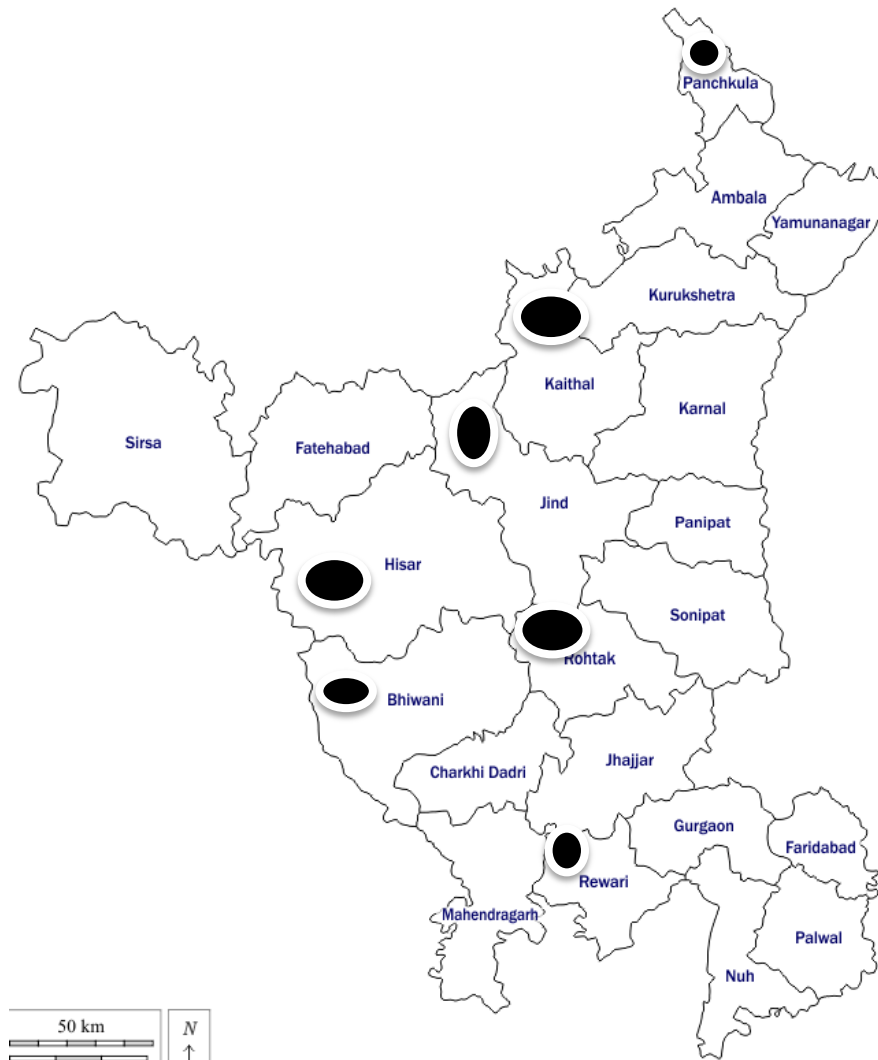


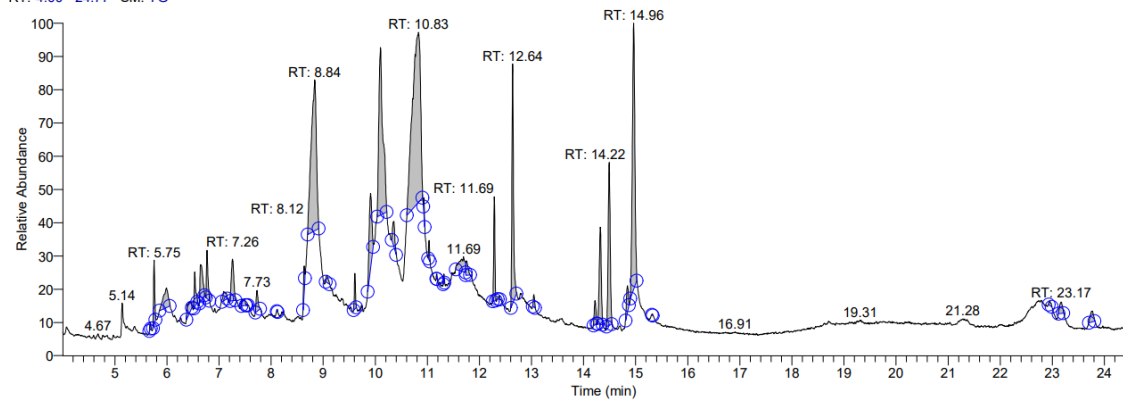
**Figure S1.** Map of India showing states from where various accessions were collected



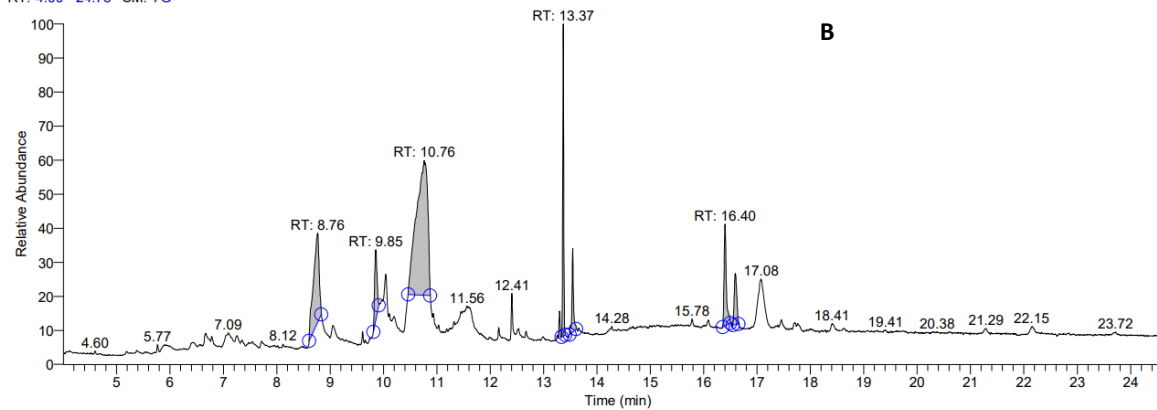
**Figure S2.** Districts of Haryana from where 14 accessions were collected

**A**

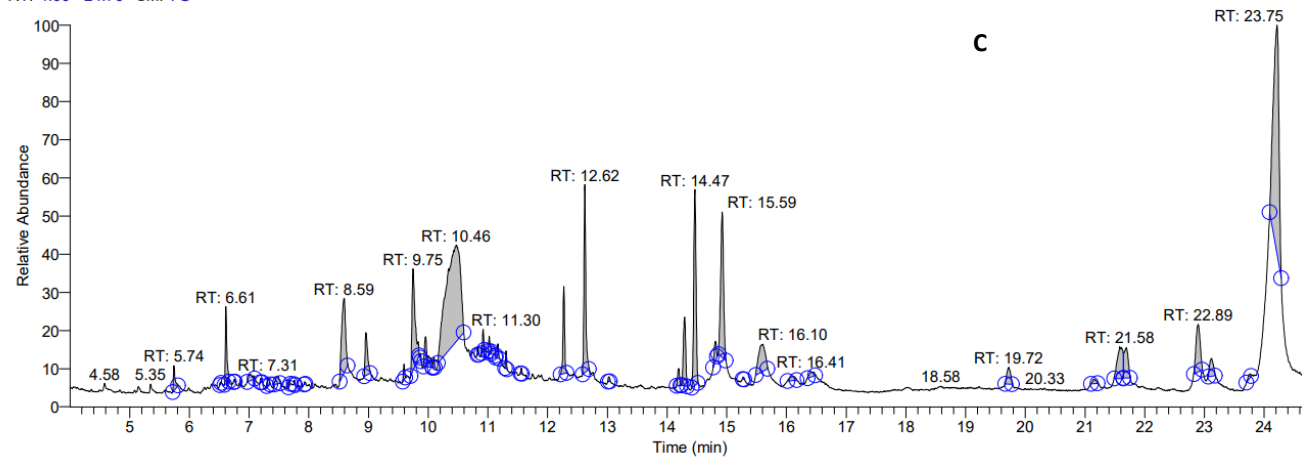
RT: 4.00 - 24.77 SM: 7G

**B**

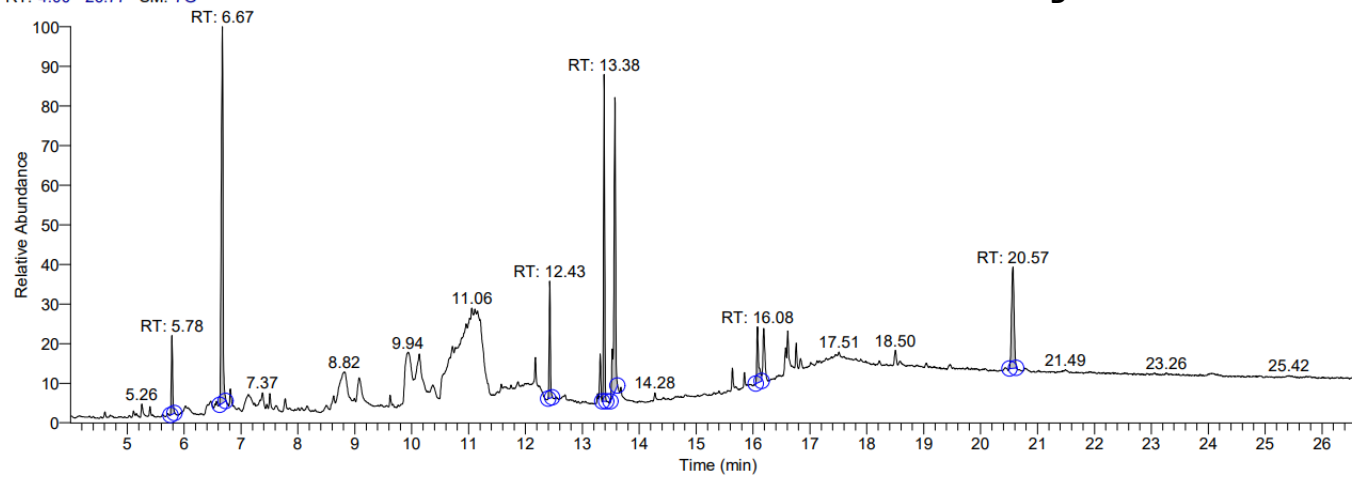
RT: 4.00 - 24.78 SM: 7G



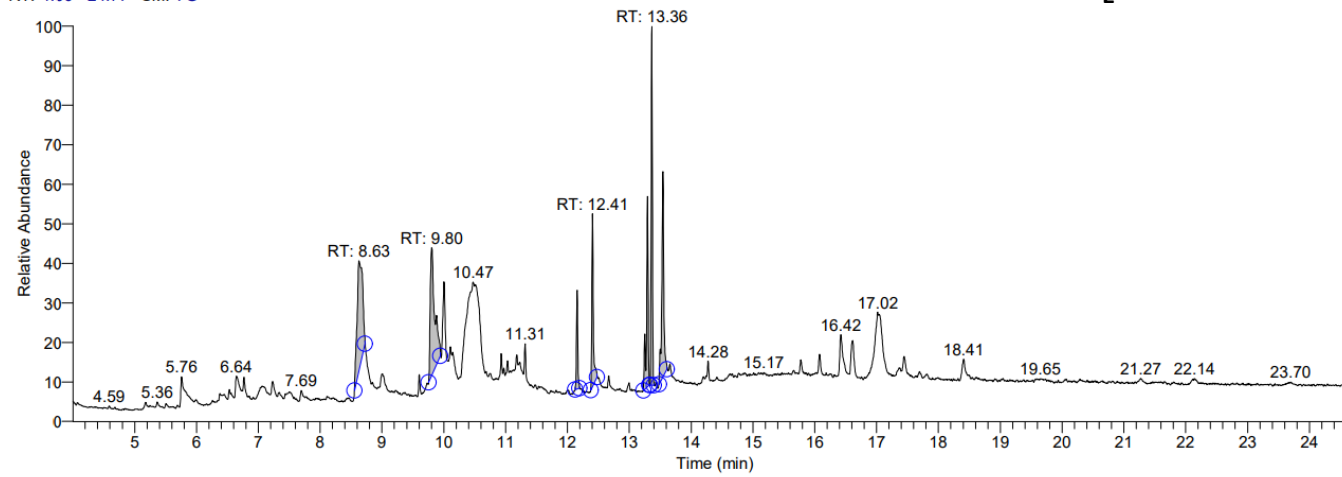
RT: 4.00 - 24.76 SM: 7G



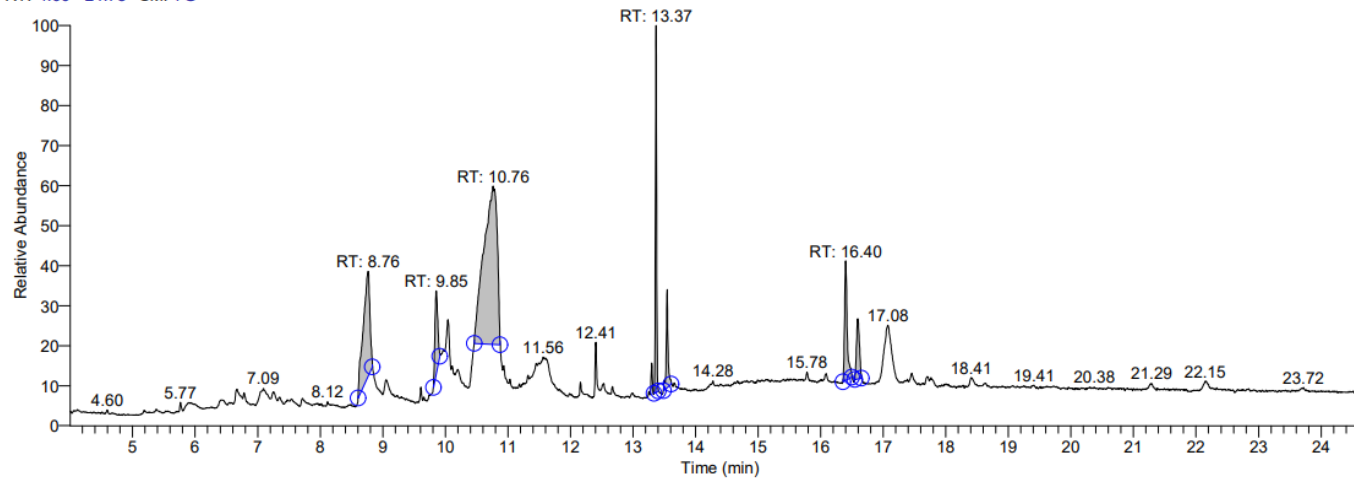
RT: 4.00 - 26.77 SM: 7G



RT: 4.00 - 24.77 SM: 7G

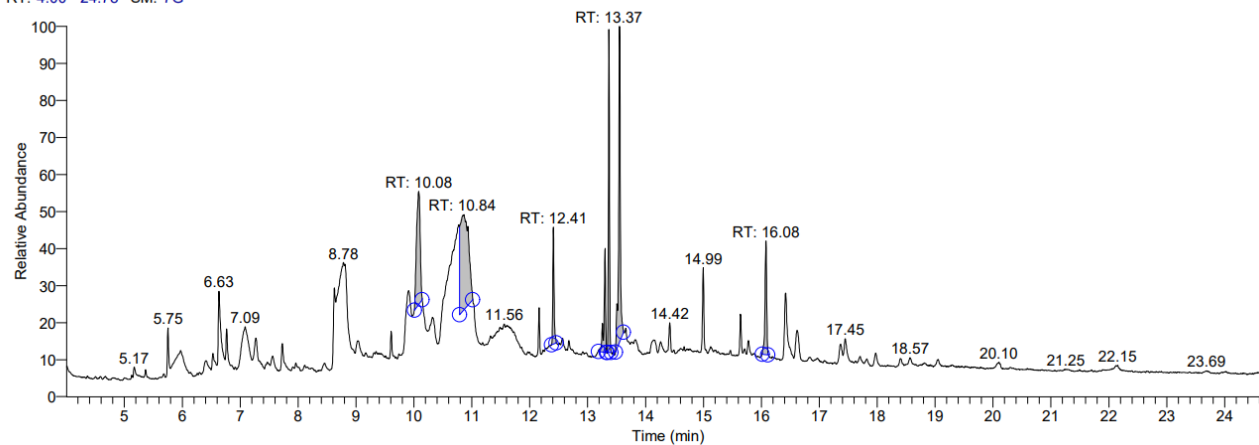


RT: 4.00 - 24.78 SM: 7G



RT: 4.00 - 24.78 SM: 7G

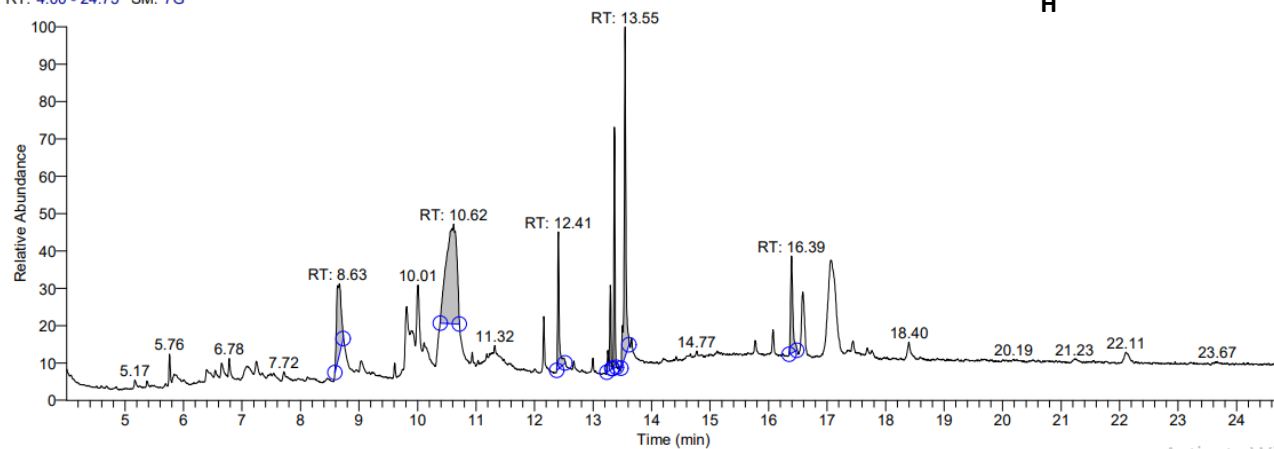
G



Activate Windows

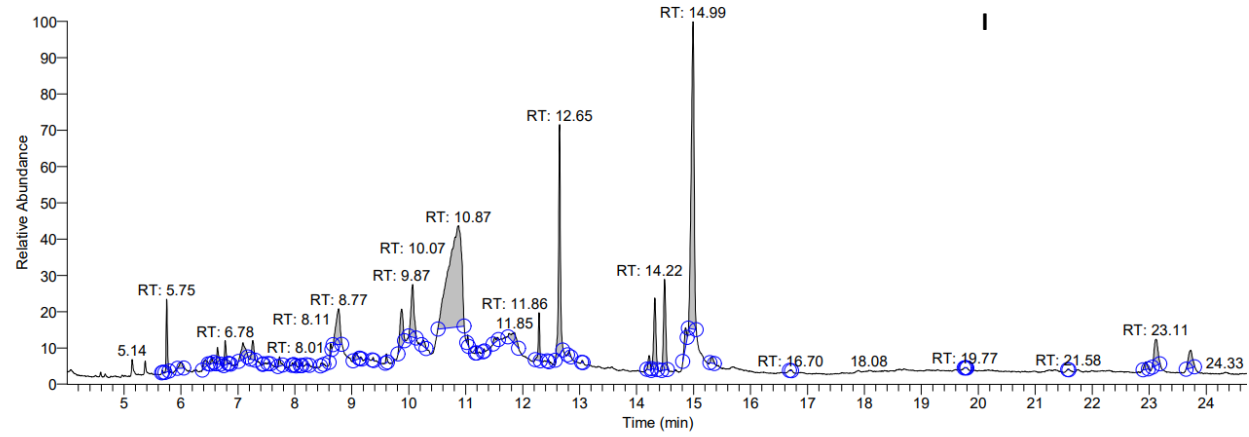
RT: 4.00 - 24.75 SM: 7G

H

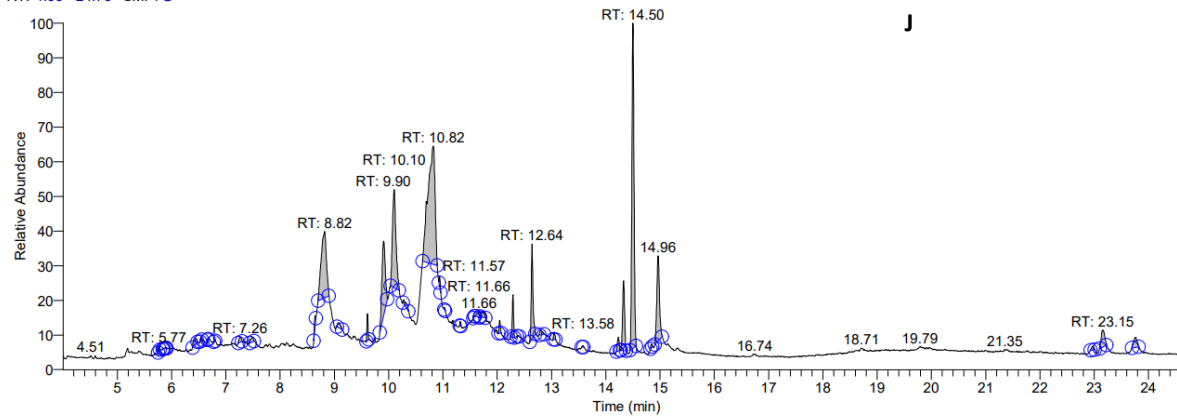


Activate Windows

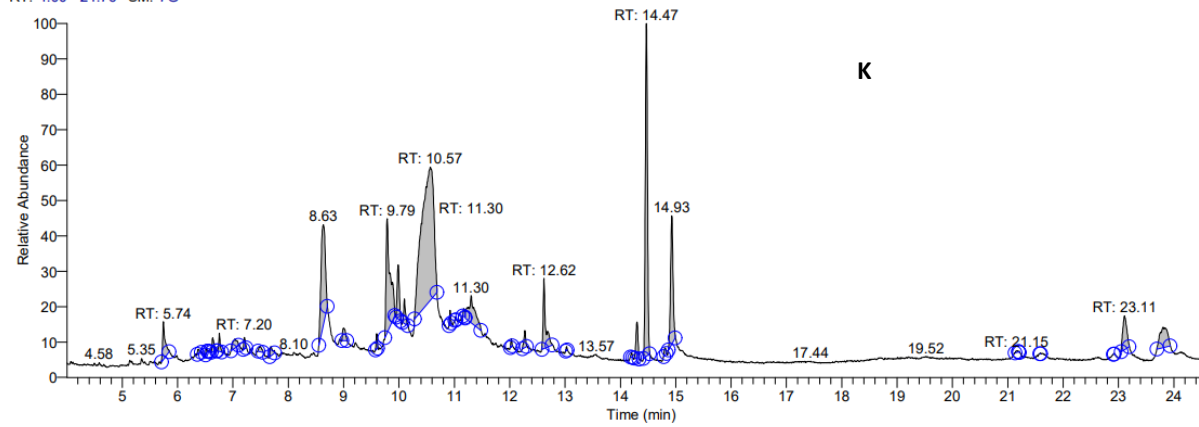
RT: 4.00 - 24.75 SM: 7G



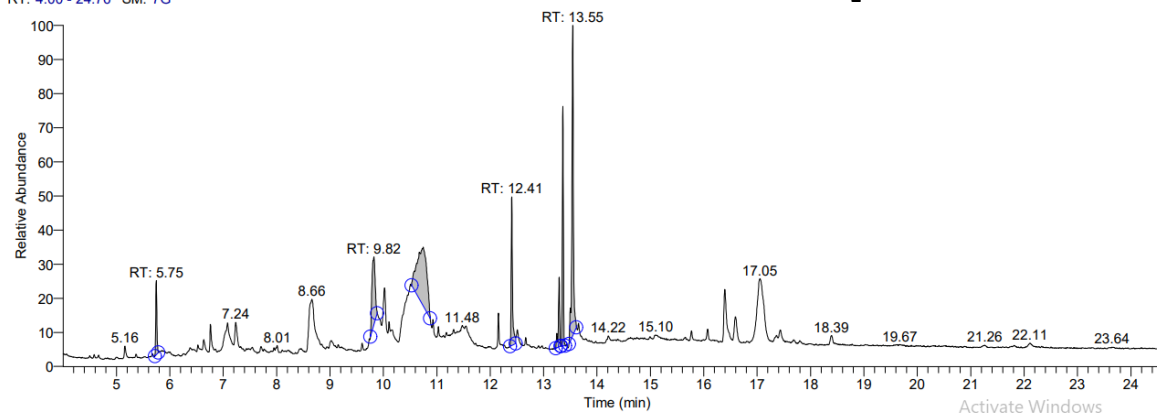
RT: 4.00 - 24.76 SM: 7G



RT: 4.00 - 24.76 SM: 7G



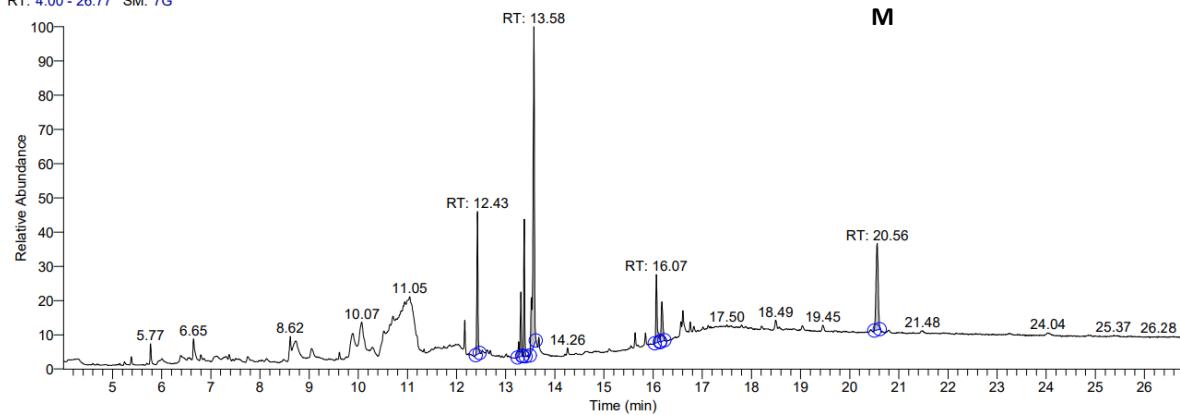
RT: 4.00 - 24.76 SM: 7G



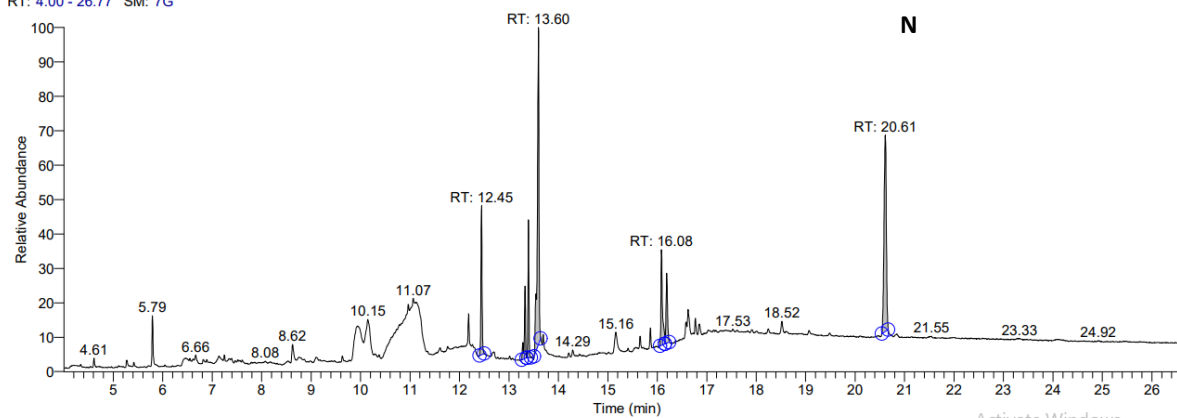
Activate Windows  
Go to Settings to activate Windows.



RT: 4.00 - 26.77 SM: 7G

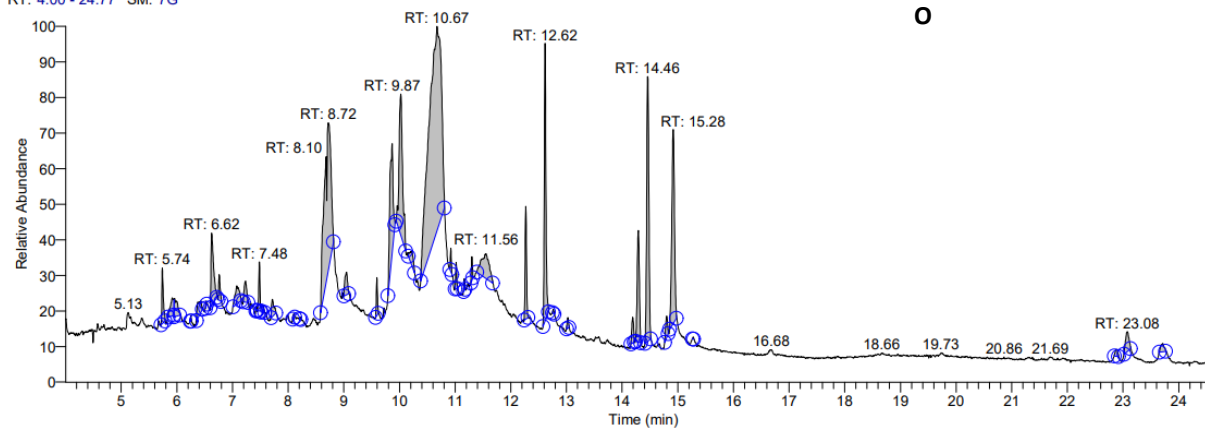


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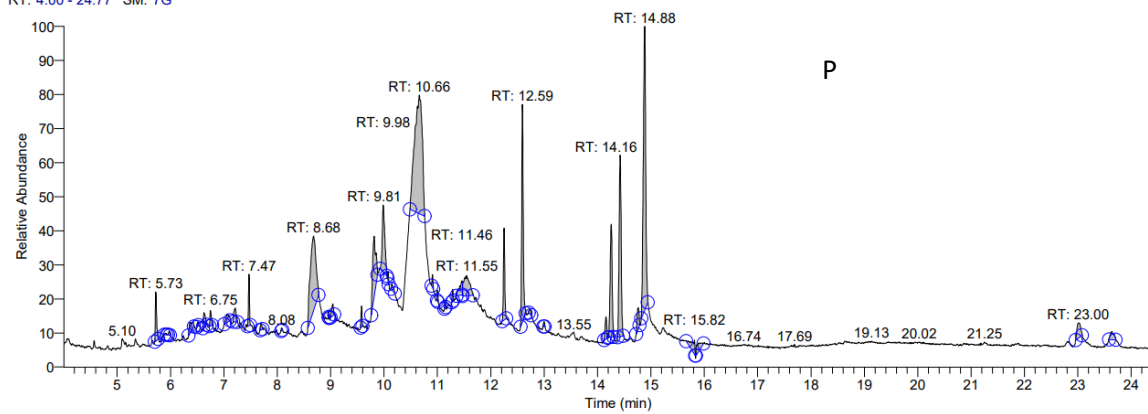
Activate Windows

RT: 4.00 - 24.77 SM: 7G



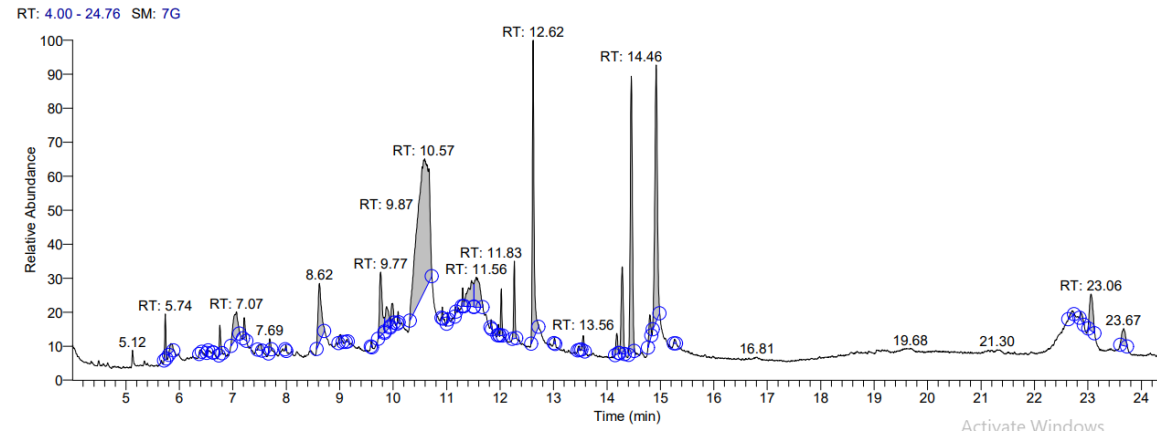
O

RT: 4.00 - 24.77 SM: 7G

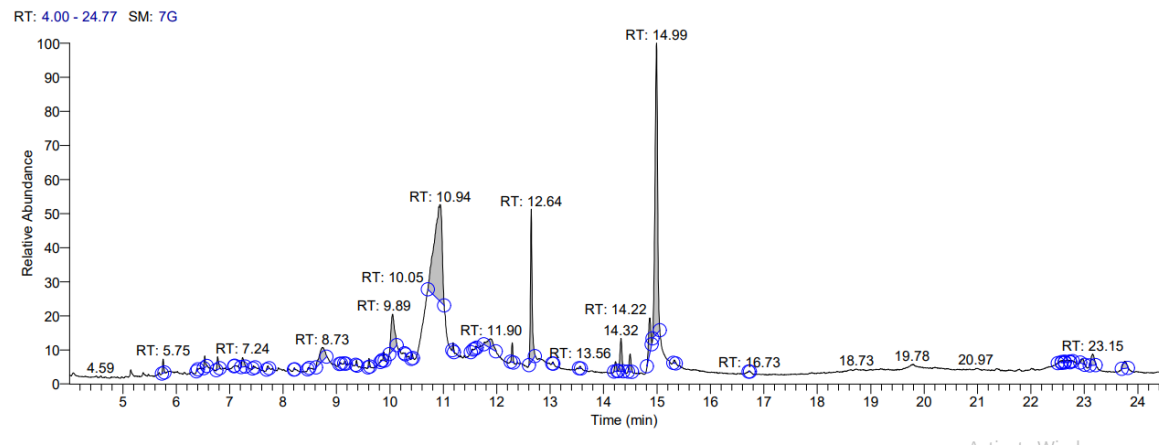


P

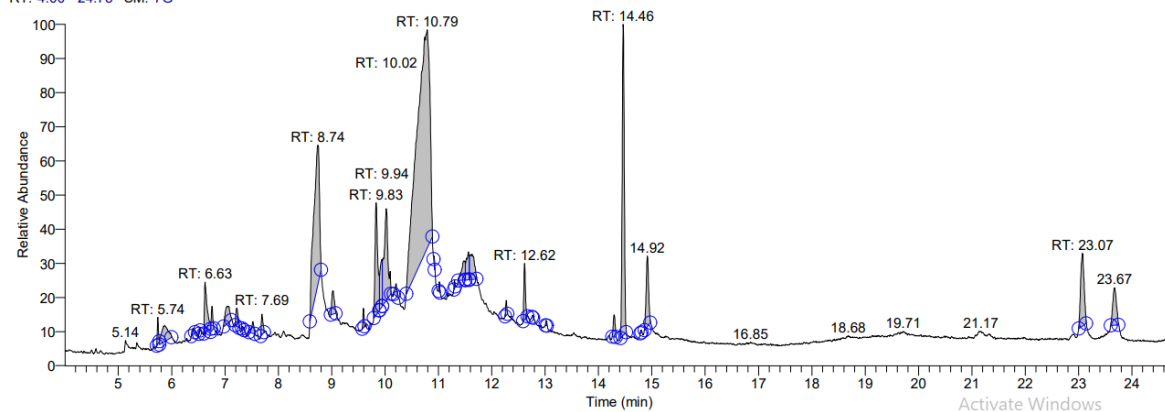
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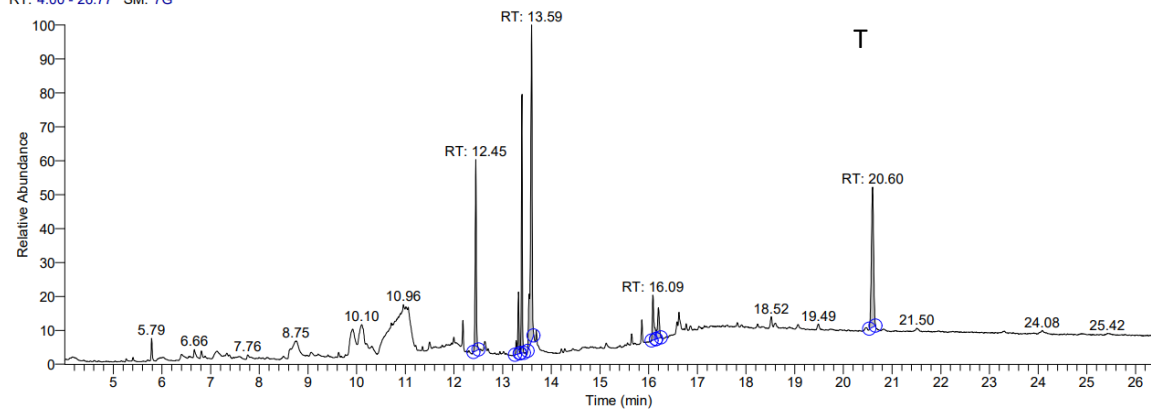
R



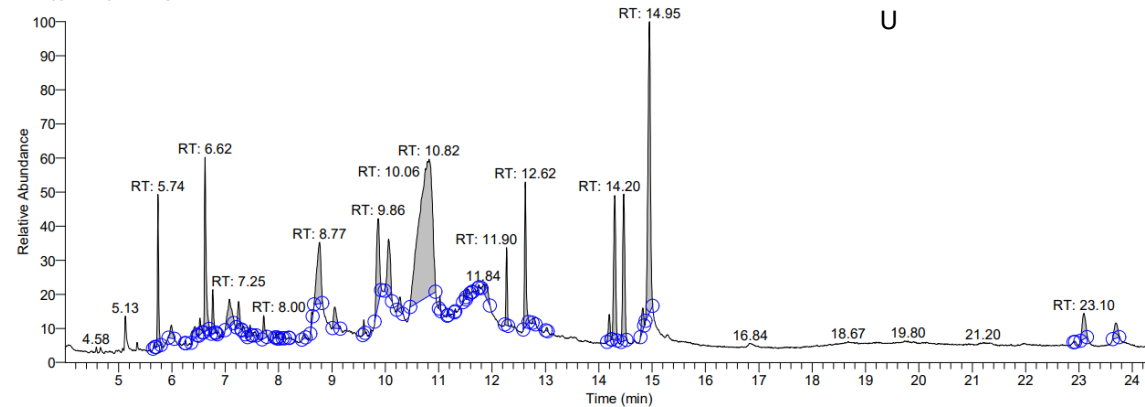
RT: 4.00 - 24.78 SM: 7G



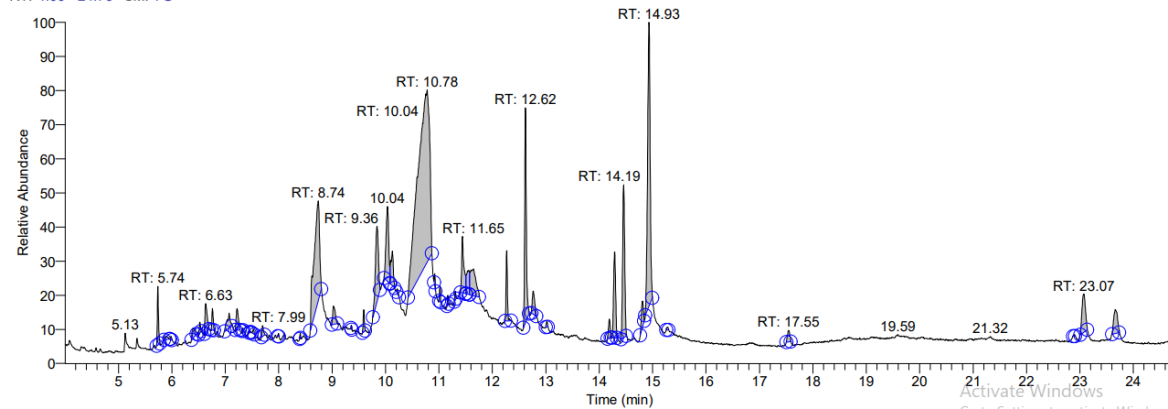
RT: 4.00 - 26.77 SM: 7G



RT: 4.00 - 24.76 SM: 7G

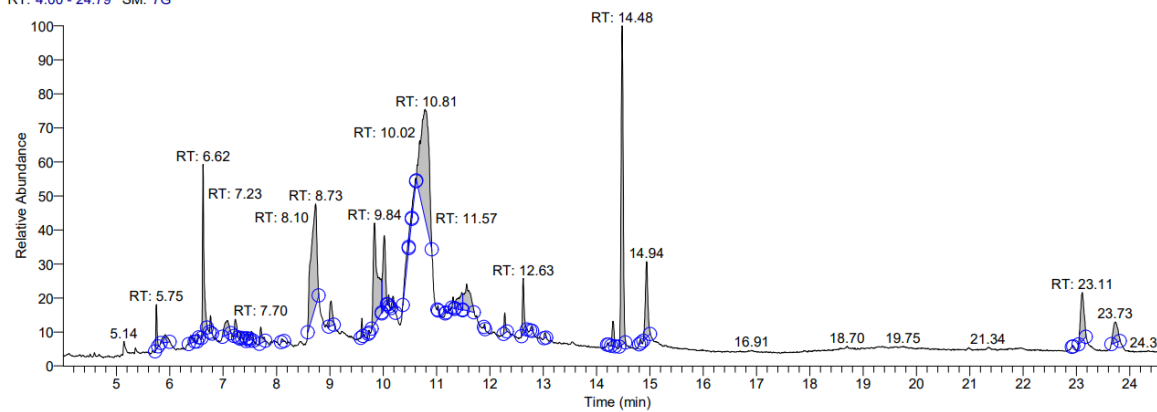


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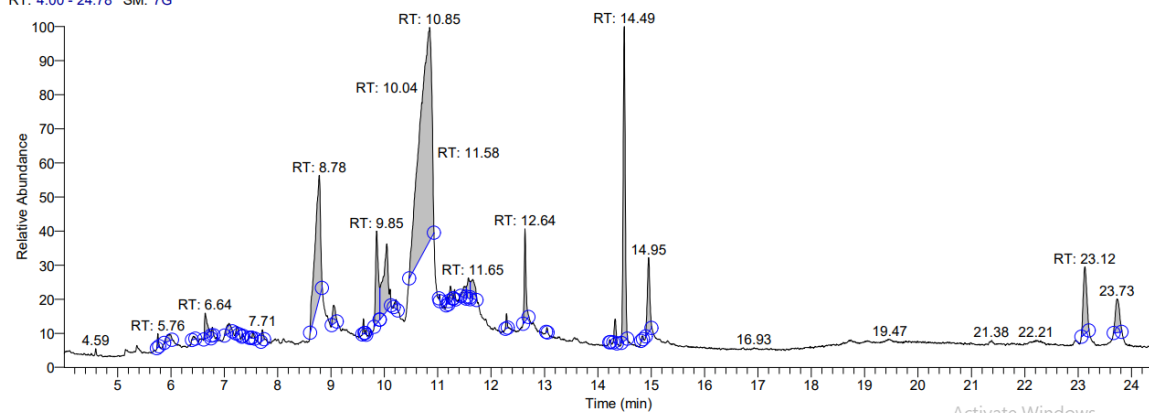
W

RT: 4.00 - 24.79 SM: 7G

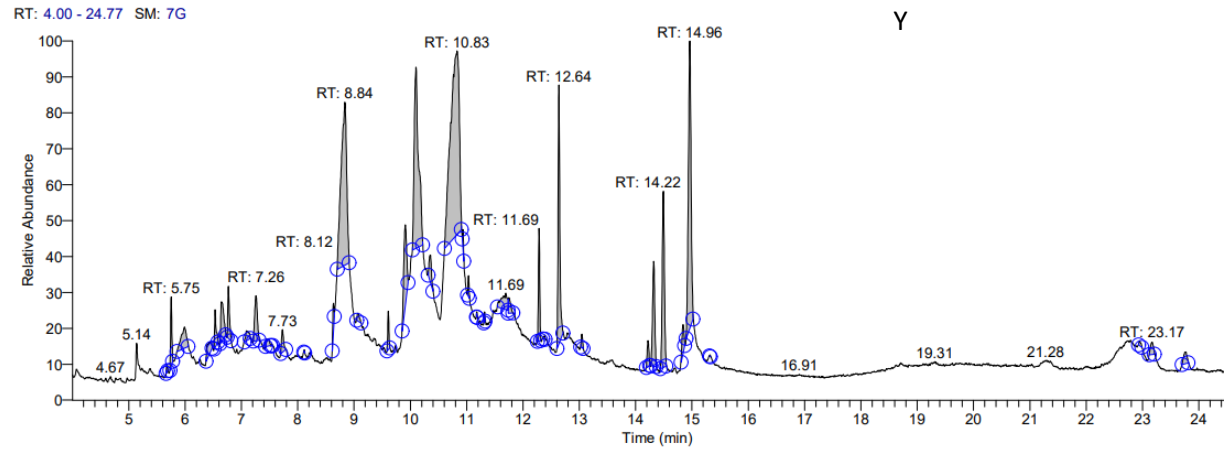


X

RT: 4.00 - 24.78 SM: 7G



Activate Windows



**Figure S3.** GC-MS chromatogram of methanolic leaf extracts of 25 accessions of *Catharanthus roseus*

(A) Cr00PFRE, (B) Cr00LPFLPE, (C) Cr00DPF, (D) Cr00WFYE, (E) Cr00WFRE, (F) Cr00WFRE2, (G) Cr00WFSRE, (H) Cr00WFYE2, (I) Cr00DP, (J) Cr00LP, (K) Cr00BPF, (L) Cr00SFP, (M) Cr00CAF, (N) Cr00LPNF, (O) Cr00SBRF, (P) Cr00PLMF, (Q) Cr00CHEF, (R) Cr00SNFF, (S) Cr00CLF, (T) Cr00SAF, (U) Cr00TDRF, (V) Cr00 DRYE, (W) Cr00FRFF, (X) Cr00PFWE, (Y) Cr00PFYE

**Table (S1).** Comparative analysis of phytochemicals in 25 *Catharanthus roseus* accessions

Name of compounds	Name of accessions	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
4H-Pyran-4-one		+	+	+	+	+	-	-	+	+	-	+	+	+	+	-	+	+	+	+	+	+	-	+	+	-
Catechol/Resorcinol		+	-	-	-	-	-	-	+	+	-	-	-	-	-	-	+	-	-	-	+	+	-	+	+	-
Benzofuran, 2,3-dihydro		+	-	+	+	-	-	-	+	+	+	-	+	-	+	+	+	+	+	+	+	+	+	+	-	+
5Hydroxymethylfurfural		+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	+	-
1,2,3-Propanetriol, 1-acetate/acetin		-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	+	+	-	+	-	-	-	-
L-Glucose		-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	+	-	+	-
Ascaridole epoxide		-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	+	-	-	+	-	-	-	-	-	-
Deoxyspergualin		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	+	-	-	+	-
Sucrose		+	+	+	+	+	+	+	+	+	-	+	+	-	-	+	+	+	+	+	+	-	-	+	+	-
D-fructose		+	+	+	+	-	-	+	+	+	-	+	-	-	+	-	+	-	+	+	-	-	+	-	+	+
D-allose		+	+	+	+	-	-	+	+	+	-	-	+	+	-	-	+	-	+	-	-	+	-	+	+	-
Desulphosinigrin		+	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-
3',5'-Dimethoxyacetophenone		+	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	-
$\alpha$ -D-Glucopyranoside, O- $\alpha$ -Dglucopyranosyl-(1.fwdarw.3)- $\beta$ -d-fru		+	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	-
1,2,3,5-Cyclohexanetetrol+		+	+	+	+	-	-	+	+	+	+	+	+	+	+	-	+	+	+	+	-	-	-	-	-	-
Quinic acid		+	+	+	-	-	-	+	+	+	-	-	-	-	-	-	+	+	+	+	-	-	-	-	-	-
Myo-Inositol, 4-C-methyl-		+	+	-	-	-	-	-	-	+	-	-	+	+	-	-	+	+	+	-	-	-	-	-	-	-
Muco-Inositol		+	+	+	-	+	+	-	+	+	-	-	+	+	-	-	+	+	+	-	-	-	-	-	-	-
Hexadecanoic acid, methyl ester		+	+	+	-	-	-	-	-	+	+	+	+	-	-	-	+	+	-	-	-	-	-	-	-	-
Pentadecanoic acid		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Phytol		+	+	-	+	-	-	-	+	+	+	-	+	-	-	-	+	+	+	-	-	-	-	-	-	-
9,12,15-Octadecatrienoic acid, methyl ester		+	+	+	+	+	-	+	+	+	+	-	+	-	-	-	+	+	+	+	-	-	-	-	-	-
2,20-Cycloaspidospermidine-3-carboxylic acid		+	+	-	-	+	+	-	+	+	+	-	+	-	-	+	+	+	+	+	-	-	-	-	+	-
Vindoline		+	+	-	-	+	+	-	+	+	+	-	+	-	-	+	+	+	+	+	+	-	-	-	+	-
9,12,15-Octadecatrienoic acid,		+	+	-	+	+	-	-	+	+	+	+	+	-	-	-	+	+	+	+	+	-	-	-	-	-
Octadecane, 3-ethyl-5-(2-ethylbutyl)-		+	+	-	+	-	-	-	+	+	+	-	+	-	-	-	+	+	+	+	+	-	-	-	+	-
Aspidospermidine-3-carboxylic acid		+	+	+	+	+	+	-	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+
vindoline		+	+	+	+	+	+	-	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+
Condylan, 14,19-didehydro-12-methoxy-, (14E)-		+	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phthalic acid, di(oct-3-yl) ester		+	-	+	-	-	-	+	-	+	+	+	-	-	-	+	-	-	+	-	-	-	-	-	-	-

**+= Presence ; -= Absence**

(A) Cr00PFRE, (B) Cr00LPFLPE, (C) Cr00DPF, (D)Cr00WFYE, (E) Cr00WFRE, (F) Cr00WFRE2, (G) Cr00WFSRE, (H) Cr00WFYE2, (I) Cr00DP, (J) Cr00LP, (K) Cr00BPF, (L) Cr00SFP (M) Cr00CAF, (N) Cr00LPNF, (O)Cr00SBRF, (P) Cr00PLMF, (Q) Cr00CHEF, (R) Cr00SNFF, (S) Cr00CLF, (T) Cr00SAF, (U) Cr00TDRF, (V) Cr00 DRYE, (W) Cr00FRFF, (X) Cr00PFWE, (Y) Cr00PFYE