



Effect of Rain-Fed and Surface Drip Irrigation by Efficiency of Fertilizers and Rice Husk Ash Using Cassava Var HB 80 in Late and Early Rainy Seasons

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Field trials using cassava variety HB 80 were conducted at Darnkhuntod district, Nakhonratchasima province, on sandy loam-Sikiew soil series in late and early rainy seasons 2011 and 2012 respectively. The experimental design was a split plot, with 3 replications, each of which comprised 2 main plots: rain-fed (RF) and surface drip irrigation (SDI). The sub-plots were consisting of 6 NPK-fertilizers and rice husk ash (RHA) treatments including the control. The main objectives were to assess effects of 2 water sources and 6 NPK fertilizers and RHA treatments on cassava growth, yield. Late season-cassava treated with SDI, NPK fertilizers and RHA gave more enhancing effects than that of the RF, with or without NPK fertilizers and RHA treatments, with respect to the increment in growth, fresh root yield (FRY). Late season-cassava treated with SDI, NPK fertilizers and RHA gave more enhancing effects than that of the RF, with or without NPK fertilizers and RHA treatments. The water drops on the ground together with the chemical fertilizer formula 15-7-18, 0-0-60 and RHA rate of 50, 50 and 300 kg./rai respectively. The efficiency of cassava in the use of chemical fertilizers and RHA up 50.10 percent. In all, the general perspectives of the results obtained from early season-cassava as affected by water sources and NPK fertilizers and RHA treatments were coincided with that of the late-season cassava's outcomes. Experimental method that the fertilizer formula 15-7-18, 0-0-60 and RHA 50, 25 and 150 kg./rai respectively. The effective use of chemical fertilizers and RHA of cassava up 80.86 percent.

Keywords : Surface Drip Irrigation, Fertilizer, Rice Husk Ash, Cassava, Variety HB 80