

Thesis Title The Development of Using Bio-extract Solutions for Sugar-Cane Growing for Agriculturists in Moo 1, Tambon Namsud, Phatthana-Nikhom District, Lop Buri Province .

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ABSTRACT

The purposes of this research were to 1) study the present condition, problems or obstacles, and needs of using bio-extract solutions for sugar-cane growing of the agriculturists in Moo 1, Tambon Namsud 2) search the approaches, ways, and success indicators in developing using bio-extract solutions for sugar-cane growing of the farmers in Moo 1, Tambon Namsud 3) develop the using of bio-extract solutions for sugar-cane growing of thirty agriculturists in Moo 1, Tambon Namsud, Phatthana Nikhom District, Lop Buri Province, The study was conducted by learning process development based on the belief in the capability of the staff who would be for responsible for the development of using bio-extract solutions in growing sugar-cane if they had suitable reinforcement. Therefore, this research and development by using participatory action research focused on intensive participation of all stakeholders in every step of the research starting from studying the present condition, problems and obstacles, searching the approaches and the ways in development to set the success indicator in development and conducting the activities in order to develop the bio-extract solutions using for growing sugar-cane.

This research and development created a corporative learning opportunity of all stakeholders by doing activity for the development in each step suitably. The study was conducted by using the research framework as the procedure conduction concerning the production of bio-extract solutions: raw materials, production processes, products and using bio-extract solutions in regard to rate of mixture, time and time period of squirting, mixture with other solutions, and squirting equipment.

The findings were

1) most of the agriculturists in Moo 1, Tumbon Namsud, Phatthana Nikhorn District, Lop Buri province, grew sugar-cane and used to use bio-extract solutions but with no actual producing and using,

2) regarding the problems and the obstacles of the development in using bio-extract solutions, most of the staff who were responsible for this lacked knowledge, understanding, skills, and positive attitude towards production and using bio-extract solutions in growing sugar-cane, the agriculturalists didn't get any training and there's rarely public relation about producing and using bio-extract solutions to the agriculturists,

3) increasing knowledge, understanding, skills, and positive attitude in using bio-extract solutions to the staff by operational training, providing the correct and appropriated production information about using bio-extract solutions were the approaches and the ways to use bio-extract solutions in growing sugar-cane of the agriculturists,

4) the development strategy of using bio-extract solutions in growing sugar-cane starting from training the agriculturists directly by providing the high suitable and possible development approach that was the training with the content that consisted of 2 parts

4.1) producing bio-extract solutions comprising the details about raw materials, production processes, and products,

4.2) using bio-extract solutions comprising rate of mixture, time and time period of squirting, mixture with other solutions, and squirting equipment; the training was conducted by giving a lecture and practicing,

5) the result of using bio-extract solutions' development improved the agriculturists' understanding, positive attitude and skills in producing and using the solutions for growing sugar-cane and it resulted in using solution development of the agriculturists more effectively and also decreased capital expenditure. Moreover, the experience from the research and development additionally constructed the learning processes from conducting the development activities in order to train the staff whose responsibility was using bio-extract solutions for growing sugar-cane until they were able to use them effectively while Saraburi Sugar Refinery can apply the learning experience from this study for improving other related contents.