

SUMMARY

Utilization of unused refined coal is used as plant fertilizer for the purposes of the Corporate Social Responsibility (CSR) program. The research was carried out at the Mineral Processing Laboratory of the Mining Engineering Department of UPN Veteran Yogyakarta and the Laboratory of Chemical Engineering Process and Product System Development UPN Veteran Yogyakarta.

The implementation of this research starts from March to June 2021 by carrying out procedures in accordance with national, international journals as well as research that has been carried out previously. Coal was first finely ground with a mortar and porcelain required as much as 600gr and then the results of the refining were sieved with a 65mesh hanging sieve. The refined coal was then dissolved with 6 samples of 1M NaOH and 6 samples of 1M NaOH for comparison. Coal as much as 40gr, 50gr and 60gr which have been screened, then added with a NaOH base solution in a ratio of 1: 5. Then dissolved in the extraction to get the humic acid. Then the results of the fertilizer were tested at the official Institute for the Study of Agricultural Technology (BPTP) Yogyakarta. The results showed that refined coal produces humic acid which is useful as a plant fertilizer.