

1.

$$\frac{Ca}{Sr} = -46,259 \cdot \ln(X) + 259,302 \quad (3)$$

$$R^2 = 0,8288.$$

$$Sr^{2+} = [Sr^{2+}] (1 + [CO_3^{2-}]/K_{SrCO_3} + [HCO_3^-]/K_{SrHCO_3} + [SO_4^{2-}]/K_{SrSO_4} + [OH^-]/K_{SrOH}) \quad (4)$$

$$K_{SrCO_3}^0 = 1,152 \cdot 10^{-3}, K_{SrHCO_3}^0 = 8,578 \cdot 10^{-2}, K_{SrSO_4}^0 = 5,715 \cdot 10^{-3} \quad [4].$$

$$73,5\%$$

$$Sr^{2+}$$

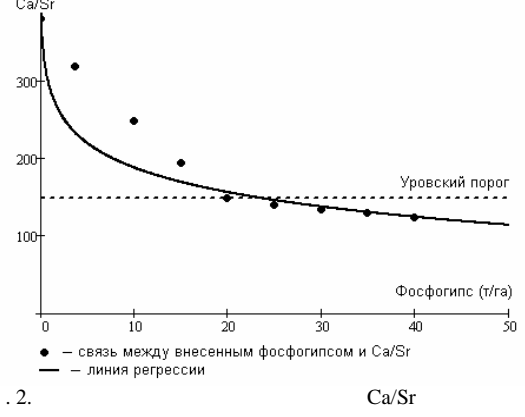
$$20 / 100$$

$$102 \quad (/ = 1/1,2).$$

$$30-60$$

Ca Sr
 Sr ()
 600 /
 Sr
 2-5%
 [4].
 Ca/Sr .

$K_{M(Ca:Sr)} \approx 2,1845 \cdot$
 382 () 125 (40 /).
 [4],
 20 /



2.

1.
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THERMODYNAMIC SUBSTANTIATION OF PHOSPHOGYPSUM RECYCLING IN CHERNOZEM

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Summary. Recycling of phosphogypsum in the 30- to 60-cm layer of calcareous ordinary chernozem in the south-European facies of the northern Krasnodar region under rotavation was considered, as well as the thermodynamic features of passivation of pollutant impurities in phosphogypsum.

Key words: thermodynamics of pollutant passivation in the soil, phosphogypsum recycling in the 30- to 60-cm layer of chernozem under rotavation.