

Suphatsa Pairtong 2008: Development of Expert Systems for Sugarcane Production.
Master of Science (Agricultural Information Technology), Major Field: Agricultural
Information Technology, Interdisciplinary Graduate Program. Thesis Advisor:
Associate Professor Prasert Chatwachirawong, M.S. 65 pages.

The expert systems for sugarcane production were developed. There were two main components, comprised with the analytical and database systems for sugarcane production. The analytical systems were generally known as production expert systems. It's modified MySQL database software as knowledge-base, and developed matching-rule using a computer language PHP: Hypertext Preprocessor. Macromedia Dreamweaver MX software was used to developing the user interfaces. The systems will help sugarcane farmers to making decision for 1) selection of sugarcane varieties to optimum the planting areas, 2) recommendation of land preparation method, time schedule and amount of fertilizer applying to sugarcane plant, and 3) diagnosis of sugarcane diseases for protection and control. The database systems provided necessary information for sugarcane production, viz. the main commercial varieties, texture and productivity of soil in planting area, diseases protection, and weeds control. Thus, farmers can use the systems to making decision for sugarcane production in the specific planting area.

Student's signature

Thesis Advisor's signature

____ / ____ / ____