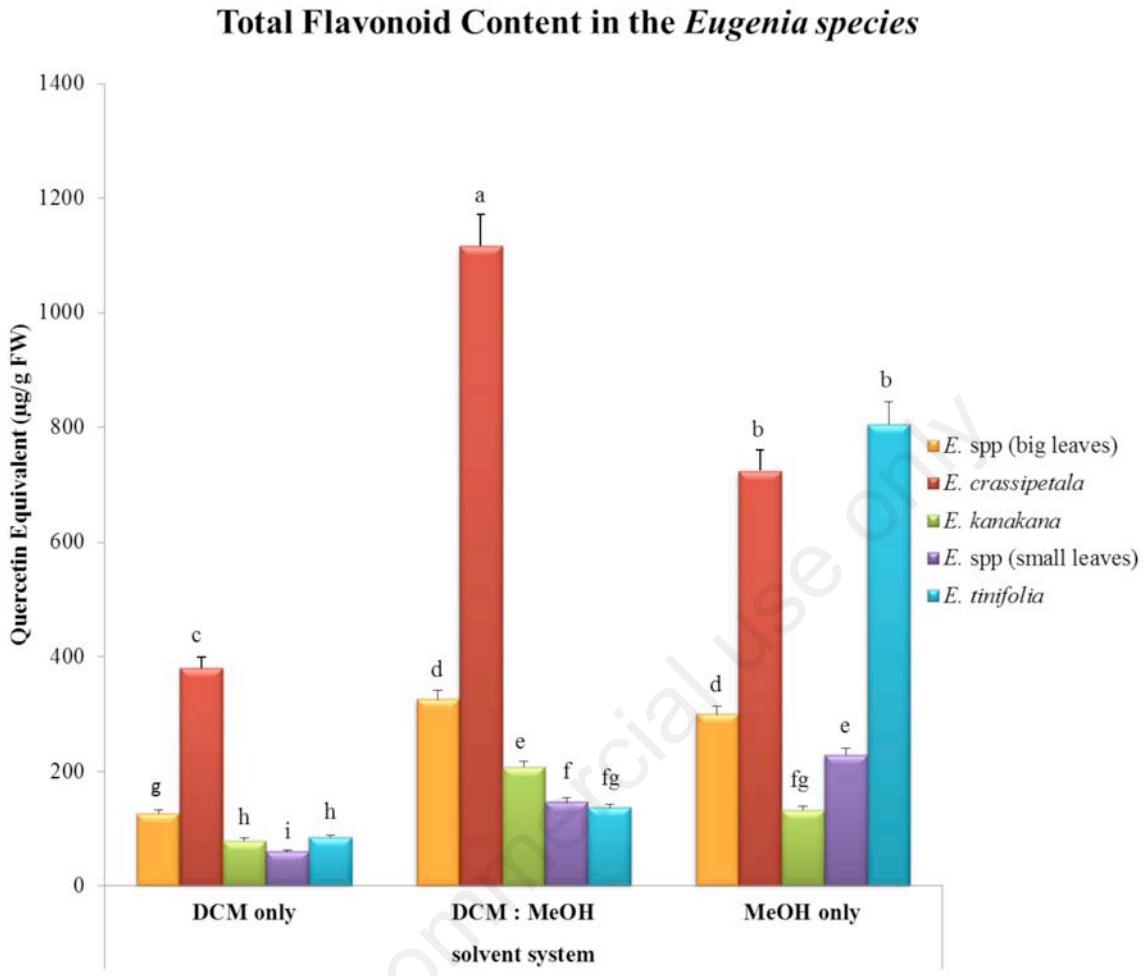
Primer	Sequence 5'→3'		Number of		% polymorphism
		Markers Used	Monomorphic markers	Polymorphic markers	
OPA-10	GTGATCGCAG	15	0	11	73.3
OPD-02	GGACCCAACC	7	2	4	57.1
OPD-13	GGGGTGACGA	10	0	2	20.0
OPP-20	GACCCTAGTC	11	0	2	18.2
OPL-05	ACGCAGGCAC	20	0	16	80.0
OPB-11	GTAGACCCGT	6	0	3	50.0
OPW-04	CAGAAGCGGA	11	0	1	9.1
OPA-19	CCAACGTCGG	28	1	16	57.1
OPA-04	AATCGGGCTG	17	1	8	47.1
OPA-02	TGCCGAGCTG	14	1	9	64.3
OPA-12	TCGGCGATAG	15	1	7	46.7
OPA-11	CCATCGCCGT	26	0	15	57.7
OPA-08	GTGACGTAGG	14	0	11	78.6
OPH-04	GGAAGTCGCC	9	0	6	66.7

Spearman's correlation coefficient for TFC and/or TFC and DPPH percentage inhibition.

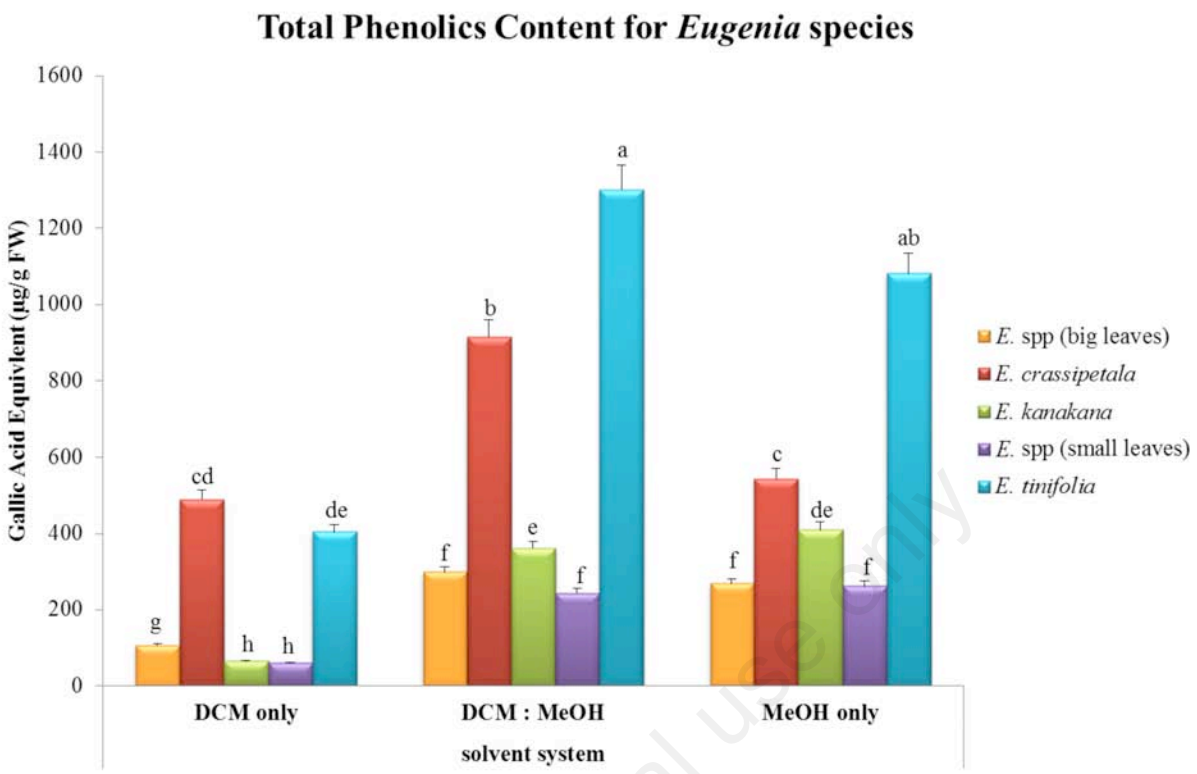
Statistical Analysis	Source	Significance (P value)	Correlation coefficient, r_s	R^2 value (Excel)
Spearman's correlation coefficient	TFC and DPPH inhibition	0.041	0.533	0.3445
	TPC and DPPH inhibition	0.026	0.570	0.6750

Average genetic dissimilarity (estimated as genetic distance) among the five *Eugenia* species using the 9 RAPD primers and 3 ISSR primers. Range of genetic distances estimated was from 48.6 to 100% (to 3 s.f.). Maximum genetic distances (100%) were estimated between *E. kanakana* and *E. tinifolia* while 48.6% genetic distance was estimated between *E.*spp (big leaves) and *E.*spp (small leaves).

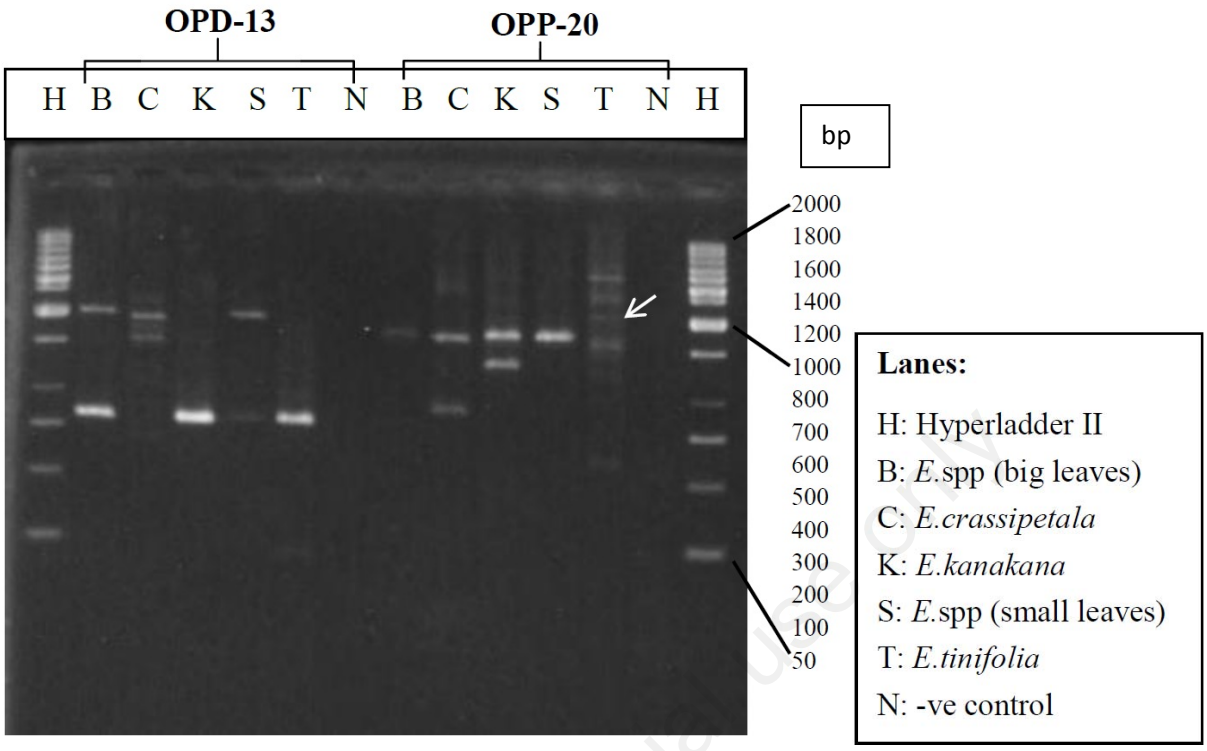
	***E.*spp (big leaves)**	***E. crassipetala***	***E. kanakana***	***E.*spp (small leaves)**
E. crassipetala	0.9695			
E. kanakana	0.8094	0.8540		
***E.*spp (small leaves)**	**0.4863**	0.8240	0.6420	
E. tinifolia	0.8540	0.6774	**0.999**	0.9013



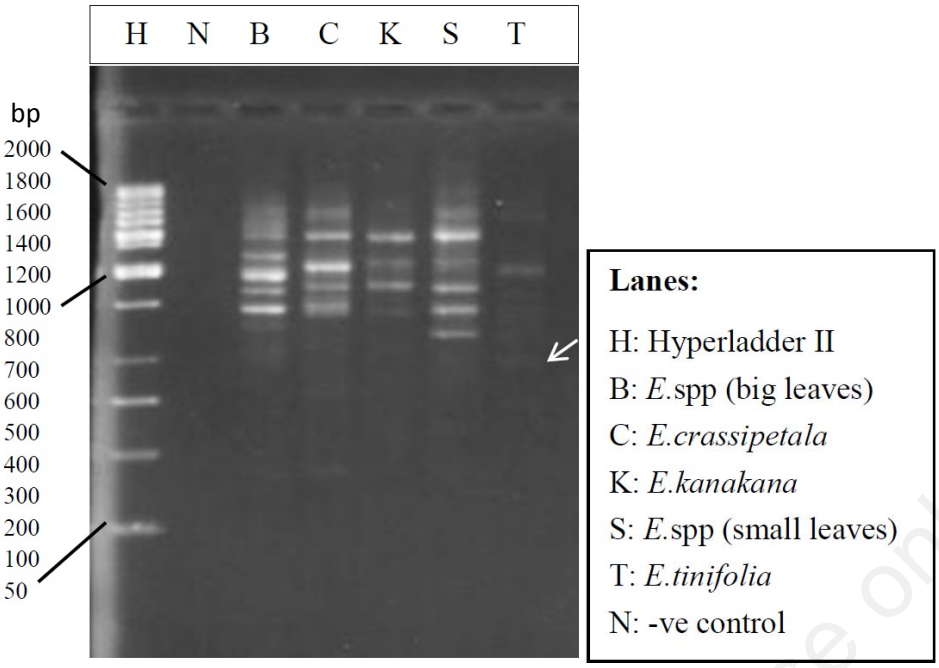
Supplementary Figure S1. Total flavonoid content in the *Eugenia* spp. crude extracts with respect to the different solvent systems (Data presented in QE µg/g FW, standard error included as Y error bars, n=3). Bar charts with different letters are significantly different (P<0.05).



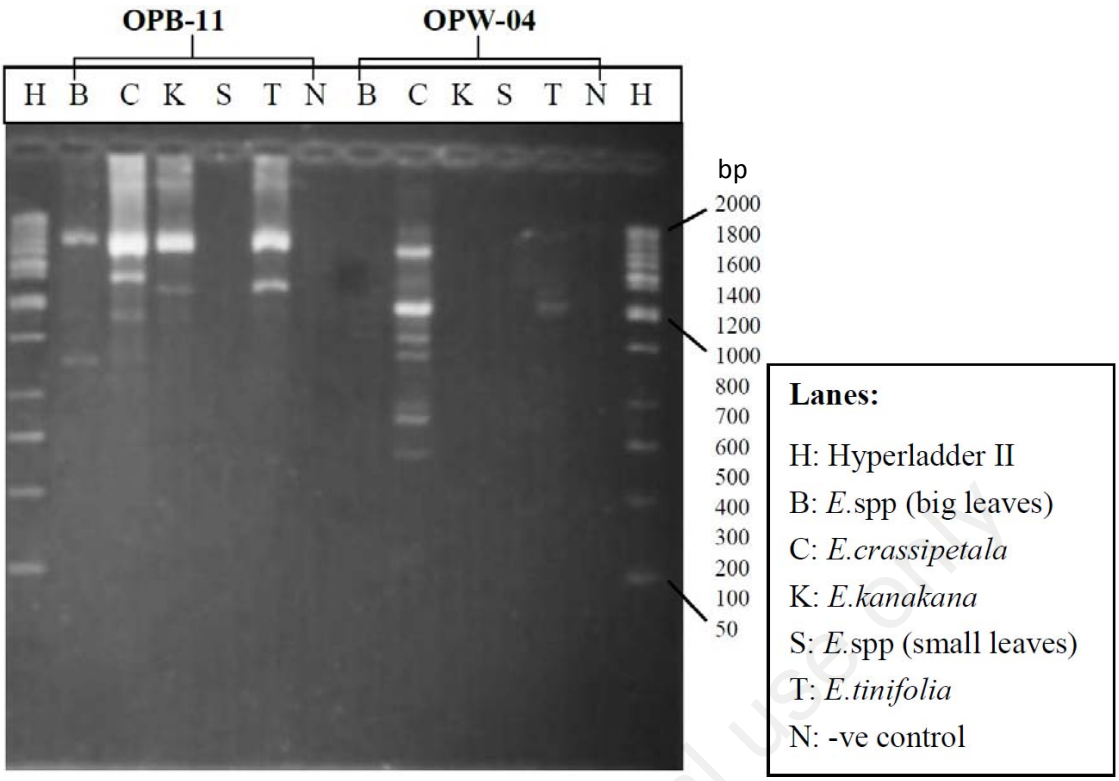
Supplementary Figure S2. Total phenolics content in the *Eugenia* spp. crude extract with respect to the different solvent systems (Standard error included as Y error bars). (Data presented in GAE µg/g FW, standard error included as Y error bars, n=3). Bar charts with different letters are significantly different (P<0.05).



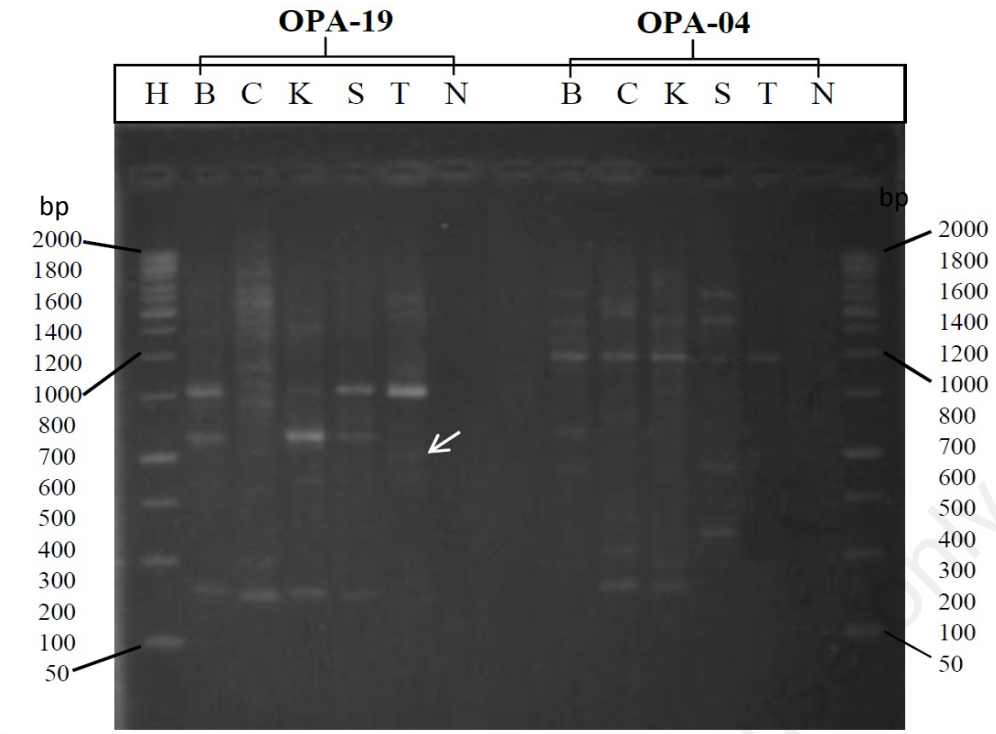
Supplementary Figure S3. Banding pattern produced from DNA amplification using RAPD primers OPD-13 and OPP-20 with lanes labelling shown in the textbox beside. Hyperladder II (Bioline) was used and double sterilised water used as negative control (-ve control).



Supplementary Figure S4. Banding pattern produced from DNA amplification using RAPD primers OPL-05 with lanes labelling shown in the textbox beside. Hyperladder II (Bioline) was used and double sterilised water used as negative control (-ve control).



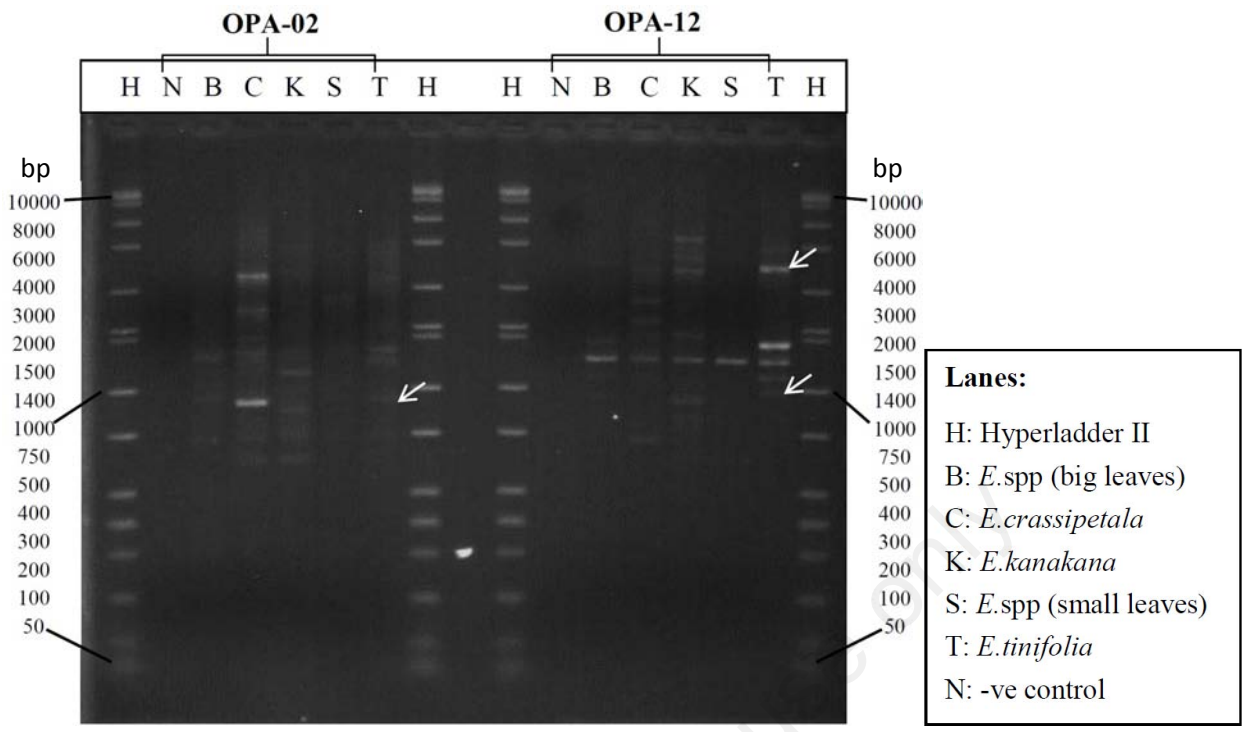
Supplementary Figure S5. Banding pattern produced from DNA amplification using RAPD primers OPB-11 and OPW-04 with lanes labelling shown in the textbox beside. Hyperladder II (Bioline) was used and double sterilised water used as negative control (-ve control).



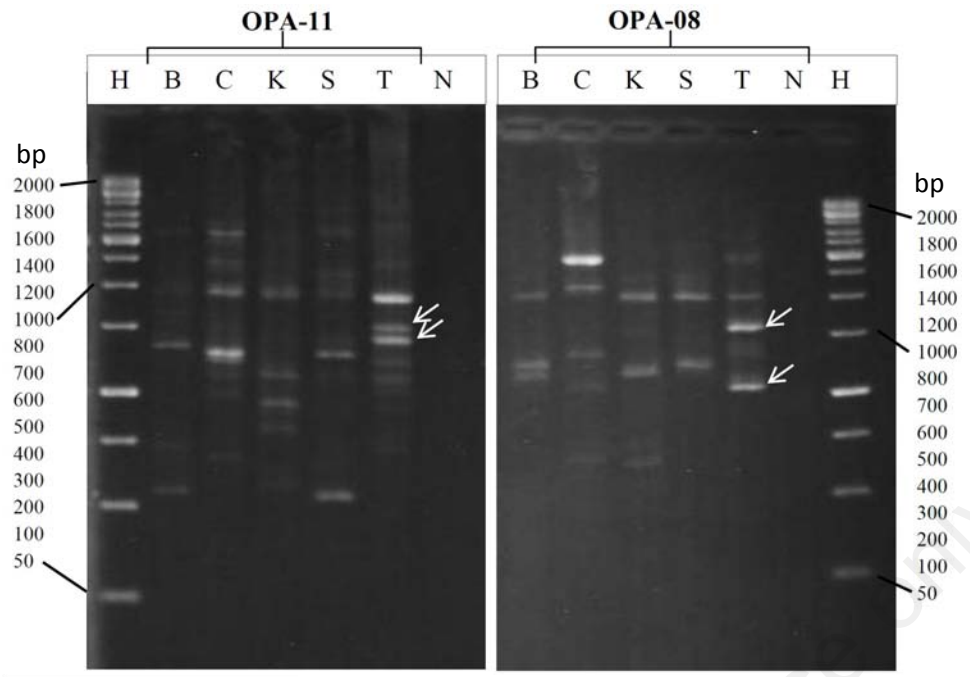
Lanes:

H: Hyperladder II
B: *E.*spp (big leaves)
C: *E.crassipetala*
K: *E.kanakana*
S: *E.*spp (small leaves)
T: *E.tinifolia*
N: -ve control

Supplementary Figure S6. Banding pattern produced from DNA amplification using RAPD primers OPA-19 and OPA-04 with lanes labelling shown in the textbox beside. Hyperladder II (Bioline) was used and double sterilised water used as negative control (-ve control).



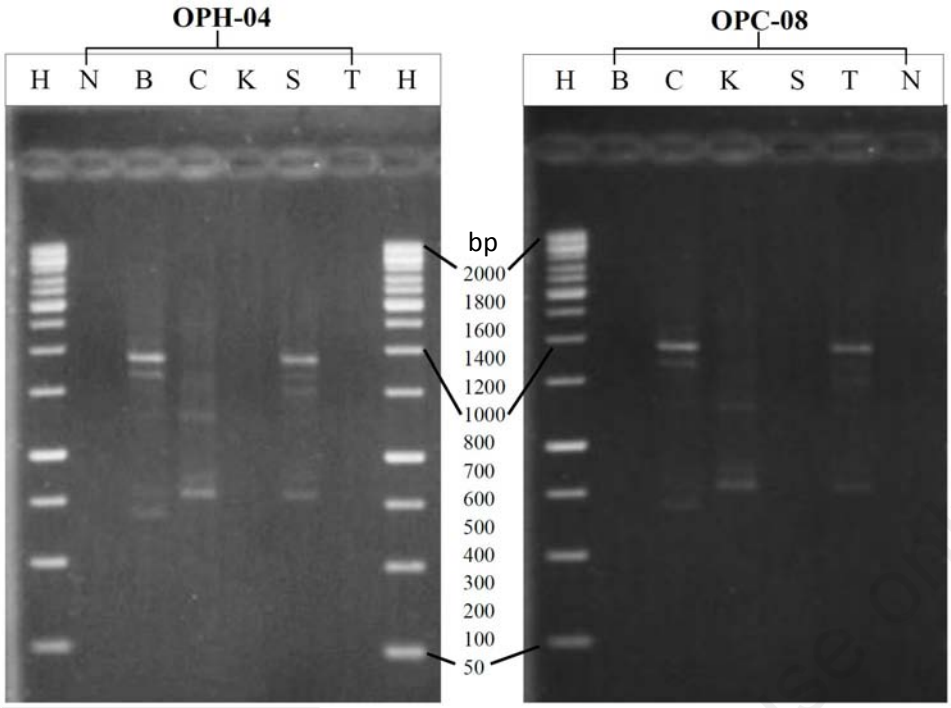
Supplementary Figure S7. Banding pattern produced from DNA amplification using RAPD primers OPA-02 and OPA-12 with lanes labelling shown in the textbox beside. Hyperladder II (Bioline) was used and double sterilised water used as negative control (-ve control).



Lanes:

H: Hyperladder II
B: *E.*spp (big leaves)
C: *E.crassipetala*
K: *E.kanakana*
S: *E.*spp (small leaves)
T: *E.tinifolia*
N: -ve control

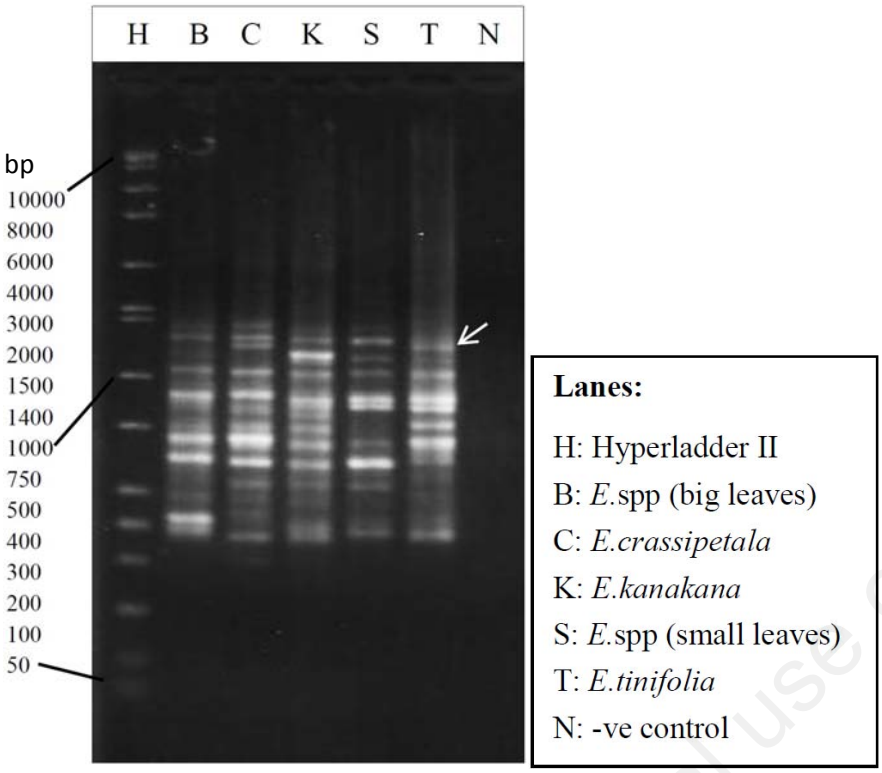
Supplementary Figure S8. Banding pattern produced from DNA amplification using RAPD primers OPA-11 and OPA-08 with lanes labelling shown in the textbox beside. Hyperladder II (Bioline) was used and double sterilised water used as negative control (-ve control).



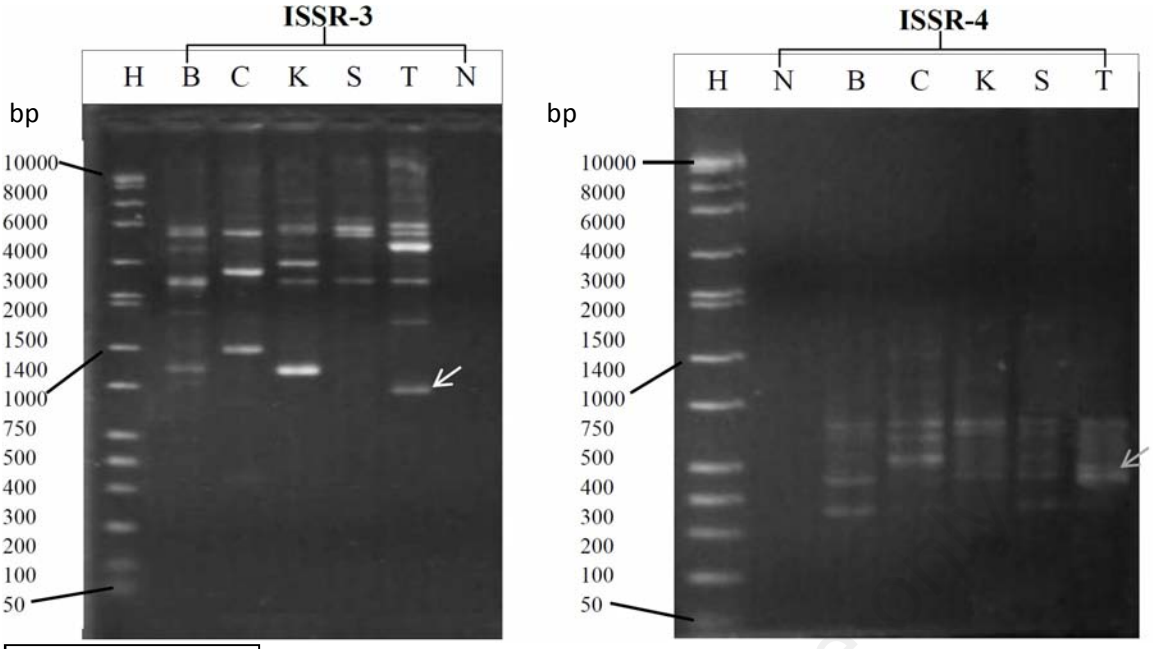
Lanes:

H: Hyperladder II
B: *E.*spp (big leaves)
C: *E.crassipetala*
K: *E.kanakana*
S: *E.*spp (small leaves)
T: *E.tinifolia*
N: -ve control

Supplementary Figure S9. Banding pattern produced from DNA amplification using RAPD primers OPH-04 and OPC-08 with lanes labelling shown in the textbox beside. Hyperladder II (Bioline) was used and double sterilised water used as negative control (-ve control).



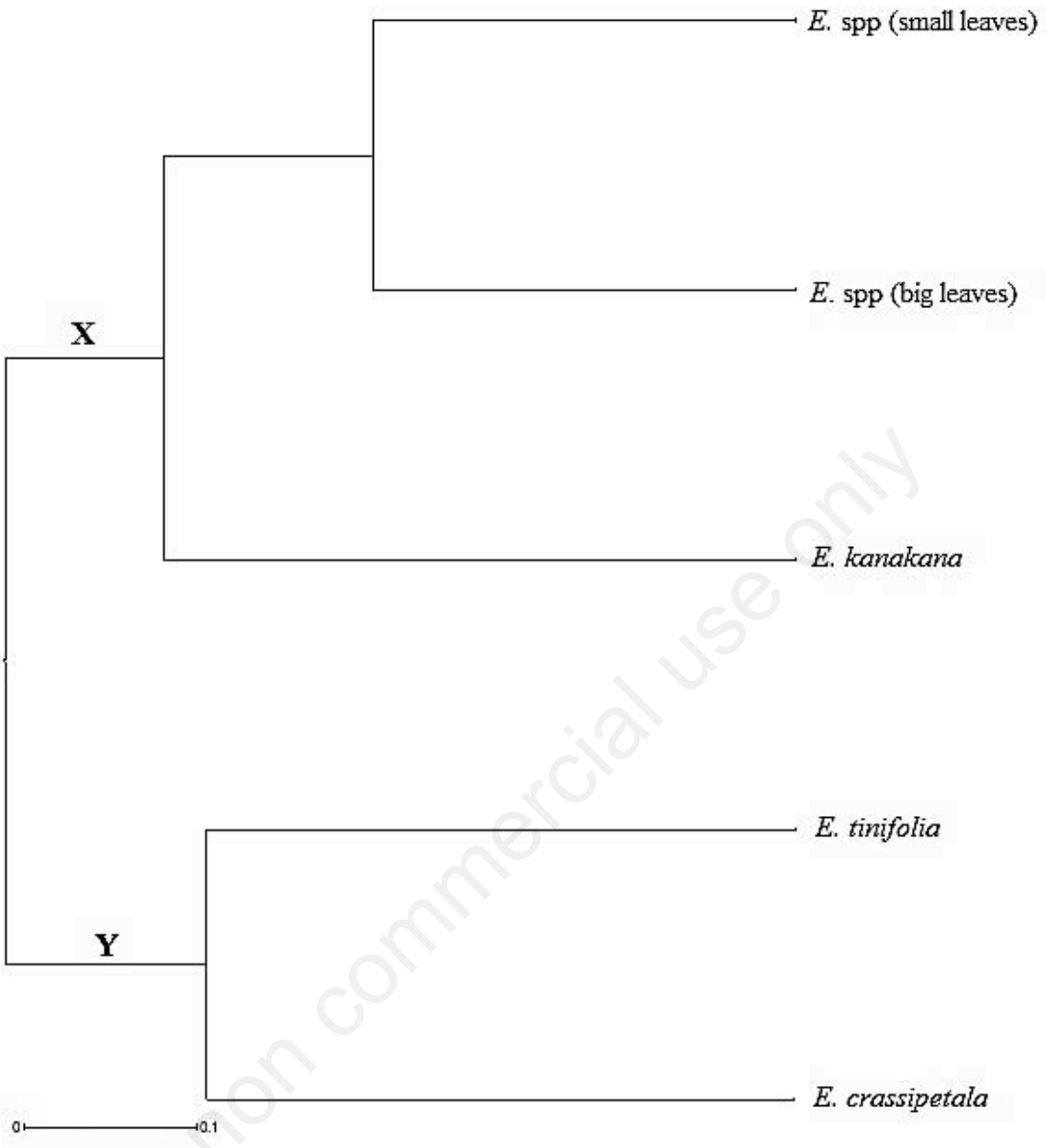
Supplementary Figure S10. Banding pattern produced from DNA amplification using ISSR primer ISSR-2 with lanes labelling shown in the textbox beside. Hyperladder (All-purpose HI-LO DNA marker) was used and double sterilised water used as negative control (-ve control).



Lanes:

H: Hyperladder II
B: *E.*spp (big leaves)
C: *E.crassipetala*
K: *E.kanakana*
S: *E.*spp (small leaves)
T: *E.tinifolia*
N: -ve control

Supplementary Figure S11. Banding pattern produced from DNA amplification using ISSR primer ISSR-3 and ISSR-4 with lanes labelling shown in the textbox beside. Hyperladder (All-purpose HI-LO DNA marker) was used and double sterilised water used as negative control (-ve control).



Supplementary Figure S12. Dendogram illustrating genetic relatedness among the five endemic *Eugenia* species of Mauritius generated by the UPGMA cluster calculated from 156 RAPD markers and 48 ISSR markers.