

RECOLTIVATION OF SLAG HEAPS BY FERTILIZATION WITH ORGANIC FERTILIZERS

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Abstract

By the application of the new liquid fertilizer AH-I 100 l/ha at the first alfalfa crop (2011), the values of mobile phosphorus content in the soil increased to 64.15 mg/kg as compared to the non-fertilized control of 51.17 mg/kg. By the increase of the AH-I liquid fertilizer dose to 150 l/ha, the mobile phosphorus content in the soil increased as compared to the non-fertilized control to the value of 68.47 mg/kg due to the fertilizer which contains NPK in its matrix. Upon application of 100 l/ha AH-N, the mobile phosphorus content in the soil increases to 164 mg/kg as compares to the non-fertilized control, whose content is 152 mg/kg. Following the application of the treatment with AH-I in one dose at the second crop, significant increases of the mobile phosphorus content in the soil were noticed, i.e. 77.51 mg/kg as compared to 5349 mg/kg in the non-fertilized witness. AH-N applied in one dose (100 l/ha) obviously increases the mobile phosphorus content in the soil to 180,20 mg/kg as compared to 154 mg/kg in the non-fertilized control. The increase of the AH-N dose (150 l/ha) resulted in an increased mobile phosphorus content up to 189 mg/kg as compared to 154 mg/kg in the non-fertilized control. The applied treatments did not change the total nitrogen content in the soil.

Key words: recultivation, slag heaps, organic fertilizers, alfalfa