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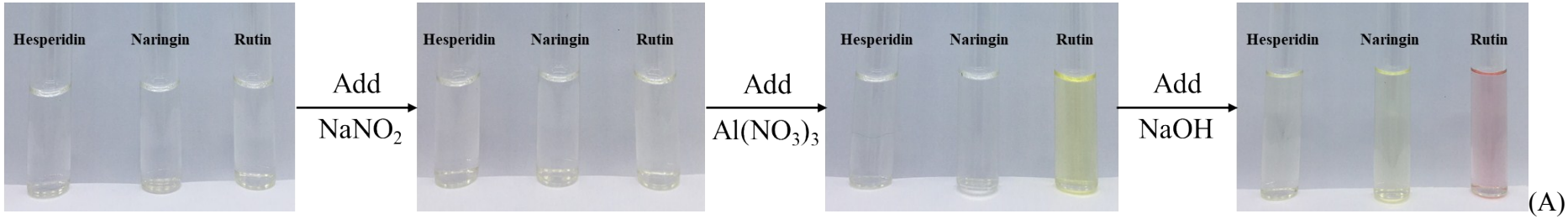
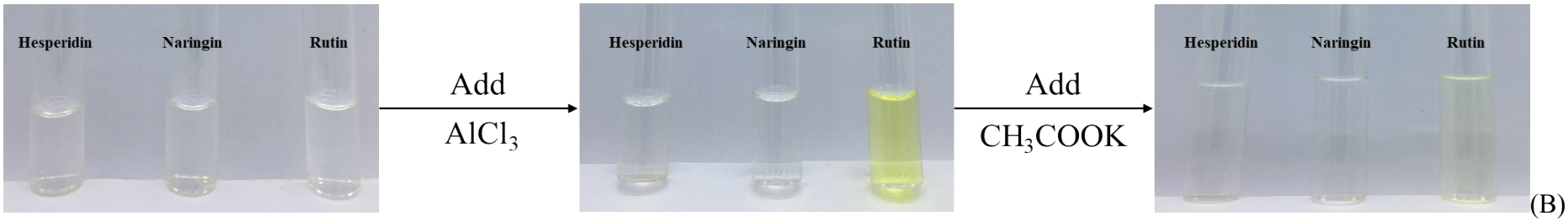
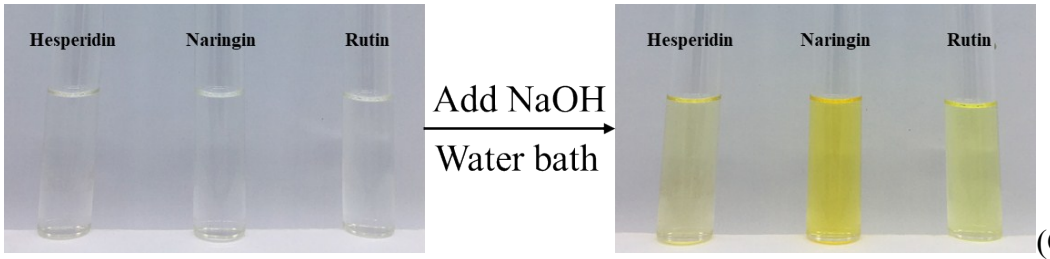



(A)




(B)




(C)

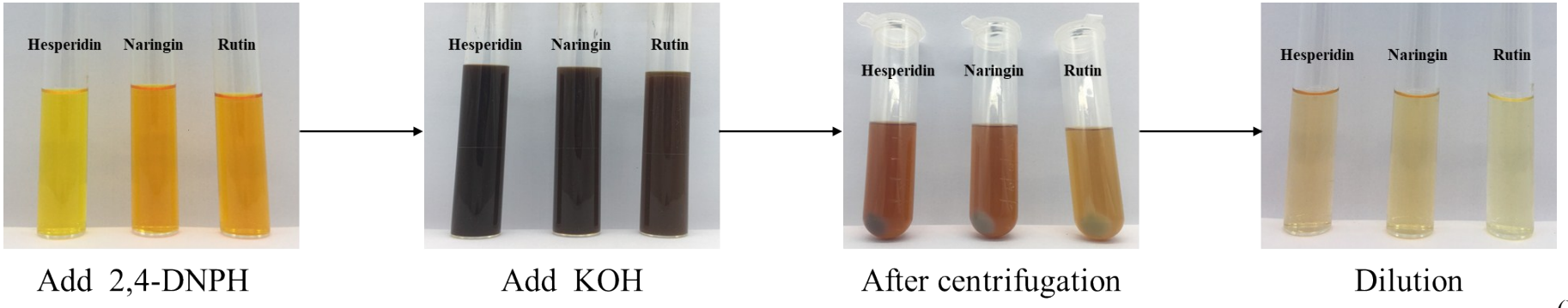
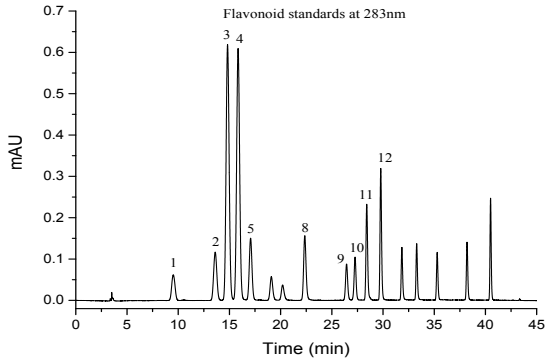
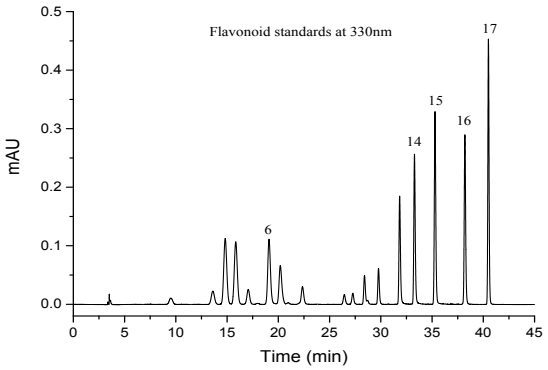
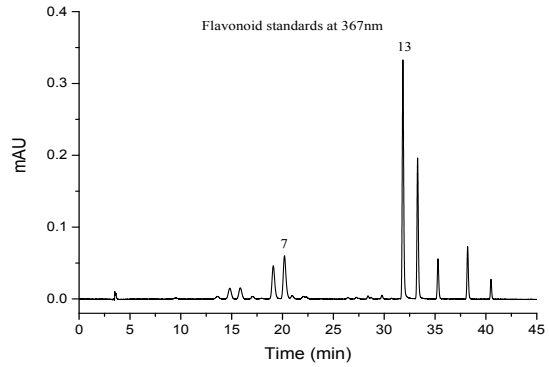
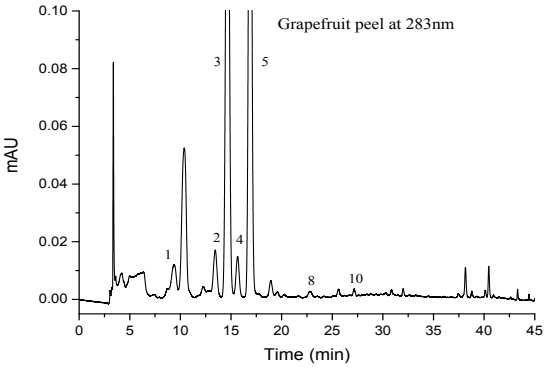


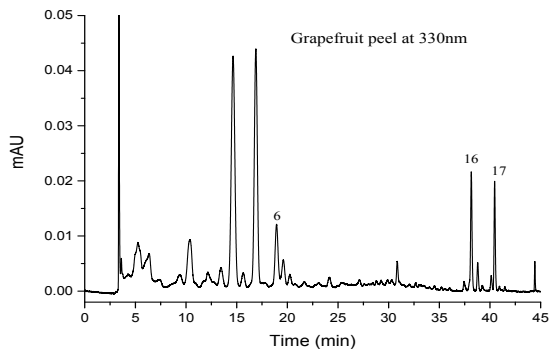

Fig. S1. Photos of color change of four colorimetric methods: (A) The $NaNO_2$-$Al(NO_3)_3$-NaOH method; (B) The $AlCl_3$ method; (C) The Davis method; (D) The 2,4-Dinitrophenylhydrazine method.

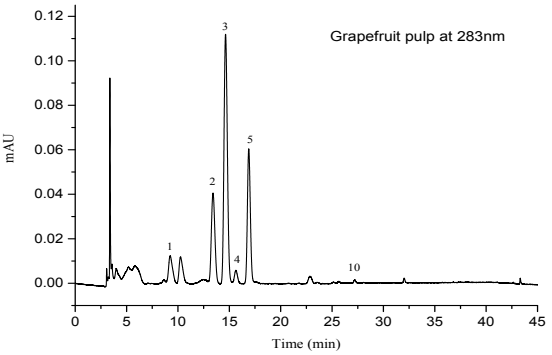

Flavonoid standards at 283nm
mAU
Time (min)
1
2
3
4
5
8
9
10
11
12

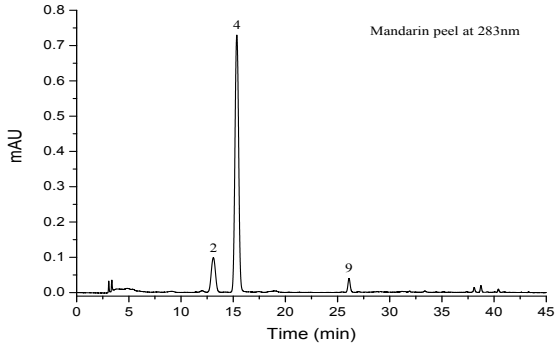

Flavonoid standards at 330nm
mAU
Time (min)
6
14
15
16
17

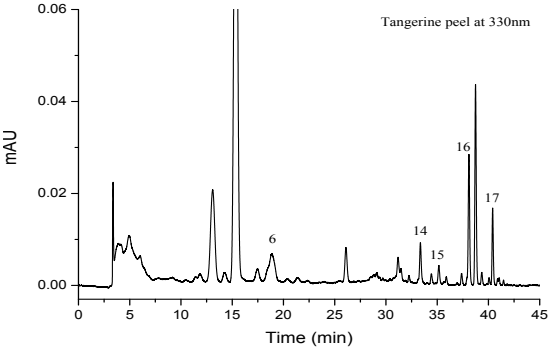

Flavonoid standards at 367nm
mAU
Time (min)
7
13

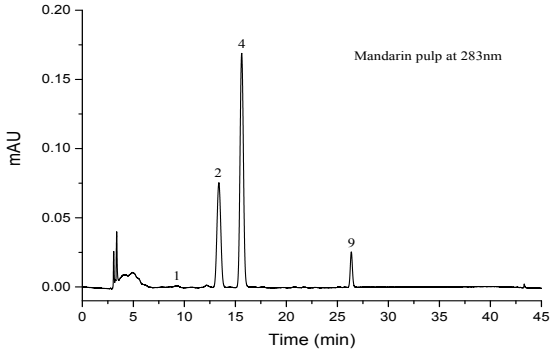

Grapefruit peel at 283nm
mAU
Time (min)
1
2
3
4
5
8
10

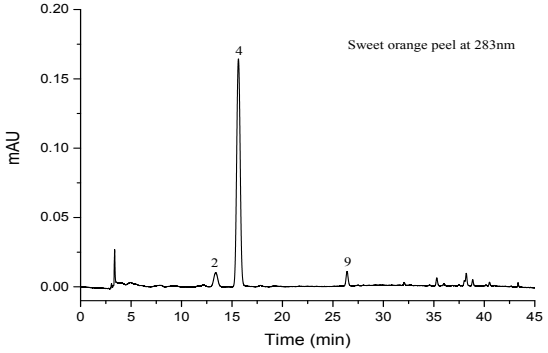

Grapefruit peel at 330nm
mAU
Time (min)
6
16
17

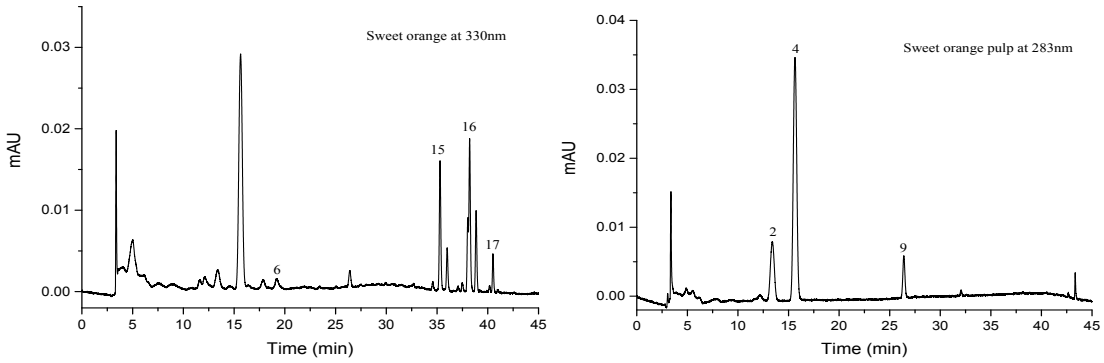

Grapefruit pulp at 283nm
mAU
Time (min)
1
2
3
4
5
10


Mandarin peel at 283nm
mAU
Time (min)
2
4
9


Tangerine peel at 330nm
mAU
Time (min)
6
14
15
16
17


Mandarin pulp at 283nm
mAU
Time (min)
1
2
4
9


Sweet orange peel at 283nm
mAU
Time (min)
2
4
9




1. Eriocitrin; 2. Narirutin; 3. Naringin; 4. Hesperidin; 5. Neohesperidin; 6. Rhoifolin; 7. Quercitrin; 8. Eriodictyol; 9. Didymin; 10. Poncirin; 11. Naringenin;12. Hesperetin; 13. Kaempferol; 14. Diosmetin; 15. Sinensetin; 16. Nobiletin; 17. Tangeretin

**Fig. S2.** HPLC chromatograms of standard solution (17 flavonoid standards) and flavonoids in part samples

**Table S1** The description of seven species of citrus used in this work

| Common name | Scientific name | Dehydration rate | |
|---|---|---|---|
| | | Peel | Pulp |
| Grapefruit | *C.paradisi* Macf. Changshanhuyou | 81.97% | 88.02% |
| Pomelo | *Citrus grandis (L.)* Osbeck cv Guanxiyou | 79.73% | 87.9% |
| Mandarin, Owari unshŭ | *Citrus unshiu* Marc. | 75.87% | 87.66% |
| Ponkan | *Citrus poonensis* Hort. ex Tanaka | 78.81% | 87.12% |
| Lemon | *Citrus limon(L.)* Burm.f. | 77.12% | 88.25% |
| Sweet orange | *Citrus sinensis* Osbeck cv Newhall | 76.23% | 85.69% |
| Tangerine | *Citrus reticulata* Blanco cv.Shatangju | 73.96% | 85.01% |

**Table S2** Principles of four colorimetric measuring methods

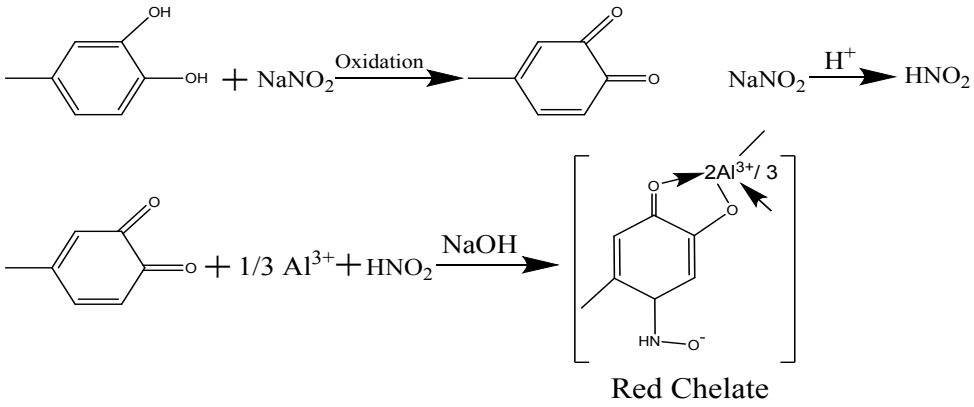
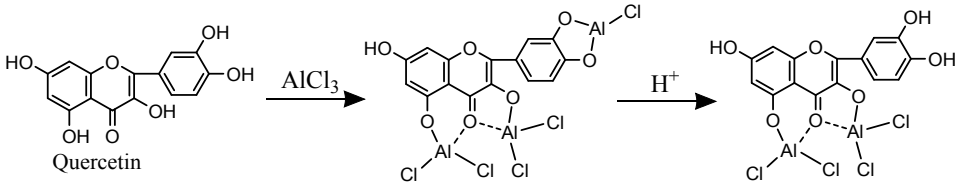
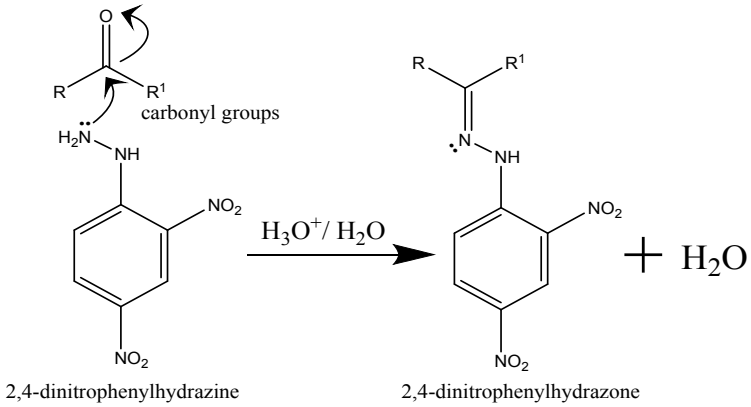
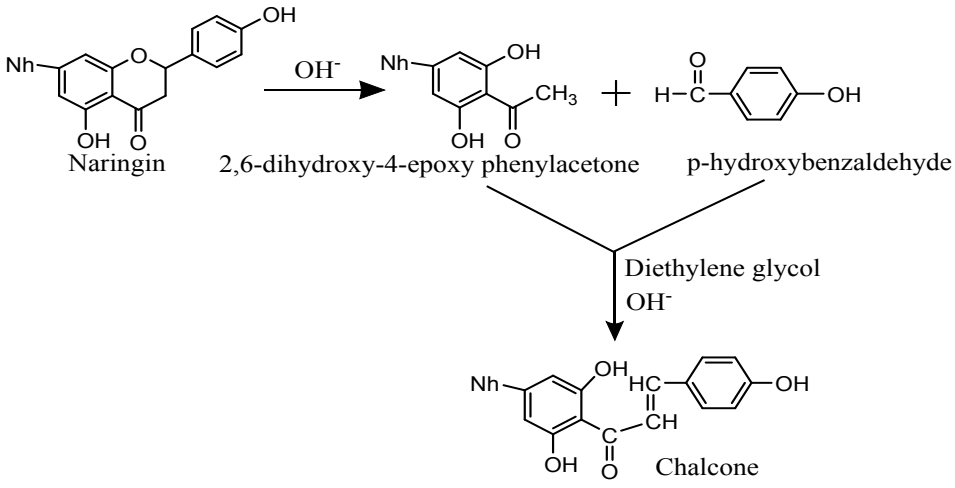
| Methods | Principles |
|---|---|
| $NaNO_2$-$Al(NO_3)_3$-NaOH method |  |
| $AlCl_3$ method |  |
| 2,4-DNPH |  |
| Davis method |  |

**Table S3** Regression equations of four colorimetric methods

| Methods | Standard compounds | Wavelength (nm) | Regression equations | Correlation coefficient ($R^2$) | Linear range (mg $ml^{-1}$) |
|---|---|---|---|---|---|
| $NaNO_2$ | Rutin | 510 | y=1.208x-0.003 | 0.9996 | 0-0.5 |
| $AlCl_3$ | Quercetin | 415 | y=6.531x-0.0055 | 0.9991 | 0-0.1 |
| Davis | Hesperidin | 360 | y=1.5322x+0.0076 | 0.9993 | 0-0.4 |
| | Naringin | 420 | y=2.9718x-0.0162 | 0.995 | 0-0.25 |
| 2,4-DNPH | Hesperidin | 476 | y=0.1406x-0.0004 | 0.999 | 0-1.5 |
| | Naringin | | y=0.1617x+0.0024 | 0.999 | 0-1.5 |

**Table S4** Standard curves of 17 flavonoid standards in the method of HPLC

| **Flavonoids** | Regression equations | Correlation coefficient（$R^2$） | Linear range（μg/ml） |
|---|---|---|---|
| **Flavanones** | | | |
| Hesperidin | y = 22914x - 38626 | 0.9995 | 10.82-1082 |
| Narirutin | y = 25473x - 10866 | 0.9995 | 1.98-198 |
| Didymin | y = 24034x - 5408.5 | 0.9995 | 1.04-104 |
| Eriocitrin | y = 23941x-10687 | 0.9994 | 1.16-116 |
| Naringin | y = 22378x - 25961 | 0.9994 | 11.30-1130 |
| Neohesperidin | y = 25467x - 15220 | 0.9994 | 2.18-218 |
| Poncirin | y = 29603x - 6469.2 | 0.9995 | 0.94-94 |
| Hesperetin | y = 48841x - 18438 | 0.9995 | 1.36-136 |
| (±)- Naringenin | y = 47066x - 15063 | 0.9995 | 1.14-114 |
| Eriodictyol | y = 53023x - 33618 | 0.9994 | 1.00-100 |
| **Flavones** | | | |
| Nobiletin | y = 50284x – 16259 | 0.9995 | 1.10-110 |
| Tangeretin | y = 58995x – 13439 | 0.9995 | 1.24-124 |
| Rhoifolin | y = 34336x – 18195 | 0.9996 | 1.20-120 |
| Sinensetin | y = 53556x – 22382 | 0.9994 | 1.20-120 |
| Diosmetin | y = 51308x – 32251 | 0.9994 | 0.98-98 |
| **Flavonols** | | | |
| Kaempferol | y = 51376x – 54369 | 0.9994 | 1.32-132 |
| Quercitrin | y = 22787x – 11162 | 0.9994 | 0.98-98 |