**Supplemental Table 1 Compounds identified from the flower of *Pueraria thomsonii* Benth extract by UPLC-QTOF/MS method**

No. tR Identification Elemental [M-H]—and fragments

 (min) composition Observed Calculated Error

 mass (Da) mass (Da) (ppm)

1 4.44 puerarin C21H19O9 415.1028 415.1029 -0.2

 C14H7O3 223.0401 223.0395 2.7

2 4.66 dihydrokaempferol-7-O-glucoside C21H21O11 449.1064 449.1084 -4.5

 C15H11O6 287.0547 287.0556 -3.1

 C14H11O5 269.0471 269.045 7.8

3 5.11 6-hydroxygenistein-6,7-di-O-glucoside C27H29O16 609.1471 609.1456 2.5

 C21H19O11 447.0918 447.0927 -2.0

 C15H9O6 285.0404 285.0399 1.8

4 5.31 nicotiflorin C27H29O15 593.151 593.1506 0.7

 C15H9O6 285.038 285.0399 -6.7

 C7H3O4 151.0027 151.0031 -2.6

5 6.43 daidzin C21H19O9 415.0999 415.1029 -7.2

 C15H9O4 253.048 253.0501 -8.3

6 6.73 glycitein-7-O-xylosylglucoside C27H29O14 577.1542 577.1557 -2.6

 C22H21O10 445.1094 445.1135 -9.2

 C16H11O5 283.0602 283.0606 -1.4

 C15H8O5 268.037 268.0372 -0.7

 C14H8O4 240.0414 240.0423 -3.7

7 7.27 glycitin C22H21O10 445.1129 445.1135 -1.3

 C16H11O5 283.0608 283.0606 0.7

 C15H8O5 268.0365 268.0372 -2.6

 C14H7O4 239.0341 239.0344 -1.3

8 9.05 rutin C27H29O16 609.1462 609.1456 1.0

 C15H9O7 301.0331 301.0348 -5.6

 C14H7O6 285.0399 285.0399 0.0

9 9.73 genistin C21H19O10 431.098 431.0978 0.5

 C15H9O5 269.0451 269.045 0.4

 C8H5O2 133.0302 133.029 9.0

10 a) 9.84 tectorigenin-7-O-β-D-xylosylglucoside C27H29O15 593.1509 593.1506 0.5

 C16H11O6 299.0565 299.0556 3.0

 C15H8O6 284.0326 284.0321 1.8

 C14H7O5 255.0302 255.0293 3.5

11 10.09 biochanin A-7-O-β-D-glucopyranoside C22H21O10 445.1151 445.1135 3.6

 C16H11O5 283.0603 283.0606 -1.1

 C15H8O5 268.0398 268.0372 9.7

12 a) 10.62 tectorodin C22H21O11 461.1097 461.1084 2.8

 C16H11O6 299.0561 299.0556 1.7

 C15H8O6 284.0322 284.0321 0.4

 C14H7O5 255.0302 255.0293 3.5

**Supplemental Table 1 Compounds identified from the flower of *Pueraria thomsonii* Benth extract by UPLC-QTOF/MS method (*Continued*)**

No. tR Identification Elemental [M-H]—and fragments

 (min) composition Observed Calculated Error

 mass (Da) mass (Da) (ppm)

13 12.43 6-hydroxygenistein-7-O-glucoside C21H19O11 447.0914 447.0927 -2.9

 C15H9O6 285.0414 285.0399 5.3

 C15H7O5 267.0268 267.0293 -9.4

14 12.54 apigenin-4'-O-glucoside C21H19O10 431.0979 431.0978 0.2

 C15H9O5 269.0434 269.045 -5.9

 C7H3O4 151.0027 151.0031 -2.6

15 14.84 6-hydroxybiochanin A-6,7-di-O-glucoside C28H31O16 623.1611 623.1612 -0.2

 C22H21O11 461.1045 461.1084 -8.5

 C16H11O6 299.056 299.0556 1.3

 C15H8O6 284.0301 284.0321 -7.0

16 a) 16.17 daidzein C15H9O4 253.0508 253.0501 2.8

 C14H7O3 223.0399 223.0395 1.8

17 17.34 isomer of tectorigenin C16H11O6 299.0552 299.0556 -1.3

 C15H8O6 284.0302 284.0321 -6.7

 C14H7O5 255.0313 255.0293 7.8

18 18.42 irilin D C16H11O7 315.0511 315.0505 1.9

 C15H8O7 300.0245 300.027 -8.3

19 19 glycitein C16H11O5 283.0606 283.0606 0.0

 C15H8O5 268.0355 268.0372 -6.3

20 a) 19.44 luteolin C15H9O6 285.0402 285.0399 1.1

 C8H5O2 133.0294 133.029 3.0

21 20.13 vanillic acid C8H7O4 167.0347 167.0344 1.8

 C6H4O2 108.0204 108.0211 -6.5

22 21.19 kakkalide C28H31O15 607.1669 607.1663 1.0

 C17H13O6 313.0708 313.0712 -1.3

 C16H10O6 298.0479 298.0477 0.7

 C15H7O6 283.0257 283.0243 4.9

23 a) 21.43 genistein C15H9O5 269.0453 269.045 1.1

 C8H5O2 133.0297 133.029 5.3

24 21.74 apigenin C15H9O5 269.045 269.045 0.0

 C7H3O4 151.0039 151.0031 5.3

25 a) 21.87 tectorigenin C16H11O6 299.0566 299.0556 3.3

 C15H8O6 284.0314 284.0321 -2.5

 C14H7O5 255.029 255.0293 -1.2

26 22.07 irisolidone-7-O-β-D-glucopyranoside C23H23O11 475.124 475.124 0.0

 C17H13O6 313.0683 313.0712 -9.3

 C16H10O6 298.0464 298.0477 -4.4

 C15H7O6 283.0221 283.0243 -7.8

27 22.42 iristectorigenin A C17H13O7 329.0664 329.0661 0.9

 C16H10O7 314.0397 314.0427 -9.6

**Supplemental Table 1 Compounds identified from the flower of *Pueraria thomsonii* Benth extract by UPLC-QTOF/MS method (*Continued*)**

No. tR Identification Elemental [M-H]—and fragments

 (min) composition Observed Calculated Error

 mass (Da) mass (Da) (ppm)

28 23.6 formononetin C16H11O4 267.0648 267.0657 -3.4

 C15H8O4 252.0423 252.0423 0.0

29 25.47 astragaloside VIII C47H75O17 911.4992 911.5004 -1.3

 C41H65O13 765.4435 765.4425 1.3

 C36H55O8 615.3893 615.3897 -0.6

 C30H49O3 457.3675 457.3682 -1.5

30 25.53 soyasaponin I C48H77O18 941.507 941.511 -4.2

 C42H67O14 795.4492 795.4531 -4.9

 C36H55O8 615.3887 615.3897 -1.6

 C30H49O3 457.3661 457.3682 -4.6

31 25.85 soyasaponin II C47H75O17 911.4987 911.5004 -1.9

 C41H65O13 765.4442 765.4425 2.2

 C36H55O8 615.3839 615.3897 -9.4

 C30H49O3 457.3704 457.3682 4.8

32 a) 25.9 irisolidone C17H13O6 313.0717 313.0712 1.6

 C16H10O6 298.0481 298.0477 1.3

 C15H7O6 283.0242 283.0243 -0.4

 C14H7O5 255.0296 255.0293 1.2

33 26.01 kaikasaponin III C48H77O17 925.5164 925.5161 0.3

 C42H67O13 779.4632 779.4582 6.4

 C36H57O8 617.4084 617.4053 5.0

 C36H55O7 599.396 599.3948 2.0

 C30H49O2 441.3737 441.3733 0.9

34 26.08 soyasaponin IV C41H65O13 765.4414 765.4425 -1.4

 C36H55O8 615.3888 615.3897 -1.5

 C30H49O3 457.3653 457.3682 -6.3

35 26.15 kaikasaponin II C48H77O17 925.5151 925.5161 -1.1

 C42H67O13 779.4576 779.4582 -0.8

 C36H57O8 617.4095 617.4053 6.8

 C36H55O7 599.39 599.3948 -8.0

 C30H49O2 441.3752 441.3733 4.3

36 26.56 kaikasaponin I C42H67O13 779.4582 779.4582 0.0

 C36H57O8 617.3998 617.4053 -8.9

 C36H55O7 599.3998 599.3948 8.3

37 26.67 azukisaponin I C42H67O13 779.4568 779.4582 -1.8

 C36H57O8 617.4074 617.4053 3.4

 C36H55O7 599.3961 599.3948 2.2

38 26.67 kakkasapnin I C47H75O16 895.5026 895.5055 -3.2

 C41H65O12 749.4518 749.4476 5.6

 C36H55O7 599.3931 599.3948 -2.8

 C30H49O2 441.3705 441.3733 -6.3

**Supplemental Table 1 Compounds identified from the flower of *Pueraria thomsonii* Benth extract by UPLC-QTOF/MS method (*Continued*)**

No. tR Identification Elemental [M-H]—and fragments

 (min) composition Observed Calculated Error

 mass (Da) mass (Da) (ppm)

39 26.75 baptisiasaponin I C47H75O16 895.5039 895.5055 -1.8

 C41H65O12 749.4473 749.4476 -0.4

 C36H55O7 599.3946 599.3948 -0.3

 C30H49O2 441.3709 441.3733 -5.4

40 26.99 phaseoside IV C48H75O17 923.4988 923.5004 -1.7

 C42H65O13 777.4481 777.4425 7.2

 C36H53O7 597.376 597.3791 -5.2

 C30H47O2 439.3568 439.3576 -1.8

41 27.55 kakkasapnin II C42H65O13 777.4464 777.4425 5.0

 C36H53O7 597.381 597.3791 3.2

 C30H47O2 439.3612 439.3576 8.2

42 27.66 kakkasapnin III C47H73O16 893.4911 893.4899 1.3

 C41H63O12 747.4379 747.432 7.9

 C36H53O7 597.3791 597.3791 0.0

 C30H47O2 439.3615 439.3576 8.9

43 28.91 sophoradiol monoglucuronide C36H57O8 617.4033 617.4053 -3.2

 C30H49O2 441.3762 441.3733 6.6

a) Compositions identified with reference compounds comparison