

Supplementary tables

Table. S1. Comparison of metabolite categories in healthy acid lime

Categories	Healthy acid lime.	
	Numbers	Percentage
Total	79	100
Organic Acids	22	27.84
Amino Acids and Derivatives	9	11.39
Sugars and Sugar Derivatives	16	20.25
Alcohols and Polyols	7	8.86
Steroids and Lipids	5	6.32
Terpenes and Aromatics	3	3.79
Phenols and Flavonoids	5	6.32
Aromatic and Heterocyclic Compounds	5	6.32
Cyclic Compounds	1	1.26
Fatty Acids, Esters, and Derivatives	1	1.26
Miscellaneous	5	6.32

Table. S2. Comparison of Metabolite Categories in infected acid lime

Categories	Infected acid lime.	
	Numbers	Percentage
Total	60	100
Organic acid	16	26.66
Amino acid	3	5
Fatty acid and lipids	6	10
Sugars and Sugar Derivatives	10	16.66
Terpenes and Sterols	8	13.33
Phenols and Flavonoids	4	6
Pyridine and Pyrimidines	3	5
Alcohols and Polyols	3	5
Other Compounds	7	11.66

Table. S3. Comparison of Metabolite Categories in healthy mandarin orange

Categories	Healthy mandarin orange.	
	Numbers	Percentage
Total	93	100
Organic Acids	12	12.9
Amino Acids and Derivatives	5	5.37
Sugars and Sugar Derivatives	21	22.58
Alcohols and Polyols	9	9.67
Steroids and Lipids	9	9.67
Terpenes and Aromatics	6	6.45
Phenols and Flavonoids	5	5.37
Aromatic and Heterocyclic Compounds	6	6.45
Cyclic Compounds	3	3.22
Fatty Acids, Esters, and Derivatives	6	6.45
Miscellaneous	11	11.82

Table. S4. Comparison of Metabolite Categories in infected mandarin orange

Categories	Infected mandarin orange	
	Numbers	Percentage
Total	68	100
Organic acid	16	23.52
Amino acid	3	4.41
Fatty acid and lipids	7	10.29
Sugars and Sugar Derivatives	9	13.23
Alcohols and Polyols	3	4.44
Terpenes and Sterols	9	13.23
Phenols and Flavonoids	6	8.82
Aromatics	5	7.35
Pyrimidines and Related Compounds	2	2.94
Cyclic and Polycyclic Compounds	3	4.41
Miscellaneous Compounds	5	7.35

Table. S5. Comparison of Metabolite Categories in healthy Poncirus

Categories	Healthy poncirus	
	Numbers	Percentage
Total	96	100
Organic Acids	10	10.41
Amino Acids and Derivatives	6	6.25
Sugars and Sugar Derivatives	24	25
Alcohols and Polyols	9	9.37
Steroids and Lipids	7	7.29
Terpenes and Aromatics	4	4.16
Phenols and Flavonoids	4	4.16
Aromatic and Heterocyclic Compounds	8	8.33
Cyclic Compounds	3	3.12
Fatty Acids, Esters, and Derivatives	10	10.41
Miscellaneous	11	11.45

Table. S6. Comparison of Metabolite Categories in infected Poncirus

Categories	Infected poncirus.	
	Numbers	Percentage
Total	77	100
Organic Acids	16	20.77
Amino acid	4	5.19
Fatty acid and lipids	1	1.29
Sugars and Sugar Derivatives	21	27.27
Alcohols and Polyols	6	7.79
Steroids and Lipids	8	10.38
Terpenes and Aromatics	2	2.59
Phenols and Flavonoids	6	7.79
Aromatic and Heterocyclic Compounds	4	5.19
Cyclic Compounds	3	3.89
Fatty Acids, Esters, and Derivatives	1	1.29
Miscellaneous	5	6.49

Table. S7. Comparison of Metabolite Categories in healthy rangpur lime

Categories	Healthy rangpur lime.	
	Numbers	Percentage
Total	116	100
Organic Acids	15	12.93
Amino Acids and Derivatives	8	6.89
Sugars and Sugar Derivatives	19	16.37
Alcohols and Polyols	10	8.62
Steroids and Lipids	15	12.93
Terpenes and Aromatics	8	6.89
Phenols and Flavonoids	5	4.31
Aromatic and Heterocyclic Compounds	8	6.89
Cyclic Compounds	3	2.58
Fatty Acids, Esters, and Derivatives	14	12.06
Miscellaneous	11	9.48

Table. S8. Comparison of Metabolite Categories in infected rangpur lime

Categories	Infected rangpur lime.	
	Numbers	Percentage
Organic acid	66	19.69
Amino acid	4	6.06
Fatty acid and lipids	8	12.12
Sugars and Sugar Derivatives	8	12.12
Alcohols and Polyols	4	6.06
Terpenes and Sterols	7	10.6
Phenols and Flavonoids	7	10.6
Aromatics	4	6.06
Cyclic and Polycyclic Compounds	5	7.57
Pyrimidines and Related Compounds	1	1.51
Miscellaneous Compounds	5	7.57