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2 **Multi-wavelength Fusion Column Fingerprint Technology**
3 **Combined with Chemometrics Analysis to Evaluate the**
4 **Overall Quality of *Gardenia Jasminoides* Root**

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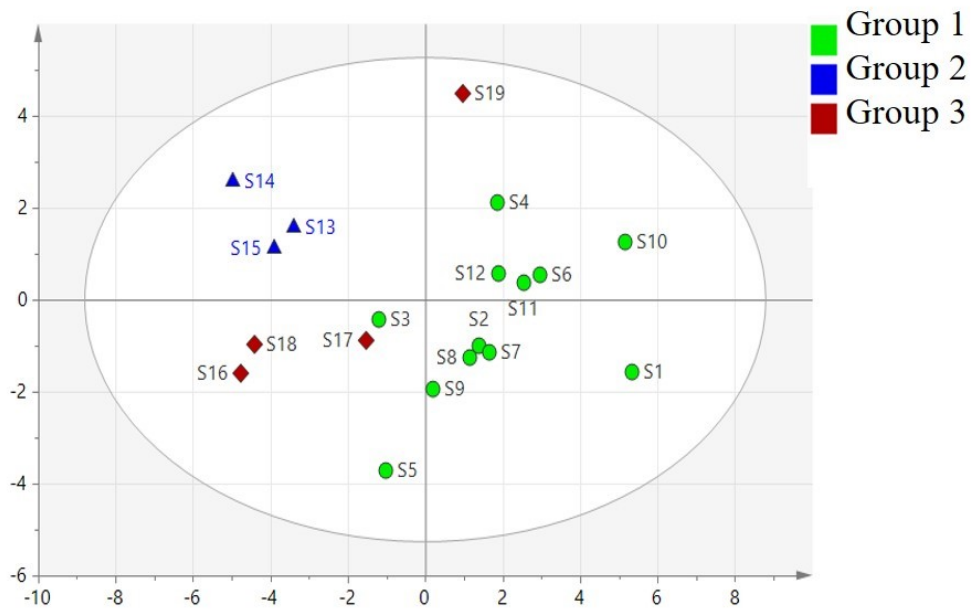


Figure S1 The score scatter plot of PCA

Table S1 Sample information of *Gardenia Jasminoides* root

No.	Batches	Geographical regions	No.	Batches	Geographical regions
S1	ZZG-R2006001	Yunhe, Zhejiang	S11	ZZG-R2006011	Lishui, Zhejiang
S2	ZZG-R2006002	Jingning, Zhejiang	S12	ZZG-R2006012	Zhejiang
S3	ZZG-R2006003	Qingtian, Zhejiang	S13	ZZG-R2006013	Jiujiang, Jiangxi
S4	ZZG-R2006004	Longquan, Zhejiang	S14	ZZG-R2006014	Jiujiang, Jiangxi
S5	ZZG-R2006005	Qingtian, Zhejiang	S15	ZZG-R2006015	Jiujiang, Jiangxi
S6	ZZG-R2006006	Lishui, Zhejiang	S16	ZZG-R2006016	Meizhou, Guangdong
S7	ZZG-R2006007	Lishui, Zhejiang	S17	ZZG-R2006017	Meizhou, Guangdong
S8	ZZG-R2006008	Yunhe, Zhejiang	S18	ZZG-R2006018	Sanming, Fujian
S9	ZZG-R2006009	Lishui, Zhejiang	S19	ZZG-R2006019	Sanming, Fujian
S10	ZZG-R2006010	Lishui, Zhejiang			

Table S2 Retention time and peak area after fusion of five wavelengths

RT ^a (min)	PA ^b (mAU*S)	RT ^a (min)	PA ^b (mAU*S)	RT ^a (min)	PA ^b (mAU*S)
2.6	5065.786	19.4	434.138	34.4	2418.753
2.7	4529.185	20.3	746.656	35.0	251.268
3.5	1577.235	20.7	482.059	35.7	655.175
4.2	202.359	21.6	718.015	37.6	516.384
4.4	276.508	22.9	356.325	37.7	333.157
7.5	283.112	23.3	528.056	38.4	483.566
7.7	200.337	23.4	1457.838	39.3	529.064
8.1	1423.481	24.1	2229.098	39.5	2717.124
8.5	1523.724	24.8	8520.913	40.7	442.318
8.8	797.882	25.1	4648.798	41.4	497.370
8.9	280.298	25.5	210.424	44.0	6634.245
9.4	8353.077	25.6	1311.051	44.5	1198.468
9.9	298.438	26.2	279.244	45.0	713.240
10.4	328.499	26.5	575.123	45.3	703.487
10.6	764.574	26.9	1077.011	46.3	347.775
11.2	376.550	27.4	1014.444	47.0	632.397
15.0	3455.550	27.9	580.886	47.5	276.661
15.7	7038.119	28.3	233.723	49.8	6147.807
16.3	1120.920	29.1	533.238	50.2	415.099
17.2	390.977	29.4	3060.414	50.8	7116.809
17.9	261.784	30.3	715.584	54.9	1299.407
18.6	408.474	31.9	1214.007	67.9	1516.083
18.9	1054.432	32.3	423.472	78.2	1783.453
19.1	292.556	33.2	913.507		

^a RT: retention time

^b PA: peak areas

Table S3 Common peak areas of 19 batches in 203 nm HPLC fingerprints

No.	1	2	3	4	5	6	7	8
S1	1577.2	3187.9	7038.1	8520.9	2613.8	6634.2	6077.1	7116.8
S2	923.2	1775.0	5500.1	10570.2	1853.6	5073.8	5244.4	5293.6
S3	534.2	1282.0	3988.4	6830.8	1190.2	3576.0	3604.5	3617.4
S4	948.1	1940.6	5817.4	7657.4	2076.7	5650.4	5810.0	5118.2
S5	947.4	1854.2	6580.4	8430.9	2269.6	7104.9	6368.2	6737.0
S6	918.5	1580.7	5973.4	7455.6	1850.6	5391.4	5662.0	5447.4
S7	994.0	1717.0	5742.7	7113.1	1700.7	5569.4	5418.8	5002.1
S8	825.8	1487.6	5813.9	7186.9	1978.8	5682.5	5430.8	5659.7
S9	868.0	1735.9	5400.3	9700.8	1974.9	5117.5	5076.1	4716.8
S10	1104.9	1535.0	6814.2	8554.8	2047.6	6221.0	5733.8	6624.3
S11	990.8	2116.1	5564.7	10317.9	1816.1	5332.4	5098.5	5282.1
S12	935.1	1845.2	5826.2	9703.1	1795.0	5498.2	5312.6	5077.3
S13	756.8	3862.2	3029.8	5389.8	490.3	3386.2	2548.9	2296.5
S14	742.9	3374.7	2992.8	4786.3	431.6	2762.0	2196.2	2176.0
S15	407.6	4517.0	3529.1	4412.8	728.3	2955.1	2148.6	2218.8
S16	372.8	2497.3	4496.7	7298.0	1254.9	3116.8	1600.9	1765.1
S17	319.5	1707.6	3257.1	7629.5	1783.0	6499.7	4948.3	5459.8
S18	349.1	1157.2	2894.9	6135.1	1059.9	5320.3	3074.5	2899.2
S19	601.9	656.2	2905.9	8416.2	1265.2	9799.5	7302.1	5453.7

Table S4 Common peak areas of 19 batches in fusion HPLC fingerprints

No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
S1	5065.8	4529.2	8353.1	298.4	328.5	764.6	3455.6	7038.1	1120.9	8520.9	1311.1	3060.4	2418.8	529.1	497.4	6634.2	632.4	6147.8	7116.8	1299.4	1516.1
S2	2588.4	3078.7	4551.6	422.9	414.3	611.1	2081.4	5500.1	818.5	10570.2	1439.0	1404.8	970.7	648.6	550.7	5073.8	659.6	5272.4	5293.6	1123.4	1635.5
S3	1906.9	2338.7	3569.2	203.6	361.0	531.8	1940.7	3988.4	651.6	6830.8	1106.0	1465.7	766.4	629.7	584.2	3576.0	719.4	3658.8	3617.4	935.8	621.8
S4	2714.6	3105.9	4930.4	381.9	539.3	754.8	2252.3	5817.4	974.0	7657.4	931.5	1921.9	842.5	965.1	842.5	5650.4	979.8	5874.0	5118.2	1008.2	1660.3
S5	2356.5	2122.1	4789.2	235.3	334.0	627.6	2890.7	4985.2	906.1	8213.1	1029.1	994.6	1242.0	329.6	300.1	2181.1	397.3	1291.6	1709.2	585.2	1677.6
S6	2970.8	3069.7	4853.7	372.9	423.6	668.9	2284.6	6580.4	851.5	8430.9	1554.6	2130.1	1280.9	775.0	716.2	7104.9	831.7	6432.1	6737.0	1183.5	1672.7
S7	3168.1	3165.1	4085.0	444.4	0.0	614.6	2460.8	5973.4	861.3	7455.6	873.3	2183.2	2164.3	616.7	549.3	5391.4	652.4	5712.7	5447.4	994.2	1593.5
S8	2807.5	2772.3	4193.5	446.1	0.0	567.1	2089.7	5742.7	771.0	7455.6	873.3	2183.2	2164.3	616.7	549.3	5391.4	652.4	5712.7	5447.4	994.2	1593.5
S9	2671.1	2460.5	4023.1	372.2	0.0	567.4	1625.2	5813.9	702.9	7186.9	1145.7	1333.1	882.3	460.5	469.8	5682.5	534.1	5477.9	5659.7	946.1	1401.7
S10	3560.3	4094.9	5039.8	343.9	494.5	853.5	3795.0	7373.8	1183.5	9577.6	1458.3	3094.6	1862.2	822.9	807.0	6708.0	894.0	6185.9	6489.6	1263.3	1608.6
S11	3299.9	3767.2	3972.0	290.8	395.8	657.8	2808.6	6814.2	937.5	8554.8	1564.8	1048.6	0.0	676.2	685.7	6221.0	781.1	5779.2	6624.3	1156.3	1618.9
S12	2954.3	2995.4	4803.4	314.6	0.0	720.1	2414.3	5826.2	964.9	9703.1	1242.3	1414.5	852.6	786.1	713.1	5498.2	825.4	5353.4	5077.3	950.7	1633.1
S13	2638.5	3214.0	3702.3	0.0	1599.8	706.0	1134.5	3029.8	662.8	879.2	739.5	831.8	0.0	858.6	614.1	3386.2	728.4	2586.1	2296.5	0.0	0.0
S14	1142.0	2047.9	2184.1	549.1	1130.4	707.2	1170.7	2992.8	669.8	0.0	589.7	0.0	0.0	952.1	708.5	2762.0	858.5	0.0	2176.0	0.0	0.0
S15	1786.1	2341.6	2023.2	1161.8	920.9	0.0	1613.4	3529.1	786.5	558.2	726.0	912.3	985.7	801.7	655.3	2955.1	803.9	2166.4	2218.8	515.3	0.0
S16	0.0	0.0	1189.0	419.5	7309.5	627.8	1007.4	4496.7	776.3	7298.0	725.7	610.8	930.6	588.9	455.2	3116.8	514.7	0.0	1765.1	746.1	612.7
S17	1626.3	2145.1	773.5	237.4	4559.6	640.8	1373.4	3257.1	782.0	7629.5	897.8	861.4	1298.6	602.3	473.6	6499.7	558.6	4971.6	5459.8	1114.8	716.4
S18	0.0	1845.3	708.4	314.8	3584.9	422.4	1457.0	2894.9	615.9	6135.1	603.2	993.5	737.4	453.0	443.7	5320.3	604.2	220.4	2899.2	678.2	0.0
S19	2270.2	3676.9	570.1	287.4	2526.9	907.5	1778.9	2905.9	1099.9	8416.2	1291.5	2612.2	1236.9	1071.8	857.3	9799.5	997.4	404.4	5453.7	1031.1	0.0

Table S5 Analysis of principal components and variance of 203nm

Component	Initial eigenvalue			Extract sum of squares load			Rotate sum of squares load		
	Total	Variance e	Accumulate%	Total	Variance %	Accumulate%	Total	Variance %	Accumulate%
1	5.312	66.401	66.401	5.312	66.401	66.401	3.568	44.828	44.828
2	1.456	18.200	84.601	1.456	18.200	84.601	3.182	39.773	84.601

Table S6 Main factors loading matrix of 203nm

Peaks	Load	
	1	2
1	0.701	0.611
2	-0.561	0.700
3	0.790	0.523
4	0.800	-0.055
5	0.927	0.168
6	0.762	-0.495
7	0.935	-0.208
8	0.964	0.011