

(. 1). (. 2);

1. 8%, 12%; 10% 10% 1,5% 8%, 12%, 10% 1,5% 3.

1. « ».

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65-75. 29.06.2011

633.15:581.45_

10%

U.V. Karpiuk, V.S. Kyslychenko, Ia.V. Diakonova

DETERMINATION OF SOME PARAMETERS OF STANDARDIZATION OF ZEA MAYDIS LEAVES

Key words: zea mays, microscopic examination, scanning electron microscopy

Some parameters of standardization of *Zea maydis* leaves by study of macroscopic characters and anatomy structure with determination of diagnostic signs by method of scanning electron microscopy, study of moisture, content of total ash and ash insoluble in 10% hydrochloric acid have been determined. Using method of scanning electron microscopy the main diagnostic features have been identified: the form and type of relief, the shape of epidermis cells, the type of stoma apparatus, the trichomes type and the type of wax.

615.322 : 615.451.16 : 661.91-404

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B B EHH
I EH M A AM

O EHB BERBERIS VULGARIS

8 [3]. 1,5- 3% () [3,4,12]. () ()

[5,12].
 Helicobacter pylori
 [7].
 [3,12].
 [8].
 [9].
 [10].
 2,
 [6].
 [11].
 -22,
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 [1]
 -22
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 3-4
 100 150
 1 2
 1
 0,5
 100
 20 10%
 2
 10
 20 5%
 20, 20 10
 25%
 =9,
 15
 10 40%
 15

20 () 0,1
), 20 0,002
 30
 2-3 0,1%
 0,1
 1
 , %
 [8].

$$A = \frac{2,114 \cdot (20,0 \cdot KPI_{\phi MK} - (V_{NaOH} - 20,0 \cdot KPI_{H2SO4}) \cdot 1,923) \cdot KPI_{NaOH} \cdot 10}{m_H \cdot (100 - W)}, \quad (1)$$
 NaOH - 0,1
 2so4,
 W - , %.
 [2].
 2
 -22,
 (-22)
 2% ; -410
 (1:1). [2]
 -22 5-10%
 (95%)
 -22
 .
 .1 2.
 70%
 100
 . 10
 100 ° .
 () , %

$$X = \frac{m_e \cdot 10 \cdot 100}{m_H \cdot (100 - W)} \cdot 100, \quad (2)$$
 ;
 () ;
 W - , %.
 () .

0,03
(1)
W=0.

$$E_n = \frac{m_n}{\sum_{i=1}^k m_i} \cdot 100, \quad (3)$$

2,15±0,06% 1,93±0,03%

1 -22 2%

1.

100)

-22

2%

1,

							%	%	%	%**	
	°	*	;	°	:	,					
1	-	-	-	15	121	75	-	-	-	-	
2	40±5	1:10	90	40±5	1 10	90	1,073	53,67	0,533	55,20	
3	40±5	1:10	90	35±5	1 10	45	0,416	65,09	0,244	56,36	
4	40±5	1:9,5	60	40±5	1 10,5	60	0,212	73,20	0,132	70,13	
5	20	1:9	120	20	1 11,5	90	0,078	84,51	0,056	-	
:							1,779		0,965		

* - ; ** -

0,965%

44,9%

85%

-22

(98:2)

(36,3%),

2

4-

5-
(73-85%).

(3).

(),

150

54,2%.

-22,

410

10, 20, 30,

40% ()

;

25 °

- 30 °

12 ;

- 10;

45 ° ;

- 4.

2 (

- 15 ;

150)

-22

10 ° ,

(20%) [1,2].

().

- 410

120 .

10-15 ° ,

-22,

85-92%

:

1:12.

- 410

(1:1).

), -410 (2, 150

£	® § * .. 6%							, %	, %	, %	- , %
				-			-				
		-	-	.	-	-	.				
1	1:13	20	20	2880	20	20	120'	2,162	28,79	0,566	34,48
2	1:13	25	25	120	25	35	10' 14	1,308	49,48	0,578	53,74
3	1:14	20	20	1440	27	40	15' 10	0,704	49,47	0,315	63,34
4	1:14	30	30	150	27	40	10' 10	0,210	49,82	0,096	52,71
5	1:15	20	20	720	30	40	10' 15	0,141	65,96	0,086	
:								4,525		1,640	

(. 1),

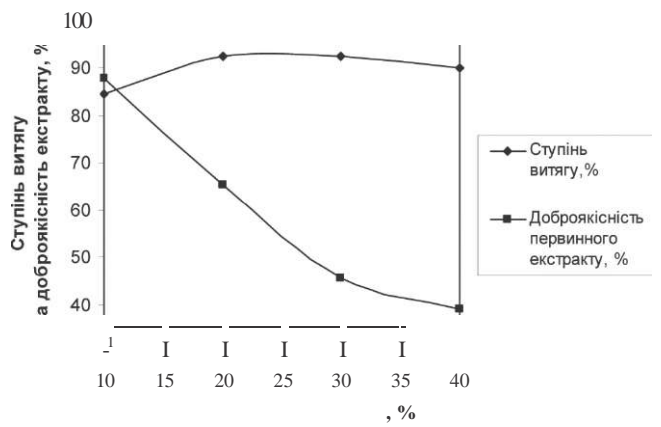
-410 12% (.) .

1. -22, 410 -

2. - 410 12% .

3. 87%. : — 25

— 3G ° 45 ° ;
— 1G; — 4. — 15 ;



1. /

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25.06.2011

615.322 : 615.451.16 : 661.91-404

BMBHEHM
BERBERIS VULGARIS I EH M

86%

-22, 410

8 %

roYHEHME
BERBERIS VULGARIS C EHH M

-22, 410

D.V. Demyanenko
**STUDY OF EXTRACTION PROCESS
OF BARBERRY ROOTS
WITH CONDENSED GASES**

Key words: extraction, barberry roots, condensed gases, Freon, ammonia, alkaloids

The research of extraction process of alkaloids from barberry roots with condensed Freons-22, 410 and their mixtures with ammonia has been done. The most optimum parameters for the technological mode of extraction and the composition of extracting solvent have been found. It was shown that under certain conditions it was possible to achieve 86% yield of the biologically active substances and the high quality of the primary extract.

547.458:582.886

EH E O EC BEHHO O E^ECTBEHHOro
O CAXA OB B CHAMAENERION ANGUSTIFOLIUM B ^ A AX
^ O AHAX

lium) (Chamaenerion angustifo- : 20-30
(Onagraceae) - (), 40-50
(),
) [2,3,5]. 2010
(-) 1-2
[1,13,14], ().
: 82%
[10]. ();
0,5% (); 7%
().
2 (2)
[4].
« [11,12]. 96%
96%
« » [6,7,8,9].
0,4 10
10 20%
()
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(-)
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