

HPLC

	*		#
			40400
Cosmosil C ₁₈	-	55 45 V/V)	1.0mL/min 270nm
r=0.9999		RSD <2%	99.16% RSD 1.43% n=6

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Content Determination of Icariin in Compound Xuanju Capsules by HPLC

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Abstract Objective To establish a method for content determination of icariin in Compound xuanju capsules. **Methods** HPLC was conducted. The column was Cosmosil C18, the mobile phase was methanol-phosphoric acid (55:45,V/V) at a flow rate of 1.0mL/min and the detection wavelength was 270nm. The sampling volume was 20 L. **Results** There was a good linear relationship between the concentration of icariin and peak area in the range of 49.95~499.50 g/mL(r=0.9999). The RSDs of precision, stability and reptatability were less than 2%. The average recovery was 99.16%(RSD=1.43%,n=6). **Conclusions** The method is simple, accurate and reproducible. It can be used for the content determination of icariin in Compound xuanju capsules.

keywords Compound xuanju capsules; Icariin; HPLC; Content determination

4

1.2

141001 141002 141003

[1-2]

110737-200415

HPLC 2

2.1

Cosmosil

C18(250mm×4.6mm

1.1 1260 HPLC

-0.1% 55:45 V/V

1.0mL/min

270nm

1

*

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023-85736701

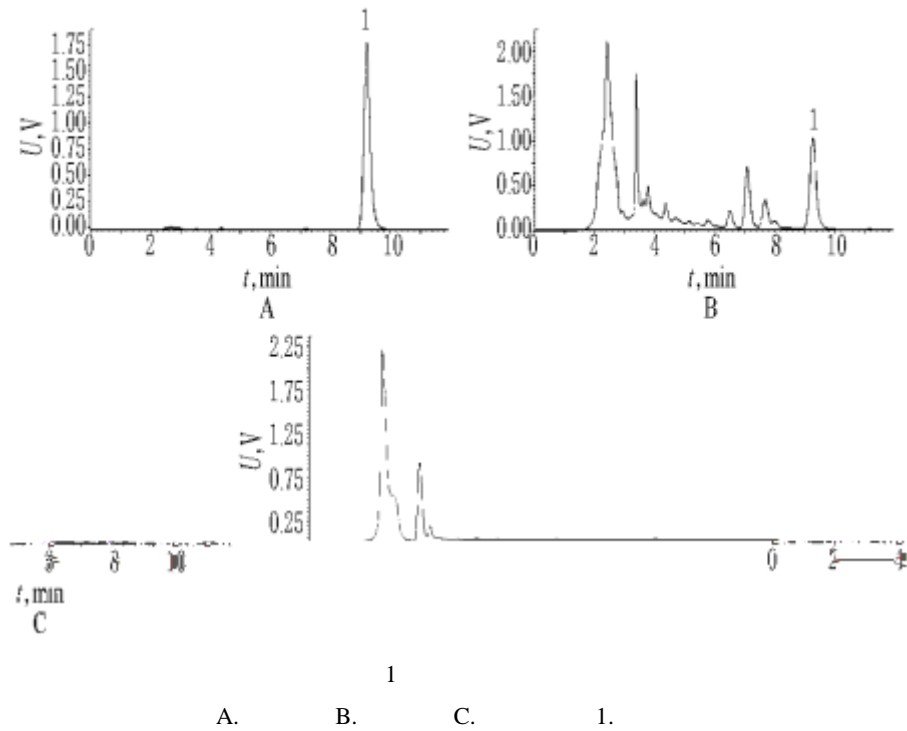


Fig 1 HPLC chromatograms
A.reference substance; B.test sample; C.Negative control; 1.icariin

2.2

2.2.1

8mg

50mL

2mL

10mL

2.3

99.90

199.80

299.70

399.60

1mL

49.95

2.2.2

0.3g

x mg/mL

y

$$y=54928x+40162 \quad r=0.9997$$

30min

10mL

2.4

3

20mL

RSD=0.06% n=6

-

2:1 V/V)

5

2.5

50mL

0 2 4 6 8 12h

RSD=1.6% n=6

12h

2.6

1g 6

1

2.8

3

141001

141002 141003

1.0g

RSD=1.8%

n=6

2.7

3

6

4.058 5.161 4.350mg/g

4.523mg/g

1

n=6

Tab 1 Results of recovery test(n=6)

mg	mg	mg	%	%	RSD	%
0.0918	0.082	0.1745	100.85			
0.0893	0.082	0.1699	98.29			
0.0931	0.082	0.1741	98.78			
0.0899	0.082	0.1726	100.85	99.16		1.43
0.0910	0.082	0.1721	98.90			
0.0922	0.082	0.1720	97.31			

3

270nm

-

[4-5]

-

-0.1%

-3.8%

[3]

28:72 V/V)

-

55:45

HPLC

V/V)

-

55:45 V/V)

30% 50% 70%

2

3 4

9min

70%

3

4

2

3 4

70%

3

270nm

[1]

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2010

[J].

[4] , , .
, 2012,18(7):661. [J]. , 2005,14(11):78.

[2] , , . [5] . HPLC
[J]. , [J]. , 2014,10(19):23.
2011,21(10):2045.

[3] , , . [J]. , 2003,23(8):47.