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(54) 发明名称

(57) 摘要

<sup>12</sup>C<sup>6+</sup>  
UV B           x

8 15

<sup>12</sup>C<sup>6+</sup>  
UV B           x  
UV B

1.  $^{12}\text{C}^{6+}$  UV B  
X  $^{12}\text{C}^{6+}$  4 8 0.8 1.2 C  
30 40MeV/u 250 500nGy 20 30nGy/min  
UV B 20W12RS 280-320nm UV B  
50cm UV B 20.5  $\mu\text{W}/\text{cm}^2$  11:00 0.12KJ/m<sup>2</sup>/day  
17 22  
x 2.0GeV 30 40mA 0.5 2.5KeV  
 $10^{11}/\text{s}$  UV B 15 20s 30 60min  
UV B  
3 1  
2. 1 UV B

一种提高紫土豆中花青素含量的方法及其产品

技术领域

[0001]

背景技术

[0002]

[0003]

2

OH H<sub>2</sub>O<sub>2</sub>

:

VE 50

Vc  
OH

发明内容

[0004]

[0005]

[0006]

[0007]

[0008]

<sup>12</sup>C<sup>6+</sup>

UV B

x

[0009]

C

<sup>12</sup>C<sup>6+</sup>  
30 40M<sup>2</sup>V/u

4 8 0.8 1.2

|           |                         |                             |                            |                             |                         |
|-----------|-------------------------|-----------------------------|----------------------------|-----------------------------|-------------------------|
| [0010]    |                         |                             |                            | 250 500mGy                  | 20                      |
| 30mGy/min |                         |                             |                            |                             |                         |
| [0011]    |                         |                             | UV B                       | 20W 12RS, 280-320nm         |                         |
| UV B      |                         |                             | 50cm UV B                  | 20. $\mu$ W/cm <sup>2</sup> | 11:                     |
| 00        | 0.12                    | 0.436KJ/m <sup>2</sup> /day |                            |                             |                         |
|           |                         |                             | 10min                      | 0.12KJ/m <sup>2</sup> /day  |                         |
| 20min     |                         | 0.24KJ/m <sup>2</sup> /day  |                            | 30min                       | 0.36KJ/m <sup>2</sup> / |
| day       | 40min                   |                             | 0.48KJ/m <sup>2</sup> /day |                             | 17 22                   |
| [0012]    |                         | 1J                          | (Wm <sup>2</sup> )*        | (s)                         |                         |
| [0013]    | $\mu$ W/cm <sup>2</sup> | 0.01Wm <sup>2</sup>         |                            |                             |                         |
| [0014]    |                         |                             | x                          |                             | 2.0GeV                  |
| 30 40mA,  | 0.5 2.5KeV              |                             | 10 <sup>11</sup> /s        | UV B                        |                         |
| 15 20s    | 30 60min                |                             | UV B                       |                             |                         |
| [0015]    |                         |                             | UV B                       |                             |                         |
| [0016]    |                         |                             |                            | 2.9wt                       |                         |
| 3.1wt     | 3.8wt                   | 0.05wt                      |                            | 0.0005wt                    | 0.05wt                  |
| 0.0004    | 0.0003                  |                             |                            |                             |                         |
| [0017]    |                         |                             |                            |                             | 3:1                     |
| [0018]    |                         |                             |                            |                             |                         |
| [0019]    |                         |                             | 3V                         |                             |                         |
|           | 0 0                     |                             |                            |                             |                         |

# 具体实施方式

[0028]

[0029]

[0030] 1

[0031] (1)

$^{12}\text{C}^{6+}$   $^{12}\text{C}^{6+}$

5 1

C

40MeV/u

250ng

20ng/min

[0032] (2)

3: 1

(0†. @ òr=7• y /#r48dPc kp0- örr='• A• W608 30cm 45cm

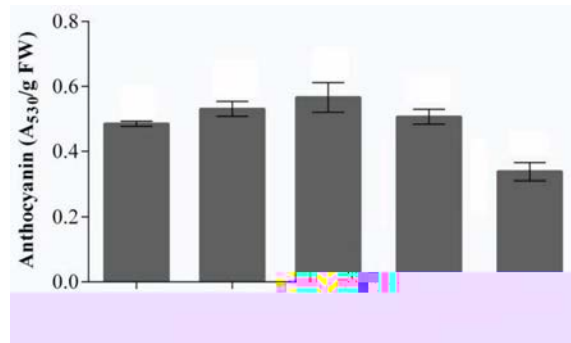
|                            |                              |                            |          |                        |                            |
|----------------------------|------------------------------|----------------------------|----------|------------------------|----------------------------|
| 9.8                        | 300mGy                       | 300mGy                     |          |                        |                            |
| [0038]                     | UV B                         |                            |          | 6 8.                   |                            |
| [0039]                     | 6 8                          |                            |          |                        |                            |
| [0040]                     | 6 8                          | 1                          | UV B     |                        | 0.12KJ/m <sup>2</sup> /day |
| 0.36KJ/m <sup>2</sup> /day | 0.48KJ/m <sup>2</sup> /day ( |                            | 6 7 8)   |                        |                            |
| 1                          |                              |                            |          |                        | I <sub>2</sub> KI          |
|                            |                              |                            | 1 3      | UV B                   |                            |
|                            |                              |                            |          |                        | 0.24KJ/m <sup>2</sup> /    |
| day                        | UV B                         | 0.48KJ/m <sup>2</sup> /day |          |                        | UV B                       |
|                            | 0.436KJ/m <sup>2</sup> /day  | 1.6                        |          |                        |                            |
| [0041]                     | 1:                           |                            |          |                        |                            |
| [0042]                     | (1)                          |                            |          |                        |                            |
| [0043]                     | (2)                          |                            | 3: 1     |                        |                            |
|                            | 30cm 45cm                    |                            |          |                        |                            |
| [0044]                     | (3)                          |                            |          | 20W12RS, 280-320nm     | UV B                       |
|                            |                              | 50cm UV B                  |          | 20.5μW/cm <sup>2</sup> | 11 00                      |
|                            |                              |                            |          | 2.9wt                  |                            |
| 3.1wt                      | 3.8wt                        | 0.05wt                     | 0.0005wt | 0.05wt                 |                            |
| 0.0004                     | 0.0003                       |                            |          | 5min 30min             |                            |
| x                          | x                            |                            | 2.0GeV   | 30 40mA,               |                            |
| 0.5 2.5KeV                 | 10 <sup>11</sup> /s          | UV B                       |          | 20s                    |                            |
| 60min                      | UV B                         |                            |          |                        |                            |

|   |           | 50cm UV B                                 | 20.5μW/cm <sup>2</sup>                    | 11 00             |
|---|-----------|---|---|-------------------|
|   |           |   | 2.9wt                                     |                   |
| 3.1wt                                     | 3.8wt     | 0.05wt                                    | 0.0005wt                                  | 0.05wt            |
| 0.0004                                    | 0.0003    |   |   | 5min 60min        |
|   | UV B      |   |   |                   |
|   |           | 2   | 20  | UV B              |
| 5min                                      |           |   | 0.12KJ/m <sup>2</sup> /day                |                   |
| [0050]                                    | 1         | x   |   |                   |
|   |           | I <sub>2</sub> KI                         |   |                   |
|   | 1         | 11.3                                      | 1 14.5                                    |                   |
|   | x         | UV B                                      | UV B                                      |                   |
| [0051]                                    | 3         |   |   |                   |
| [0052]                                    | (1)       |   |   |                   |
| [0053]                                    | (2)       |   | 3: 1                                      |                   |
|   | 30cm 45cm |   |   |                   |
| [0054]                                    | (3)       |   | 20W12RS, 280-320nm                        | UV B              |
|   |           | 50cm UV B                                 | 20.5μW/cm <sup>2</sup>                    | 11 00             |
|   |           |   | 2.9wt                                     |                   |
| 3.1wt                                     | 3.8wt     | 0.05wt                                    | 0.0005wt                                  | 0.05wt            |
| 0.0004                                    | 0.0003    |   |   | 5min 60min        |
|   | UV B      |   |   |                   |
|   |           | 2   | 20  | UV B              |
| 5min                                      |           |   | 0.12KJ/m <sup>2</sup> /day                |                   |
| [0055]                                    | 1         | x   | <sup>12</sup> C <sub>6</sub> <sup>+</sup> | UV B              |
|   |           |   |   | I <sub>2</sub> KI |
|   |           |   | 1   | 10.5              |
|   | 1 14.5    |   |   | x                 |
| <sup>12</sup> C <sub>6</sub> <sup>+</sup> | UV B      | UV B                                      |   |                   |
| [0056]                                    | 4         |   |   |                   |
| [0057]                                    | (1)       |   |   |                   |
|   |           | <sup>12</sup> C <sub>6</sub> <sup>+</sup> | <sup>12</sup> C <sub>6</sub> <sup>+</sup> | 5 1               |
|   | C         | 40MeV/u                                   |   |                   |
|   |           | 250nGy                                    | 20nGy/min                                 |                   |
| [0058]                                    | (2)       |   | 3: 1                                      |                   |
|   | 30cm 45cm |   |   |                   |

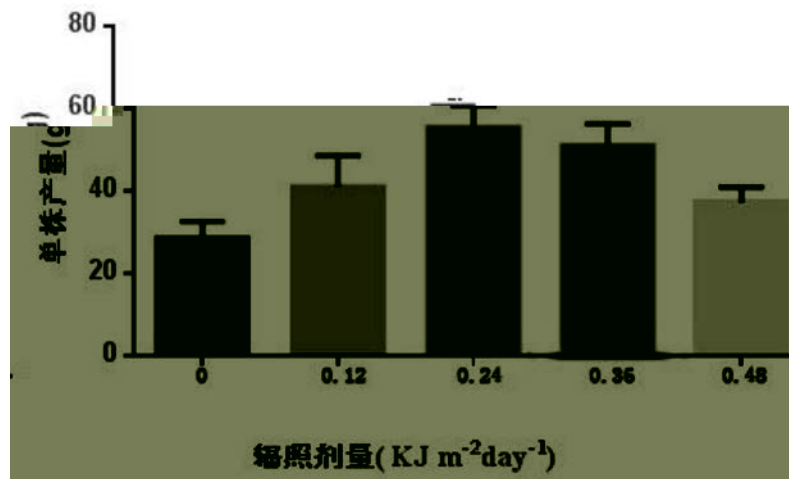
|        |                            |          |                   |                               |                               |                              |                   |
|--------|----------------------------|----------|-------------------|-------------------------------|-------------------------------|------------------------------|-------------------|
| [0059] | (3)                        |          |                   |                               |                               | 20W12RS, 280-320nm           | UV B              |
|        |                            |          | 50cm UV B         |                               |                               | 20.5 $\mu$ W/cm <sup>2</sup> | 11 00             |
|        |                            | 5min     | 30min             | x                             | x                             |                              |                   |
| 2.0GeV |                            | 30 40mA, | 0.5 2.5KeV        |                               | 10 <sup>11</sup> /s           |                              | UV B              |
|        |                            | 20s      | 60min             |                               |                               | UV B                         |                   |
|        |                            |          |                   |                               |                               |                              | 2                 |
|        | 20                         |          | UV B              |                               | 5min                          |                              |                   |
|        | 0.12KJ/m <sup>2</sup> /day |          |                   |                               |                               |                              |                   |
| [0060] |                            |          |                   |                               |                               |                              | I <sub>2</sub> KI |
|        |                            |          |                   |                               | 1                             |                              | 13.9              |
|        | 1                          |          |                   |                               |                               | 1 15                         |                   |
| [0061] |                            |          |                   |                               |                               | 1                            |                   |
| [0062] |                            |          | I <sub>2</sub> KI |                               |                               |                              |                   |
|        | 2                          |          |                   | <sup>12</sup> C <sup>6+</sup> | <sup>12</sup> C <sup>6+</sup> |                              | 5 1               |
|        | C                          |          |                   | 40MeV/u                       |                               |                              |                   |
|        |                            |          |                   | 250mGy                        |                               | 20mGy/min                    |                   |
|        | 1                          |          |                   |                               |                               |                              | I <sub>2</sub> KI |
|        |                            |          |                   |                               | 1                             |                              |                   |
|        | 2                          |          |                   |                               |                               |                              |                   |
| [0063] |                            | 3        | x                 | x                             |                               |                              | 2.0GeV            |
|        |                            | 30 40mA, | 0.5 2.5KeV        |                               | 10 <sup>11</sup> /s           | 20s                          | 60min             |
|        |                            |          |                   |                               |                               |                              | I <sub>2</sub>    |
| KI     |                            |          |                   |                               | 1                             |                              |                   |
|        | 0.8                        |          |                   |                               |                               | 1                            | x                 |
|        |                            |          |                   | x                             |                               |                              |                   |
| [0064] |                            |          |                   |                               |                               |                              |                   |



1



2



3