Organic thai herbal production in Thailand: Turmeric, Wan Krab hoi, rang jeud

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Organic farming management relies on developing biological diversity in the field to disrupt habitat for pest organisms, and the purposeful maintenance and replenishment of soil fertility. Organic farmers are not allowed to use synthetic pesticides or fertilizers. Therefore, the experimental plots of this project are located on Naresuan University, Thailand, were forest and unplanted soil. The soils were managed and developed in organic agriculture system. Three of the Thai herbs: Turmeric (Curcuma longa Linn.); Wan Karb Hoi (Rhoeo discolor Hance.);and Rang Jeud (Thumbergia laurifolia Linn.) were planted by using organic fertilizers. Insect pest and disease were controlled through the use of natural product or biopesticide. Weeds were controlled through mulching, cover crops and hand weeding. Soil samples were analyzed for checking the toxic residue of heavy metals such as lead (Pb) and cadmium (Cd). Soil chemical property were measured pH and soil nutrients (Ca, P and K) at least once a year. The toxic residue of Pb and Cd in the soil samples were found not over 100 ppm and 3 ppm respectively. Although the nutrient elements of calcium, phosphorus and potassium were found very low but trend to be raised up in the next. Because they were relies on slowly developing of soil fertility under organic agriculture management. However, those are good benefit for the soils and environment in the long term agroecosystem.