Research Title Development of Pellet Nano Silicon Fertilizer from agricultural residues to promote Cassava growth in agricultural areas at Huay Bong Sub district, Nakhon Ratchasima Province

Resaercher Dr. Nuttabodee Viriyawattana[1]

Assistant Professor Dr. Surachat Sinworn[1]

Mr. Kittisak Prukkanone[2]

Organization Faculty of Science and Technology, Suan Dusit University.

Office of National Environmental Board

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This research aims to develop nano-silicon fertilizer from agricultural waste. The substance is added to the growth of cassava. The substance is added to the growth of cassava in the area which planted to cassava in Huay Bong district, Nakhon Ratchasima province. The materials from agricultural residues found in the community, including cassava, corn stalks and straw used to produce fertilizer nano silicon. Straw has the weight% of ash and trace amounts of silicon dioxide has the highest% by weight, ash content of 18.07% and elemental silicon dioxide 8.1 8± 0.31. In addition, the study found that the microstructure technique TEM silicon nanoparticles is quite dense and clustered distribution of pore sizes consistent. The straw is the most suitable to be developed as fertilizer nano silicon. To enhance the growth of cassava. The experimental design was completely random (Completely Randomized Design: CRD) with 4 replications and 3 treatments and the formulation 1 fertilizer Nano Silicon rate of 50 kg of cassava (T1) treatments two fertilizer NPK 50. kg of cassava (T2) and the formulation 3 with control (control) fertilizer Nano silicon in cassava (T3). The experiments revealed that the two NPK fertilizer application rate of 50 kg in cassava (T2) and the yield of cassava growing up. Followed by the formulation 1 fertilizer Nano Silicon rate of 50 kg of cassava (T1) However, when the starch of the cassava revealed that the first application of nano silicon rate of 50 kg of cassava (T1) percentage. Dressing up Growing to a height at 6, 8 and 10 months after planting.