

SUPPLEMENTARY DATA

Supplementary Table 1. Genetic distance between mother plant (MP) and *in vitro* regenerants (P1–P9) of *K. galanga* based on Nei and Li's coefficient of similarity from pooled ISSR-SCoT-iPBS data

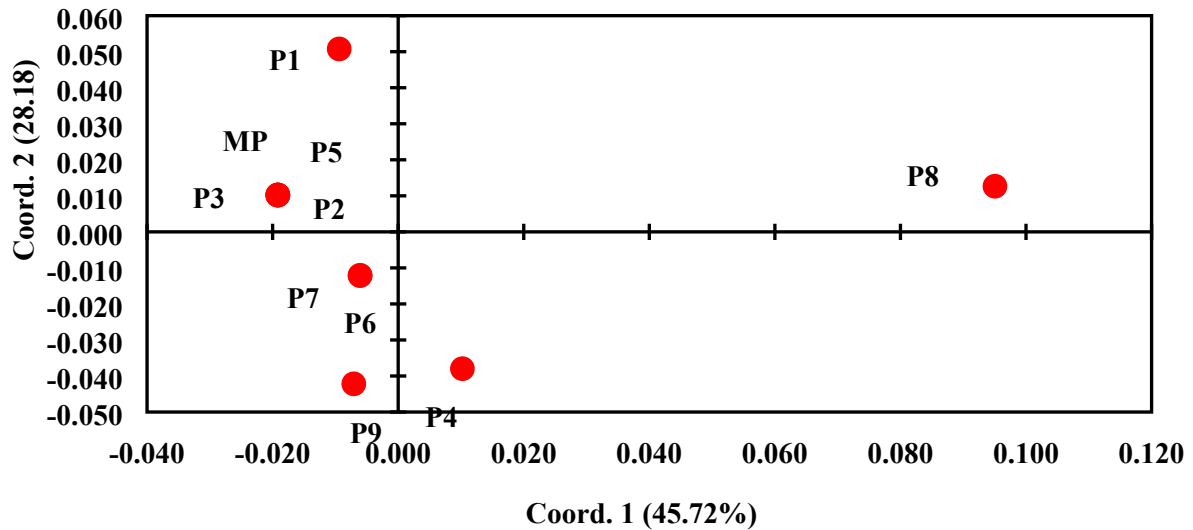
MP	P1	P2	P3	P4	P5	P6	P7	P8	P9
0.000									MP
0.015	0.000								P1
0.039	0.044	0.000							P2
0.005	0.010	0.034	0.000						P3
0.005	0.010	0.034	0.000	0.000					P4
0.000	0.015	0.039	0.005	0.005	0.000				P5
0.015	0.010	0.034	0.010	0.010	0.015	0.000			P6
0.000	0.015	0.039	0.005	0.005	0.000	0.015	0.000		P7
0.000	0.015	0.039	0.005	0.005	0.000	0.015	0.000	0.000	P8
0.015	0.029	0.044	0.020	0.020	0.015	0.029	0.015	0.015	0.000 P9

Supplementary Table 2. List of some major volatile compounds detected by LC- MS analysis in the leaves of *K. galanga* raised in medium with plant growth hormones and nanoparticles

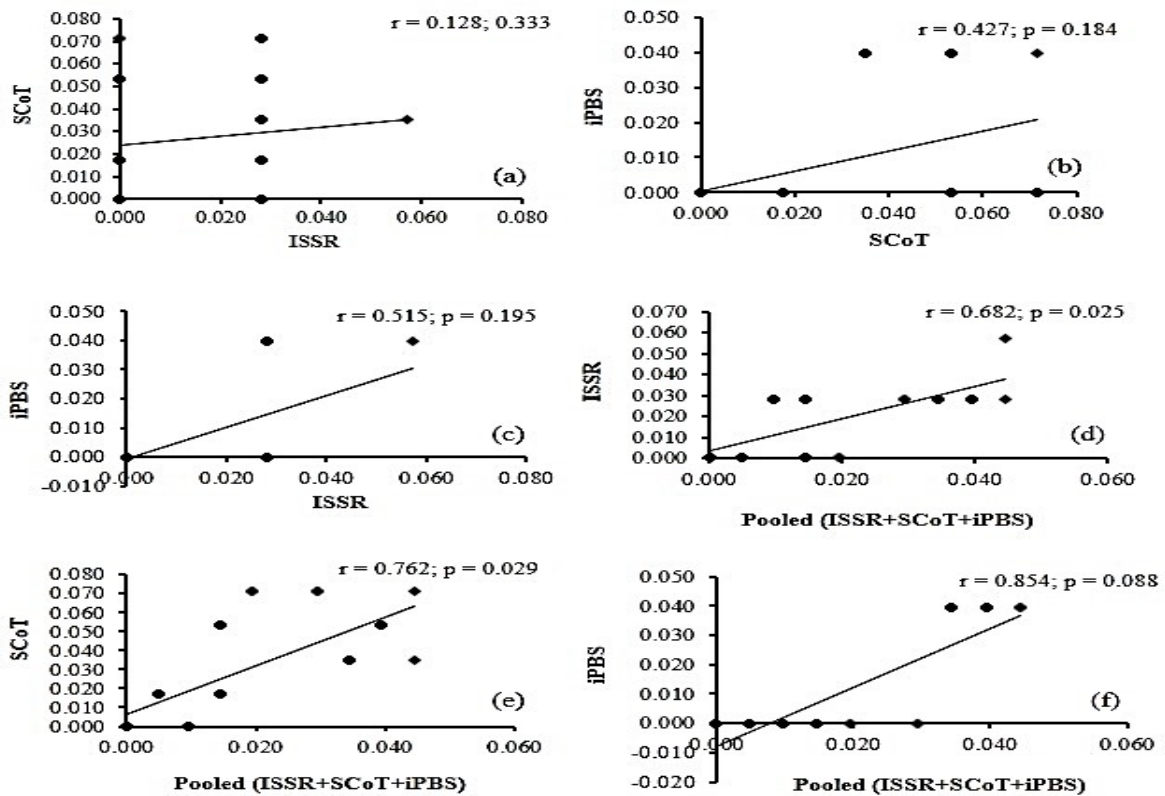
Sl. No.	Compound Name	Formula	Sample*	Mass	m/z	Score	Diff (Tgt, ppm)	RT
1	p-cymene	C ₁₀ H ₁₄	MP	134.1095	135.1167	87.59	-0.20	16.728
			Ag	134.1093	135.1165	86.81	-1.64	17.926
			BAP	134.1092	135.1165	86.91	-2.37	17.908
			ZnO	134.1091	135.1164	86.62	-3.44	17.932
2	Eucalyptol	C ₁₀ H ₁₈ O	MP	154.1357	172.1696	84.21	-0.52	1.037
			Ag	154.1357	155.1422	99.09	-0.39	10.587
			BAP	154.1353	155.1422	85.32	-2.93	10.569
			ZnO	154.1353	155.1422	84.88	-3.05	10.568
3	β pinene	C ₁₀ H ₁₆	MP	136.1251	137.1323	87.81	-0.75	17.599
			Ag	136.1250	137.1322	86.84	-1.77	17.926
			BAP	136.1248	137.1322	85.93	-3.16	17.925
			ZnO	136.1247	137.1319	84.85	-3.69	17.925
4	Carvone	C ₁₀ H ₁₄ O	MP	150.1043	168.138	87.33	-1.27	17.607
			Ag	150.1040	151.1114	86.15	-2.77	17.918
			BAP	150.1040	151.1114	98.03	-3.38	17.908
			ZnO	150.1039	151.1111	85.63	-4.04	17.908
5	Globulol	C ₁₅ H ₂₆ O	MP	222.1981	240.2319	99.29	-1.30	15.757
			Ag	222.1979	223.2054	98.77	-2.16	16.528
			BAP	222.1976	223.2054	97.53	-3.24	15.741
			ZnO	222.1976	223.2061	96.91	-3.62	16.535
6	Kaempferol	C ₁₅ H ₁₀ O ₆	MP	286.0490	304.0831	73.27	4.30	9.548
			Ag	286.0453	287.0534	73.88	-8.64	8.679
			BAP	286.0491	287.0534	76.60	4.77	9.565
			ZnO	286.0499	287.0562	60.79	7.48	9.580
7	Pentadecane	C ₁₅ H ₃₂	MP	212.2512	230.2848	62.53	3.66	11.038
			Ag	212.2520	235.2412	73.71	7.74	17.909
			BAP	212.2517	235.2412	69.39	6.29	17.900
			ZnO	212.2513	230.2850	62.21	4.04	11.129

8	Ethyl p-Methoxycinnamate	$C_{12}H_{14}O_3$	MP	206.0933	224.1278	99.55	-4.87	5.514
			Ag	206.0938	207.1015	98.78	-2.32	1.021
			BAP	206.0937	207.1015	98.24	-2.98	1.824
			ZnO	206.0936	207.1011	97.64	-3.49	1.028
9	Ethyl cinnamate	$C_{11}H_{12}O_2$	MP	176.0835	194.1173	99.68	-1.27	1.037
			Ag	176.0834	177.0898	99.10	-2.08	0.795
			BAP	176.0832	177.0898	98.71	-2.78	1.020
			ZnO	176.0831	177.0898	97.75	-3.66	0.785
10	Methyl cinnamate	$C_{10}H_{10}O_2$	MP	162.0676	180.1015	98.48	-2.69	9.665
			Ag	162.0675	163.0749	85.42	-3.34	9.691
			BAP	162.0683	163.0749	84.41	1.17	9.648
			ZnO	162.0676	163.0751	85.05	-2.75	9.664
11	Germacrene D	$C_{15}H_{24}$	MP	204.1859	227.1751	86.31	-9.18	0.803
			Ag	-	-	-	-	-
			BAP	-	-	-	-	-
			ZnO	-	-	-	-	-

[Note: Samples: Ag = 2.5 mg/L KN with 5 mg/L AgNP and 0.5 mg/L NAA, BAP = 2.5 mg/L BAP, and ZnO = 2.5 mg/L BAP with 2.5 mg/L ZnONP and 0.5 mg/L NAA, MP = Mother plant].



Supplementary Figure 1. PCoA plot depicting the distribution of mother plant (MP) and nine hardened *in vitro* raised plants of *K. galanga* (P1-P9) based on Nei and Li's coefficient of similarity using pooled SCoT-ISSR- iPBS data.



Supplementary Figure 2. Mantel test showing genetic distance correlation between different marker systems- (a) ISSR and SCoT, (b) SCoT and iPBS, (c) iPBS and ISSR, (d) ISSR and pooled ISSR-SCoT-iPBS data, (e) SCoT and pooled ISSR-SCoT-iPBS data, (f) iPBS and pooled ISSR-SCoT-iPBS data.