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Supplementary Tables

Table 1. Summary of the biological evaluation of *S. polyanthum*

Sl.No	Type of Evaluation	Method	Part of the plant	Solvent	Summary of Results	References
1	Antioxidants	DPPH	Leaf, unripe fruit, ripened fruit	Ethanol	In compared to ascorbic acid (95%), it showed significant antioxidant activity (90%).	(18)
		DPPH, FRAP, Beta-carotene,	Leaves	Ethanol	Both methods show a high antioxidants capacity	(88)
		ABTS, DPPH	Leaves	Dichloromethane, Methanol, N-hexane, Ethyl acetate	Leaves shows antioxidants with the IC_{50} of 17 µg/ml.	(34)
		DPPH, FRAP,	Leaves, stem bark	Methanol	Possess high antioxidant activity through oxidation of linolic at 91.43 ± 2.52 %.	(89)
		Well Diffusion	Leaves	Aqueous	colonization of all the tested pathogenic microorganisms.	(90)
		DPPH, FRAP	Leaves	Aqueous	With a scavenging antioxidant activity of 49.4%, it can be used as an herbal supplement.	(29)
		DPPH	Leaves	Aqueous	IC_{50} 14.84 µg/ml, flavonoids, tannins, and hydroquinone were shown to have substantial antioxidant activity.	(22)
		DPPH	Root, Bark	Essential oil	When compared to the control 15.23 µg/ml, the antioxidant potential was found to be highly significant at 18.42 µg/ml.	(68)
		DPPH	Leaves	N-hexane, Acetone, Aqueous	At 500 g/ml, the IC_{50} was not significantly different from ascorbic acid, which had an IC_{50} of 2.28 µg/ml.	(52)
		DPPH	Leaves	Ethyl acetate, Methanol	Ethyl acetate extract has IC_{50} of 13 µg/ml and methanolic 21 µg/ml	(55)
		DPPH, β-carotene bleaching assays (BCB)		Aqueous, Ethanolic	Both extract show significant activity as compared to the standard Ascorbic acid.	(28)
		DPPH, FRAP	Leaves	Aqueous, ethanol and hexane	The aqueous extract shows a high inhibition % of 84.83%.	(21)
		DPPH, ABTS , FRAP	Leaves	Petroleum ether, Methanol, aqueous and chloroform	Its exhibit a significant antioxidants.	(91)

	Leaves	Ethyl acetate ,Hexane, Methanol	Ethyl acetates exhibit strong inhibition at 73 %.	(92)
β-carotene bleaching, DPPH, Hydrogen Peroxide Radical Scavenging Activity	Bark	Methanol, Methanol-aqueous, Aqueous	Both extract exhibited a strong activity as an antioxidant source.	(93)
DPPH	Leaves	Ethanol	69.18% inhibition demonstrate a good antioxidant agent.	(86)
DPPH, FRAP	Fruits	Aqueous	With an inhibitory % of scavenging activity at 64.93 and ferric reducing power of 69.05, activity against the free radical.	(94)
DPPH	Leaves	Ethanol	69.18% inhibition demonstrate a good antioxidant agent.	(86)
DPPH	Combined Leaf of *Psidium guajava* and *Syzygium polyanthum*	Aqueous	Show strong antioxidants potential of 9 µg GAE/ml.	(95)
DPPH, FRAP	Leaves	Toluene, Petroleum ether, Ethyl acetate, Aqueous, Acetone	Inter and intra variation documented but the plant is a very good sources of antioxidant.	(96)
DPPH, FRAP	Leaves	Aqueous	In comparison to the other 21 medicinal plants, the leaves are the fourth with relatively high antioxidant activity through radical scavenging and ferric reducing activity.	(97)
DPPH	Leaves	70 % ethanol	89.66% inhibition demonstrate a good antioxidant agent.	(86)
In Vivo	Leaves	Ethanol	The ethanolic leaves extract was found to be an efficient antioxidant agent, with an optimal dose of 5,0 mg kg-1.	(64)
DPPH, FRAP		Aqueous	Radical scavenging was observed, with an inhibition %` of 64.93, which was equivalent to quercetin's 69.21. It had a substantially higher FRAP value [69.05] than Quercetin (63.27).	(98)
DPPH, FRAP	Leaves, bark, root	Ethanol, Aqueous, Essential oil	At 2.34 µg/ml, 37.32 mmol/g the extract had excellent antioxidant activity in terms of radical scavenging and reducing power..	(54)
DPPH, FRAP	Stem bark, root bark	Methanol	Root and stem bark extracts exhibit antioxidant and radical-scavenging properties. These activities are hypothesized to be caused by the presence of phenolics and flavonoids	(117)

2	Anticancer	B16 melanoma cells	Leaves	Aqueous, Methanol, Ethyl acetate.	The extract is effective at inhibiting tyrosinase and reducing extracellular melanogenesis.	(57)
		Thio barbituric HB4C5 cell line	Leaves	Aqueous	It has an anti-proliferative effect on cells as well.	(22)
3	Antidiabetic	*In vivo* (Human)	Leaves	Aqueous	Metformin in combination with the extract mixture is a promising treatment approach for not only improving diabetic control but also benefiting the liver and kidney, which are occasionally affected by metformin.	(99)
		In Vivo	Leaves	Ethanol	Very effective in lowering insulin and blood sugar levels.	(100)
		alpha-glucosidase inhibitory activity	Leaves, stems, and roots	Methanol	Strong anti-enzyme action has been documented with low IC_{50} at 28 ± 1 µg/ml.	(60)
		α-glucosidase	Leaves	Aqueous	has 41.4% antidiabetic inhibition α-glucosidase activity.	(29)
		α-glucosidase	Leaves	Aqueous, N-hexane, Acetone	The capacity of the fraction at 500 µg/ml to inhibit α-glucosidase from acetone-water exhibited the maximum inhibition at 97.34 % (4:1)	(58)
		In Vivo (Human)	Leaves	Ethanol	In patients with type 2 diabetes, the extract is beneficial in lowering fasting blood glucose levels.	(61)
		In Vivo	Leaves	Ethanol	Between the pre- and post-test comparisons, there are declines in blood glucose and AGEs levels. However, the dose of 5.0 mg kg-1 resulted in the greatest reduction in mean plasma glucose levels.	(62)
		α-glucosidase enzyme and α-amylase	Fruits	Aqueous	The inhibition of -amylase (92.21%) and -glucosidase (96.06%) was substantially higher than that of acarbose as a pure synthesized compound.	(94)
		In Vitro	Leaves	Methanol- water, Methanol	Methanol-water extracts exhibits highest activity of IC_{50} 71 and methanol 92 µg/ml respectively.	(32)
		α- glucosidase	Leaves, bark, root	Ethanol, Aqueous, Essential oil	At 19.6 µg/mL the extract had excellent α-glucosidase activity.	(54)
		Alpha Amylase, Alpha Glucosidase and Dipeptidyl Peptidase IV	Leaves	Ethanol	IC_{50} of Alpha Glucosidase 19.06, Alpha Amylase, 90.24±1.43 and Dipeptidyl Peptidase IV 18.34±2.32 at µg/ml.	(63)
		In Vivo	Leaf combination of *Andrographis paniculata*	Aqueous	From 30 to 120 minutes after treatment, the extract mixture had a significant effect on glucose	(101)

			and *Syzygium polyanthum*		tolerance tests, and no hypoglycaemic symptoms were seen.	
		Alpha Glucosidase	Leave	Aqueous	IC_{50} of 51 and 65 µg/ml respectively collected from different location.	(27)
		α-amylase, α-glucosidase	Leaves	Aqueous, Methanol	α-amylase and α-glucosidase 0.431 0.376.	(102)
		Alpha glucosidase	Combined Leaf of *Psidium guajava* and *Syzygium polyanthum*	Aqueous	It had a synergistic antioxidative impact with IC_{50} value of 12 µg GAE/ml.	(95)
		In Vivo	Leaves	Ethanol	At 5,0 mg kg-1, the extract had a significantly lower blood glucose level than the control, which was 65.91% lower.	(64)
		-glucoside inhibition	Leaves	70 % Ethanol	97.37% inhibition demonstrate a good antidiabetic agent.	(86)
		-glucoside inhibition	Leaves	Ethanol	95.51% inhibition demonstrate a good antidiabetic agent.	(86)
		Alpha-amylase and Alpha-glucosidase	Fresh juice	Aqueous	Its fresh juice has much stronger inhibitory effects than acarbose against alpha-amylase (92.21%) and alpha-glucosidase (96.06%).	(98)
		Alpha-amylase and alpha-glucosidase	Leaves	Ethanol	The extract lower the sugar level with IC_{50} of 30.82 ppm.	(103)
		In Vivo	Leaves	Methanol	Leaf has an antihyperglycemic action, lowering blood sugar levels from 5.9 ± 0.11 mmol/L to 3.4 ± 0.05 mmol/L, respectively.	(24)
		MIC, MBC and Disc Diffusion	Leaves	Methanol	Its antibacterial properties may make it suitable for use as a natural food preservative.	(104)
		MIC	Essential oil		*Bacillus subtilis* growth was substantially inhibited, while *Salmonella typhimurium*, Staphylococcus aureus, and *Vibrio cholera* growth was marginally inhibited.	(65)
4	Antibacterial					
		Disk and Ager Well	Leaves, Bark, Root	Ethanol, Aqueous, Essential oil	With the exception of *Listeria monocytogen*, which showed no inhibition, all of the sections tested displayed activity against all of the bacteria tested, with a moderate zone inhibition of 4-28 mm equal to ampicillin.	(54)
		Disc Diffusion	Leave, Unripe Fruit , Ripened Fruit	Ethanol	All the tested parts of the plant exhibit significant activity *Salmonella thypi, Bacillus cereus, Candida*	(18)

					albicans and *Trichophyton mentagrophytes* with a typical drug concentration of 10-20 µg per disk.	
		Disk Diffusion	Leaves	Methanol with 20% distilled water	At 1000 mg/mL concentrations, the extract has the broadest zone of inhibition 13 mm against *Staphylococcus hyicus, Staphylococcus aureus* and *Staphylococcus intermedius*.	(87)
		Agar Diffusion, MBC, Microdilution,	Leaves	Ethanol	It has antibacterial activity against the tested microorganism.	(105)
		Ager well	Leaves, Stem	Ethanol	Was found to exhibit the growth of *Staphylococcus aureus.*	(69)
		Broth Dilution	Leaves	Aqueous, Methanol N-hexane, Ethyl acetate, Dimethyl sulfoxide	Methanolic extracts has the IC_{50} values of 23.16 and 35.01 at µg/ml respectively against *S. aureus* and *E. coli.* While the n-hexane has the inhibition values of 49.25 and 27.54 µg/ml, respectively against the above mentioned bacteria.	(25)
		MIC, MBC, Disk Diffusion, Time-Kill Curve Assay	Leaves	Ethanol	*Klebsiella pneumoniae, Escherichia coli, Proteus mirabilis, Listeria monocytogenes, Pseudomonas aeruginosa, Vibrio cholerae, Salmonella typhimurium, Vibrio parahaemolyticus* and *Staphylococcus aureus* were all found to be susceptible to the extracts.	(66)
		Microdilution	Leaves	Methanol, ethyl acetate ethanol and n-hexane	No activity on the tested gram negative but shows significant activity on gram positive *Mycobacterium smegmatis* and *Luteus.*	(20)
		Disk Diffusion	Root, Bark	Essential oil	At 500 µg/ml, *Salmonella typhi, Staphylococcus aureus, Klebsiella pneumoniae* and *Escherichia coli* showed significant growth suppression.	(68)
		Microdilution	Leaves	Methanol, Ethyl acetate, Ethanol, N-hexane	All of the extracts are effective against *Mucor hialisalis.*	(20)
		Ager well	Leaves, Stem	Ethanol	Significantly inhibit the growth of *Fusarium oxysporum.*	(69)
5	Antifungal					
		Ager well	Essential oil	Essential	Antifungal capabilities were found in this plant against spoilage fungi *Aspergillus* spp., *Eurotium* spp and *Penicillium* spp. These findings back up the use of plant essential oils as a chemical-free way to keep bread fresh.	(70)

		Paper Dilution	Root, Bark	Essential oil	At 500 µg/ml *Candida, tropicalis*, *Aspergillus flavin*, *Fusarium oxysporum* and *Aspergillus niger* showed significant growth suppression.	(68)
		Agar Diffusion, MIC, Minimum Fungicidal Concentration	Leaves	Ethanol	The antifungal activity of the extract exhibited a significant activity with increase in concentrations.	(71)
		In Vivo	Leaves	Aqueous, Methanolic	Acute ADSP (2.50 to 3.00 g/kg) and MESP (2.00 to 3.00 g/kg) treatment significantly lowered the hypertension.	(73)
		Animal model	Leaves	N-hexane, Ethyl acetate, Methanol, Aqueous	Leaves extract has antihypertensive.	(106)
6	Antihypertensive	Animal model	Leaves	Methanolic	Have a reno protective effect in improving renal morphology in 22 hypertensive rats.	(74)
		In Vivo	Leaves	Aqueous, Methanolic	Their blood pressure greatly decreased by aqueous (20–100) and methanolic (40–100) extracts at mg/kg respectively.	(15)
		In Vivo	Leaves	Methanol, Aqueous	According to this study, both methanolic and aqueous extracts of *S. polyanthum* leaves were able to cause significant vasorelaxation in normal and hypertensive rats.	(72)
7	Anti-Diarrhea	*In Vivo*	Leaves	70% Ethanol	Similar to the control, the extract has antidiarrheal action in animal models.	(75)
8	As Sanitizer	Various concentrations of the extracts were used to treat the fruit grapes.	Leaves	Ethanol	In this study, the total plate count was drastically reduced after exposure to 0.50 % for 5 min. of soaking.	(66)
		Various concentrations of the extracts were used to treat shrimp and chicken	Leaves	Methanol	The exposure times did not differ in a statistically meaningful way. The treatment with 1.0 % extract for 10 min. resulted in the highest reduction in microbe population in chicken and shrimp.	(67)
9	Antitumor	EBV-early antigen	Leaves	80 % Ethanol	The early-antigen of Epstein-Barr virus, which was produced by a tumour promoter was fully repressed.	(78)
		In Vivo	Leaves	Aqueous	Was able to lower blood and cholesterol level.	(107)
10	Management of cholesterol Level	*In Vitro*	Pure hydroxychavicol compound	Methanol	The extracted chemicals all inhibited swine pancreatic lipase, and the high amount of hydroxychavicol (1.83 wt.%) indicated that this component was responsible for the majority of the inhibitory activity in the plant.	(80)

		In Vitro	Leaves	80% Methanol	The extract inhibits pancreatic lipase activity by 43.14.02 % when used at 500 g/ml.	(79)
11	Prevention of plaque	Human	Leaves	Aqueous	Successful in reducing the plaque accumulation	(82)
12	Anti inflammatory	*In Vivo*	Leaves	Ethanol	The results demonstrate that a dose of 75 mg/kg BW had the same impact on reducing edema volume in the rat foot as anti-inflammatory.	(81)
13	Cardiovascular disease	*In Vivo*	Leaves	Nill	Rats with myocardial infarction had increased levels of C-reactive protein and MPO. Beginning on day 4 following induction of myocardial infarction, administration lowered CRP and MPO levels in rats.	(83)
		In Vivo	Leaves	Sodium Methyl Cellulose Suspension.	It has an anti-inflammatory effect in the case of a myocardial infarction. The effect is most likely mediated by ADAM17 downregulation, which then influences TNF regulation.	(84)
14	Cytotoxicity	Seeding Cell Density	Leaves	Methanol with 20% Distilled water	No toxicity against the tested cells with weak activity on the microorganisms.	(87)
		BSLT	Leave, unripe fruit, ripened fruit	Ethanol	The leaves and fruit extracts of *S. polyanthum* were found to be inactive.	(18)
		Bleaching Assay	Leaves, stem bark	Methanol	The extracts have no cytotoxic effect on the Vero cell line.	(89)
		BSLT	Leaves	Aqueous	demonstrated relatively little toxicity to brine shrimp larvae (LD_{50}>1000g / ml)	(29)
		Hatching of Brine Shrimp	Root, bark	Essential oil	At an IC_{50} of 18.42 g/ml, the extracts were confirmed to be non-toxic.	(68)
		MIC, MBC	Leaves	Ethanol	The potential to be developed as antimicrobial agent in food sanitizer.	(108)
		PBMC	Leaves, stem	Essential oil	No toxicity reported from the evaluation	(109)
		BSLT	Leaves	Ethanol	977.237 µg/ml nontoxic since it is below 1000 µg/ml	(86)

Note: S/N = Serial Number, BSLT = Brine shrimp lethality test, DPPH = Radical Scavenging Activity, FRAP = Ferric Reducing Antioxidant Power, MIC = Minimum Inhibitory Concentrations, MBC = Minimum Bactericidal Concentration, PBMC = Peripheral blood mononuclear cells.

Table 2. Chemical contents of *Syzygium polyanthum*

Sl. No.	Compounds	Formula	Nature	Area%	Solvent & PP	CRF
	Azulene	$C_{10}H_8$	Mancude carbocyclic	1.255		
	α-Pinene	$C_{10}H_{16}$	Terpene	4.921		
	Octanal	CH_6CHO	Aldehyde	0.573		
	Linalool	$C_{10}H_{18}O$	Terpene	0.448		
	Valencene	$C_{15}H_{24}$	Sesquiterpene	1.097		
	α-Panasinsen	$C_{15}H_{24}$	Sesquiterpene	1.515		
	α-Cubebene	$C_{15}H_{24}$	Sesquiterpene	3.633		
	2-Isopropenyl-4a,8-dimethyl-1,2,3,4,4a,5,6,7-octahydronaphthalene	$C_{15}H_{24}$		0.558		
	δ-Cadinene	$C_{15}H_{24}$	Sesquiterpene	0.737		
	Nerolidol	$C_{15}H_{26}O$	Sesquiterpene	2.845	n-hexane	
	β-Panasinsene	$C_{15}H_{24}$	Sesquiterpene	3.990	Leav	
1	Humulene epoxide II	$C_{15}H_{24}O$	Monocyclic sesquiterpene	2.060		(59)
	Caryophyllene oxide	$C_{15}H_{24}O$	Bicyclic sesquiterpene	0.846		
	Farnesol	$C_{15}H_{26}O$	Acyclic alcoholic sesquiterpenes	0.715		
	γ-Tocopherol	$C_{28}H_{48}O_2$	Tocopherol	0.934		
	Phytol	$C_{20}H_{40}O$	Diterpene	8.409		
	Squalene	$C_{30}H_{50}$	Triterpene	8.776		
	β-Sitosterol	$C_{29}H_{50}O$	Phytosterols	0.676		
	β-Tocopherol	$C_{28}H_{48}O_2$	Tocopherol	0.934		
	α-Tocopherol	$C_{29}H_{50}O_2$	Tocopherol	0.340		
	Propylene glycol	$C_3H_{80}O_2$	Diol	0.272		
	α-Copaene	$C_{15}H_{24}$	Sesquiterpene	0.636	Meth	
	α-Humulene	$C_{15}H_{24}$	Sesquiterpene	0.576	Leav.	
	Octanal	$C_8H_{16}O$	Aldehyde	0.354		

Pyrogallol	$C_6 H_6 O_3$	Benzenetriol	5.247
β-Panasinsene	$C_{15}H_{24}$	Sesquiterpene	0.923
α-Panasinsen	$C_{15}H_{24}$	Sesquiterpene	0.677
2,3-Dihydro-3,5-dihydroxy-6-methyl-4H-pyran-4-one	$C_6 H_8 O_4$	Flavonoids fraction	1.423
Nerolidol	$C_{15}H_{26}O$	Sesquiterpene	2.267
Humulene epoxide II	$C_{15}H_{24}O$	Monocyclic sesquiterpene	0.910
Methyl palmitate	$C_{17}H_{34}O_2$	Fatty acid methyl ester.	0.425
Selina-4,11-diene	$C_{15}H_{24}$	Sesquiterpene	1.519
Neophytadiene	$C_{20}H_{38}$	Diterpene	0.581
β-Selinene	$C_{15}H_{24}$	Sesquiterpene	0.321
Caryophyllene oxide	$C_{15}H_{24}O$	Bicyclic sesquiterpene	0.943
Methyl oleate	$C_{19}H_{36}O_2$	Fatty acid	0.343
Farnesol	$C_{15}H_{26}O$	Acyclic Sesquiterpene	0.421
Eicosane	$C_{20}H_{42}$	Alkane	0.294
Stearic acid	$C_{18}H_{36}O_2$	Fatty acid	0.604
Phytol	$C_{20}H_{40}O$	Diterpene	4.952
α-Tocopherol	$C_{29}H_{50}O2$	Vitamin E	4.933
Hexadecenoic acid, 2-hydroxy-1-(hydroxymethyl)	$C_{19}H_{38}O_4$	Fatty acid	0.525
Pentadecane, 2,6,10,14-tetramethyl-	$C_{20}H_{42} O_2S$	Alkane	0.386
Palmitic acid	$CH_{14}COOH$	Fatty acid	2.378
β-Tocopherol	$C_{28}H_{48}O_2$	Tocopherol	0.548
9,12,15-Octadecatrien-1-ol	$C_{18}H_{32}O$	Unsaturated alcoholic compound	1.783
Pentacosane	$C_{25}H_{52}$	Alkene	1.282
Squalene	$C_{30}H_{50}$	Triterpene	10.913
β-Sitosterol	$C_{29}H_{50}O$	Phytosterols	5.560
Heptane	$C_7 H_{16}$	Alkane	0.389
n-Heptanal	$C_7 H_{14}O$	Alkyl aldehyde	0.317

Ethyl acetate

Leav.

	Propylene glycol	$C_3H_8O_2$	Diol	0.144		
	α-Pinene	$C_{10}H_{16}$	Terpene	1.068		
	Octanal	CH_6CHO	Aldehyde	0.563		
	β-linalool	$C_{10}H_{18}O$	Terpene	0.468		
	β-Selinene	$C_{15}H_{24}$	Sesquiterpene	0.735		
	α-Cubebene	$C_{15}H_{24}$	Sesquiterpene	1.690		
	α-Humulene	$C_{15}H_{24}$	Monocyclic sesquiterpene	0.504		
	Valencene	$C_{15}H_{24}$	Sesquiterpene	0.548		
	1H-Cyclopropa[a]naphthalene	$C_{15}H_{24}$	Acyclic alkene	2.226		
	α-Panasinsen	$C_{15}H_{24}$	Sesquiterpene	0.887		
	Nerolidol	$C_{15}H_{26}O$	Sesquiterpene alcohol	3.085		
	α-Tocopherol	$C_{29}H_{50}O_2$	Tocopherol	4.660		
	β-Tocopherol	$C_{28}H_{48}O$	Tocopherol	0.693		
	β-Sitosterol	$C_{29}H_{50}O$	Phytosterols	4.959		
	2-Cyclohexen-3-ol-1-one, 2-[1-iminoethyl]-	$C_8H_{12}NO_2$	Long chain alkane	0.107		
	Squalene	$C_{30}H_{50}$	Triterpene	8.345		
	Hentriacontane	$C_{31}H_{64}$	Alkane	0.303		
	n-Pentacosane	$C_{25}H_{52}$	Alkane	0.472		
	Farnesol	$C_{15}H_{26}O$	Acyclic alcoholic sesquiterpene	0.645		
	Caryophyllene oxide	$C_{15}H_{24}$	Bicyclic sesquiterpene	0.824		
	9,12,15-Octadecatrien-1-ol	$C_{18}H_{32}O$	Unsaturated alcoholic compound	1.037		
	Neophytadiene	$C_{20}H_{38}$	Diterpene	1.347		
	Phytol	$C_{20}H_{40}O$	Acyclic Diterpene	5.715		
	Humulene epoxide II	$C_{15}H_{24}O$	Monocyclic Sesquiterpene	1.557		
	Nonanoic acid, methyl ester	$C_{10}H_{20}O_2$	Fatty acid methyl esters	1.48		
2	Eicosanoid acid, methyl ester	$C_{21}H_{42}O_2$	polyunsaturated fatty acids,	17.23	Aqueous Leav.	(99)
	9,12-Octadecadienoic acid (Z,Z)-, methyl ester	$C_{19}H_{34}O_2$	Fatty acid	7.96		

	9-Octadecenoic acid, methyl ester	$C_{19}H_{36}O_2$	Fatty acid	27.07		
	Tricosanoic acid	$C_{24}H_{48}O_2$	Fatty acid	9.08		
	Terpenoids	C_5H_8n	Sesquiterpenes	12.30		
	(-)-Caryophyllene oxide	$C_{15}H_{24}O$	Sesquiterpenoid	12.3		
	Hydrocarbons		Aliphatic compounds or aromatic	9.87		
	Cyclopropane, 1-(2-methylene-3-butenyl)−1-(1-methylenepropyl)-	$C_{12}H_{18}$	Nill	1.0		
	1-Tridecene	$C_{13}H_{26}$	Nill	1.18		
	Tetradecane	$C_{14}H_{30}$	Nill	4.94		
	1-Decene	$C_{10}H_{20}$	Nill	1.44		
	Hexadecane	$C_{16}H_{34}$	Nill	1.31		
	Ketones			1.84		
	2-Pentadecanone	$C_{15}H_{30}O$	Ketone	1.84		
	Miripirium chloride	$C_{20}H_{36}ClN$		0.57		
	Silicate anion tetramer	$C_{24}H_{72}O_{12}Si_{12}$	Anions	0.47		
	Caprylic aldehyde	$C_8H_{16}O$	Saturated fatty aldehyde	14.092		
	Cis-4-decenal	$C_{10}H_{18}O$	Monounsaturated fatty	43.489		
	n-Nonaldehyde	$C_9H_{18}O$	Saturated fatty aldehyde	0.483		
	1-Decyl aldehyde	$C_{10}H_{20}O$	Aldehyde	19.752		
	Geranial	$C_{10}H_{18}O$	Monoterpene aldehyde	1.681		
	1,2,3,3a,4,6a-Hexahydro-pentalene	$C_8H_{10}O_2$	Polycyclic hydrocarbon	2.062		
3	Geranyl acetate	$C_{12}H_{20}O_2$	Monoterpene	0.562	Essential oil Leav.	(65)
	2,6-Octadienal	$C_8H_{12}O$	Aldehydes	0.990		
	α-Bergamotene	$C_{15}H_{24}$	Sesquiterpene	0.412		
	α-Copaene	$C_{15}H_{24}$	Sesquiterpenes	0.941		
	β-Caryophyllene	$C_{15}H_{24}$	Sesquiterpenes	1.734		
	α-Humulene	$C_{15}H_{24}$	Sesquiterpenes	0.388		
	α-Selinene	$C_{15}H_{24}$	Sesquiterpenes	0.712		

	α-Zingiberene	$C_{15}H_{24}$	Monocyclic sesquiterpene	1.375		
	β-Farnesene	$C_{15}H_{24}$	Acyclic sesquiterpenes alkene	0.206		
	β-Bisabolene	$C_{15}H_{24}$	Sesquiterpenes.	1.590		
	α-Curcumene	$C_{15}H_{22}$	Aromatic monoterpenoids	2.271		
	α-Farnesene	$C_{15}H_{24}$	Sesquiterpenes.	0.857		
	α-Bisabolene	$C_{15}H_{24}$	Sesquiterpenes	0.821		
	β-Sesquiphellandrene	$C_{15}H_{24}$	Sesquiterpenoids	1.407		
	3,4-Dimethyl-3-cyclohexen-1- carboxaldehyde	$C_9H_{14}O$		1.587		
	α-Muurolene	$C_{15}H_{24}$	Sesquiterpene	0.347		
	Tumerone	$C_{15}H_{22}O$	Sesquiterpenes	0.180		
	Caryophyllene oxide	$C_{15}H_{24}O$	Sesquiterpenoid oxide	0.997		
	Ethyl 3-(4-hydroxy-3-methoxyphenyl)propionate	$C_{12}H_{16}O_4$		0.454		
	Farnesyl acetate	$C_{17}H_{28}O_2$		0.235		
	6,10,14-Trimethyl-2-pentadecanone	$C_{18}H_{36}O$	Sesquiterpenoids	0.372		
	Heptanal	$C_7H_{14}O$	Alkyl aldehyde	0.17		
	Camphene	$C_{10}H_{16}$	Monoterpenes	0.31		
	Alpha-Pinene	$C_{10}H_{16}$	Bicyclic monoterpene	38.46		
	p-cymene	$C_{10}H_{14}$	Alkylbenzene monoterpene.	0.36		
	Beta-Pinene	$C_{10}H_{16}$	Monoterpene	0.09		
	Limonene	$C_{10}H_{16}$	Cyclic monoterpene	1.98		
4	Gamma-Terpinene	$C_{10}H_{16}$	Monoterpenes	0.27	Essential oil Leav.	(3)
	Z-beta-ocimene	$C_{10}H_{16}$	Monoterpenes	0.10		
	Alpha-Pinene-oxide	$C_{10}H_{16}O$	Monoterpenes	0.22		
	Terpinolene	$C_{10}H_{16}$	Monoterpenes	0.59		
	Alpha-Campholenal	$C_{10}H_{16}O$		0.24		
	Endo-Fenchol	$C_{10}H_{18}O$	Monoterpenoid	0.24		
	Camphor	$C_{10}H_{16}O$	Bicyclic monoterpene ketone	0.27		

Trans-Pinocamphone	$C_{10}H_{16}O$	monoterpene	0.12
Trans-Pinocarveol	$C_{10}H_{16}O$	monoterpene	0.44
Camphene hydrate	$C_{10}H_{18}O$	Bicyclic monoterpenoids	0.16
Terpinen-4-ol	$C_{10}H_{18}O$	Monoterpenoids	0.64
Neral	$C_{10}H_{16}O$	Monoterpenoid	0.12
Borneol	$C_{10}H_{18}O$	Monoterpenoid	0.72
Decanal	$C_{10}H_{20}O$	Aldehyde	1.31
Alpha-Copaene	$C_{15}H_{24}$	Tricyclic sesquiterpenes	1.88
(E)-Caryophyllene	$C_{15}H_{24}$	Sesquiterpenes	0.08
Valencene	$C_{15}H_{24}$	Sesquiterpenes	4.54
Beta-Salinene	$C_{15}H_{24}$	Sesquiterpenes	1.57
(E)-Methyl-cinnamate	$C_{10}H_{10}O_2$	Cinnamic acid esters	7.20
Alpha-Humulene	$C_{15}H_{24}$	Sesquiterpenes	0.42
7-epi-alpha-selinene	$C_{15}H_{24}$	Sesquiterpenes	1.32
Beta-Calacorene	$C_{15}H_{20}$		0.12
Alpha-Muurolene	$C_{15}H_{24}$	Sesquiterpenes	0.27
(E)-Nerolidol	$C_{15}H_{26}O$	Sesquiterpenoid	1.08
Humulene epoxide II	$C_{15}H_{24}O$	Epoxides	1.68
Spathulenol	$C_{15}H_{24}O$	Sesquiterpene	0.39
Premnaspirodiene	$C_{15}H_{24}$	Sesquiterpenes	0.15
Delta-Cadinene	$C_{15}H_{24}$	Sesquiterpenes	0.56
(2E,6E)-Farnesol	$C_{15}H_{26}O$	Sesquiterpenoid	0.60
Intermedeol	$C_{15}H_{26}O$	Sesquiterpenoid	0.45
Benzyl salicylate	$C_{14}H_{12}O_3$	Phenols	0.10
Muurola-4,10(14)-dien1β-ol	$C_{15}H_{24}O$	Sesquiterpene	0.44
Dauca-5,8-diene	$C_{15}H_{24}$	Sesquiterpenes	0.18
Selin-11-en-4-alpha-ol	$C_{15}H_{26}O$	Sesquiterpenoid	0.49

	Capryl aldehyde	$C_8H_{16}O$	Saturated fatty aldehyde	14.092		
	Cis-4-decenal	$C_{10}H_{18}O$	Monounsaturated fatty aldehyde	43.489		
	N-nonaldehyde	$C_9H_{18}O$	Saturated fatty aldehyde	0.483		
	1,2,3,3a,4,6a-hexahydro-pentalene	C_8H_{12}		2.062		
	2,6-octadienal	$C_{10}H_{16}O$	Aldehyde oxidase	0.990		
	α-humulene	$C_{15}H_{24}$	Monocyclic sesquiterpene	0.388		
	geraniol acetate	$C_{12}H_{20}O_2$	Monoterpenoid	0.562		
	α-copaene	$C_{15}H_{24}$	Sesquiterpenes	0.941		
	1-decyl aldehyde	$C_{10}H_{20}O$	Saturated fatty aldehyde	19.752		
	Geranial	$C_{10}H_{16}O$	Aldehyde oxidase	1.681		
	β-farnesene	$C_{15}H_{24}$	Sesquiterpenes	0.206		
	α-curcumene	$C_{13}H_{18}$	Monoterpenoids	2.271		
	Caryophyllene oxide	$C_{15}H_{24}O$	Epoxide	0.997		
5	α-bergamotene	$C_{15}H_{24}$	Sesquiterpenes	0.412	Essential oil Leav.	(114)
	β-caryophyllene	$C_{15}H_{24}$	Sesquiterpene	1.734		
	α-farnesene	$C_{15}H_{24}$	Sesquiterpenes	0.857		
	β-sesquiphellandrene	$C_{15}H_{24}$	Sesquiterpenes	1.407		
	α-zingiberene	$C_{15}H_{24}$	Sesquiterpenes	1.375		
	α-selinene	$C_{15}H_{24}$	Sesquiterpenes	0.712		
	ethyl-(2E)-3-(4-metoxyphenyl)-2-propenoate	$C_{12}H_{14}O_3$	Nill	0.454		
	3,4-dimethyl-3-cyclohexen-1-carboxaldehyde	$C_9H_{14}O$	Nill	1.587		
	β-bisabolene	$C_{15}H_{24}$	beta-bisabolene	1.590		
	6,10,14-trimethyl-2-pentadecanone	$C_{18}H_{36}O$	Ketone	0.372		
	α-muurolene	$C_{15}H_{24}$	Sesquiterpene	0.347		
	α-bisabolene	$C_{15}H_{24}$	Sesquiterpene	0.821		
	Farnesyl acetate	$C_{17}H_{28}O_2$	Sesquiterpenoids	0.235		
	Turmerone			0.180		

	Cis-1,3-Dideuterio-1,3cyclo hexane	$C_6H_{10}Cl_2$	Cycloalkanes	5.70		
	Phytol	$C_{20}H_{40}O$	Acyclic diterpene alcohol	37.55		
	1,3-dimethyl-4-azaphenanthrene	$C_{15}H_{13}N$		5.17		
	2-Hexadecene, 3,7,15-tetramethyl	$C_{20}H_{40}$		4.50	Ethanol Leav.	(62)
	1-methy-2phenylindole-2-ethylacridine	$C_{15}H_{13}N$		1.84		
	Cyclopentane 1-ethyl	C_8H_{16}		14.06		
	(z)-1,3-phytadiene	C_4H_6	Acetone and benzene	6.82		
	Phytol acetate	$C_{22}H_{42}O_2$		14.97		
	Phytol	$C_{20}H_{40}O$	Acyclic diterpene alcohol	37.55		
	Cis-1,3-Dideuterio1,3-cyclohexana	$C_6H_{10}Cl_2$		5.70		
	(z)-1,3-phytadiene	$C_{20}H_{38}$	Terpenoid	6.82		
	phytol, acetate	$C_{22}H_{42}O_2$	Nill	1497		(64)
	2-Hexadecene, 3,7,15-tetramethyl			4.90		
	1,3-dimethyl-4-az	$C_7H_{13}NO$	Nill	5.17		
	Cyclopentane, 1-ethyl	C_8H_{16}	Nill	14.06		
	1-methyl-2 phenyl indole-2- Ethylacridine	$C_{15}H_{13}N$	Nill	10.84		
6	Flavonoids, tannins and hydroquinone	Qua	Non volatile	Pt		(22)
7	Butanol					
8	Phenolic, Terpenoid Flavonoid	Qua	Non volatile	Pt	Meth. Leav, stem, root	(60)
9	Alkaloid, Flavonoid, Saponin, Tannin, Quinone, Terpenoid	Qua	Non volatile	Pt	Aqueous Leav.	(29)
10	Lipids and amino acids					(58)
11	Alkaloid Flavonoid Tannin Glycoside Saponin Terpene/steroid	Qua	Non volatile	Pt	Ethan. Leav.	(63)
12	Terpenoids, Flavonoids, Meyer Alkaloids, Bouchardat Saponins, Tannins	Qua	Non volatile	Pt	Aqueous Leav.	(27)
13	Terpenoids, glycosides, tannin alkaloids, flavonoids and saponins	Qua	Non volatile	Pt	Aqueous Leav.	(99)

14	TPC and flavonoid content.	Quan	Non volatile	Pt	Aqueous Leav.	
15	Caffeoylquinic acid	Quan	Non volatile	929.99	Aqueous Leav.	(95)
16	Terpenoid, Alkaloid, Meyer Bouchardat, Dragendrof, Flavonoid, Saponin, Quinone, Tannin,	Qua	Non volatile	Present	Ethanol Leav.	
17	Total phenol	Quan	Non volatile	445.9	70% ethanol Leav.	(86)
18	Total flavonoid	Qua	Non volatile	392.6	70 % ethanol leaf	
19	Total phenol	Qua	Non volatile	265.1	Ethanol leaf	
20	Total flavonoid			278.7	Ethanol leaf	
21	Steroids, alkaloids, phenols flavonoids, tannins, ,	Qua	Non volatile	Pt	Ethanol Leaves	(103)
22	Tannin, carbohydrate, steroid, alkaloid, flavonoid and triterpenoid	Qua	Non volatile	Pt	Ethanol unripe fruits leaves and ripened	(18)
23	-OH bonds C-C, aromatic C-O bonds, aromatic C-H	Qua	Non volatile	Pt	Aqueous Leav	(27)
24	Total Phenolic Content			3.98 ± 1.22	Petroleum Ether Leav	
25	Total Phenolic Content	Quan	Non volatile	24.27 ± 8.29	Toluene Leav	
26	Total Phenolic Content			5.82 ± 2.33	Ethyl acetate Leav	
27	Total Phenolic Content	Quan	Non volatile	6.07 ± 0.59	Acetone Leav	(96)
28	Total Phenolic Content	Quan	Non volatile	40.94 ± 9.79	Aqueous Leav	
29	Total Flavonoid Content	Quan	Non volatile	1.11 ± 0.69	Petroleum Ether Leav	
30	Total Flavonoid Content	Quan	Non volatile	42.90 ± 8.640	Toluene Leav	
31	Total Flavonoid Content	Quan	Non volatile	27.03 ± 5.83	Ethyl acetate Leav	

32	Total Flavonoid Content	Quan	Non volatile	26.85 ± 7.24	Acetone Leav	
33	Total Flavonoid Content	Quan	Non volatile	2.78 ± 1.13	AqueousLeav.	
	4-allyl-1,2-dihydroxybenzene	$C_{13}H_{14}O_4$	Hydroxychavicol	1.83	Meth. Leav.	(78)
34	Functional group	C-C, C-O	Deoxyribose			
			Phosphodiester region			
			Protein			
		O-H	Water			
			Lipids		Ethan, Aqueous Leav	(115)
35		C–H, CH_2	Fatty acids			
		N=O	Aromatic ring in lignin			
		P=O	Phosphodiester region			
			Lignin			
		C-O	Phenyl			

Note: S/N = Serial Number, PP = Part of the plant, CRF = Cited Reference, Ethan = Ethanol, Meth = Methanol, Leav = Leaves , Pt = Present. Qua = Qualitative, Quan = Quantitative.