Saychol Sukyankij 2013: Comparison of Sunflower and Sorghum in Absorbing Lead Contaminated Soil from Klity Village, Kanchanaburi Province. Master of Science (Environmental Science and Technology), Major Field: Environmental Science and Technology, Division of Science. Thesis Advisor: Assistant Professor Thanawan Panich-pat, Ph.D. 64 pages.

The research on the comparison of sunflower and sorghum in absorbing lead contaminated soil from Klity village, Kanchanaburi province aimed to study on growth of sunflower and sorghum grown on lead contaminated and uncontaminated soils, lead accumulation in different parts of sunflower and sorghum, and efficiency of sunflower and sorghum for translocation lead from soils both plants. The results showed that the biomass production sunflower and sorghum planted in lead contaminated and uncontaminated soils not significantly different ($P>0.05$). Sunflower and sorghum had the highest lead accumulation in root, followed by stem and leaves, pericarp, flower and seed. Sunflower planted in lead contaminated soil at 105 days harvest showed the highest total lead in whole plant (150.9 ± 15.8 mg kg^{-1}). Sunflower had more ability to accumulate lead in different parts than sorghum. The lead content in seeds of sunflower and sorghum grown on lead contaminated soil exceeded the standard for human consumption but did not exceed the standard as animal feed. Sunflower was more efficient than sorghum in translocating lead from soil into plant. Sunflower at day 105 of harvest had the highest BCF and sunflower at day 35 of harvest had the highest TF.

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