4036772 ENIM/M: MAJOR: INFORMATION MANAGEMENT ON ENVIRONMENTS

AND NATURAL RESOURCES; M.Sc. (TECHNOLOGY OF

INFORMATION SYSTEM MANAGEMENT)

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THEERAWAT WORACAMIN: AN EXPERT SYSTEM FOR IDENTIFYING ORCHID SPECIES: THAI DENDROBIUM. THESIS ADVISORS: PONSIRI SINSAWASDI, M.Sc., PAT TAWEEPOK, Ph.D. 126 P. ISBN 974-04-2194-6

An expert system has been developed for identifying orchid species and an applied program has been developed to utilize this expert system. Also, it is a tool for both educators and students in research processes concerning their species examination and data collection.

There are four major parts in this system. First, identification by Taxonomy: plants are identified for text book emulation. Second, identifying by parts of the plants: orchids are identified by searching via a kind of width line. Third, the database works as an information collection and essential base of the system; Finally, the glossary: especial or technical terms of orchid species can be found and identified. The study sample is a kind of Thai Dendrobium.

The result of the study for orchid species identification is a new way of identifying species. Moreover, it can examine kinds of orchid species and increase information of the system. Accordingly, we are able to insert, delete, modify the data, and also glossary terms for searching. Therefore, this system is able to identify orchid species satisfactorily. It is accurate in searching technical terms and it has information collecting capability. In the case of numerical expansion on data, this system is able to increase the ability to identify orchid species.