

NIPA YENPRAPINE: COST AND RETURN ON INVESTMENT OF SWEET POTATO PRODUCED UNDER IRRIGATED AND NON-IRRIGATED LAND IN THE CENTRAL PLAIN REGION OF THAILAND. THESIS ADVISOR : ASST. PROF. CHAIRERG SAGWANSUPYAKORN, Ph.D. 181 PP.

The objective of this thesis is to study the cost and return on investment of sweet potato produced under irrigated and non-irrigated land in the central plain region of Thailand during March to November 1988. Four groups of 20 selected growers were interviewed; the first two groups grew late variety under irrigated land in Banglen District, Nakhon Pathom and Damnuonsadoak District, Ratchaburi. The third group grew early variety under irrigated land in Bangpahan District, Ayutthaya. And, the last group grew early variety under non-irrigated land in Pagtou District, Ratchaburi. The results revealed as following;

The production cost of late variety sweet potato at Banglen and Damnuonsadoak District averaged 4,166.40 Baht and 5,217.20 Baht per rai, respectively. The profit margin to total revenue ratio of sweet potato at Banglen and Damnuonsadoak District were 0.60 and 0.40, respectively. The ratio of profit margin to total production cost of Banglen and Damnuonsadoak Districts were 150.92 % and 67.29 %, respectively.

At Bangpahan District, Ayutthaya, the production cost of early variety sweet potato; Pakchong and Eka variety; averaged 2,816.73 Baht per rai. Profit margin to total revenue ratio were 0.33 and 0.15, respectively. The ratio of profit margin to total production cost were 50.18 % and 17.65 %, respectively.

The production cost of early variety sweet potato in Pagtou District, Ratchaburi, averaged 892.18 Baht per rai. The profit margin to total revenue ratio was 0.39 while the ratio of profit margin to total cost was 65.02 %

Finally, it was found that, the return on investment of late variety at Banglen District was higher than Damnuonsadoak District. For the production of early variety, the ratio of profit margin to total production cost of Pagtou District was higher than Bangpahan District, and the return was lower than the return from the production of late variety.

The main problems in growing sweet potato were the accumulation of sweet potato weevil and insufficient water supplies. To solve the first problem, crop rotation system was strongly recommended. For the second problem, irrigated canal should be provided under the government policy.