RECULTIVATION SUBSTANCE AND COMPOSTS PRODUCED FROM SEMI-COKE: THE EFFECT ON SOIL CHARACTERISTICS, THE YIELD OF FIELD CROPS AND THE ENVIRONMENT

H. RAAVE^{*1}, P. KULDKEPP^{*2} E. LEEDU^{*3}, A. MERIVEE^{*4}

Estonian Agricultural University, Faculty of Agronomy 50 Eerika St., Tartu 412, Estonia

In the nearest years the pollution charge for semi-coke will increase almost 1.7 times, which makes the production of shale oil economically unprofitable. This urges enterprises of shale oil industry to seek intensively for possibilities for turning semi-coke less hazardous for the environment. The joint-stock company Kiviõli Chemical Industries has started to use semi-coke and sphagnum peat (volume rates 1 : 1) for producing recultivation substance. It could be applied for covering waste dumps and oil shale ash dumps, as a growth substrate in recultivation of old gravel pits and abandoned oil shale surface mines, as well as for improving soil characteristics and for increasing the yield of plants in agriculture. The current paper provides an overview of the effect of recultivation substance and the composts produced from it on the soil, the yield of field crops and the environment. It is compiled on the basis of the results of the experiments carried out at the Estonian Agricultural University in 2002.

^{*1} Corresponding author: e-mail *hraave@eau.ee*

^{*2} e-mail *paulk@eau.ee*; *3 e-mail *leedu@eau.ee*; *4 e-mail *agnes@eau.ee*