

Kittiya Ploywattanawong 2009: The Presentation of Kamphaeng Saen Sugarcane Varietal Testing Data through Information System. Master of Science (Agricultural Information Technology), Major Field: Agricultural Information Technology, Interdisciplinary Graduate Program. Thesis Advisor: Associate Professor Rewat Lersrutaiyotin, D.Agr. 97 pages.

Kamphaeng Saen Sugarcane Varietal improvement has been done continuously by the Cane and Sugar Research and Development Center. Therefore, information should be extended to farmers or people who are interested. The research objective was to create information system to display the suitability of Kamphaeng Saen Sugarcane Varietal testing. The process consisted of the use of Geographic Information System for overlay operation of layers, Thailand map, waypoints of testing areas and 62 group of soil series to make maps and connected them with 20 varietal Kamphaeng Saen Sugarcane varietal cultural control in 23 testing areas. The results were the system processed soil group and cultural control method in testing area. The users could study Kamphaeng Saen sugarcane varietal data that had similar climate, areas and cultural control. Moreover, they could use information as the reference to select the most suitable sugarcane varieties through <http://sugarcanecenter.rdi.kps.ku.ac.th/>.

This system study was to present the primary testing information of cane planted in 23 testing areas. Therefore, the ratoon data including an increase of testing area for new Kamphaeng Saen Sugarcane varietal would be added. However, the information system can be developed and used as a prototype of other plants tested in various areas for presenting the varietal result under the difference of areas and cultural control.

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Thesis Advisor's signature