



pH  
0,4-0,6

pH ( 0,5; ).

SiO<sub>2</sub>

SiO<sub>2</sub>:R<sub>2</sub>O<sub>3</sub>

108%, – 83%, – 89%;

72% [8, 12, 13].

1

( 1,0 )  
0,25

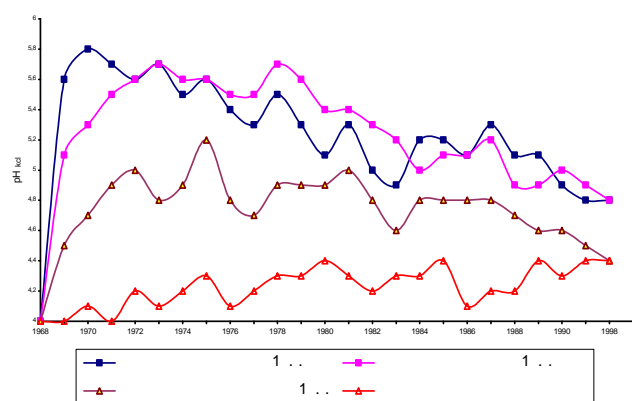
Ca(OH)<sub>2</sub>.

SiO<sub>2</sub>:R<sub>2</sub>O<sub>3</sub>

P<sub>2</sub>O<sub>5</sub>,

5-10%,

2%



9%.

3-4

8-12

5-12%

CaCO<sub>3</sub>, 13-15%

0,5%

45-50%  
0,6%

( 2-9 /100 )

50-60-

[14].

Ca:Mg

Mg:K.

[15]

[16]

| 4.                |         |      |      |           |
|-------------------|---------|------|------|-----------|
| ( . ., 2008 . )   |         |      |      |           |
|                   | /       | , %  | /    | ( - ) , % |
| 1.                | 47,7    | 12,4 | 5,91 | 100,0     |
| 2.NPK             | 51,1    | 13,8 | 7,05 | 119,3     |
| 3. + NPK          | 52,6    | 12,7 | 6,70 | 113,4     |
| 4. NPK+           | 52,2    | 14,7 | 7,67 | 129,8     |
| 5. + NPK+         | 55,4    | 13,4 | 7,42 | 125,5     |
| HCP <sub>05</sub> | 1,1-3,4 |      |      |           |

| 5. ( / )  |      |      |      |      |
|---|------|------|------|------|
| 2001-2003 .                                       |      |      |      |      |
|   | 2001 | 2002 | 2003 |      |
|   | 1,69 | 0,92 | 1,25 | 1,29 |
| 1,0 . .   | 1,91 | 1,05 | 1,54 | 1,50 |
| 1,5 . .   | 2,34 | 1,13 | 1,76 | 1,74 |
| 2,0 . .   | 2,50 | 1,29 | 2,22 | 2,00 |
| N <sub>40</sub> P <sub>70</sub> K <sub>60</sub>   | 2,71 | 1,34 | 2,41 | 2,15 |
| N <sub>40</sub> P <sub>70</sub> K <sub>60</sub> + | 2,83 | 1,51 | 2,57 | 2,30 |
| N <sub>40</sub> P <sub>70</sub> K <sub>60</sub> + | 2,96 | 1,59 | 2,68 | 2,41 |
| N <sub>40</sub> P <sub>70</sub> K <sub>60</sub> + | 3,12 | 1,71 | 2,84 | 2,56 |
| HCP <sub>0,5</sub>                                | 0,08 | 0,09 | 0,14 |      |

[17].

## USE OF INDUSTRIAL WASTE AS LIME FERTILIZER

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