

WAN and Thai herbs Database Management System in Sakon Nakhon Province

Wuttipong Hamvong^{1,2,*}, Pichet Wechvitan^{1,3}, Wiwat Sriwicha^{1,3}

¹ Rajamangala University of Technology Isan, Sakon Nakorn Campus, 47160, Thailand

² Fishery Science, Faculty of Natural Resources Rajamangala University of Technology Isan, Sakon Nakorn Campus, 47160, Thailand

³ Medicine Science, Faculty of Natural Resources Rajamangala University of Technology Isan, Sakon Nakorn Campus, 47160, Thailand

*Corresponding Author: harmvong@hotmail.com

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ABSTRACT

This research aims to create a database on biodiversity and the integrity of the herbs in Sakon Nakhon province. This research has defined the scope into 3 phases. In the early stages of the data which existing recorded at no less than 200 species, the second phase was the screening test, review and update of the first phase in consistent with the correct information. The third phase way the mechanism to be able to transform data from the second period to update. Survey was done in 18 districts of Sakon Nakhon Thailand. There were found that many of the herb names that appear in terms of used for treat a specific disease, such as WAN kae-bua-mow, WAN kae-kai, WAN kan-pob, WAN kae-ma-kad, WAN kae-pla-duk-kad, WAN me-luk, WAN pod-tow, WAN kai-pit etc. For analysis of data from secondary data source it can be called to have about 56 names. All information were designed to store data information for a database that is WAN.DBF which not less than 256,000 kinds of data to support in the future. In addition, this study also presents the database of the herbs through the Internet to determine the performance of database systems. The understanding of database were test in the sample of 200 persons by t-Test Two-Sample Assuming analysis with the factor of with or without the understanding. The results of the study in term of the knowledge showed that the performance of the database and Thai herbs after receiving training were 3.96 at a high level ($P > 0.05$). The studied group + could be understand for the database after training which differ with statistical significance at the 0.05 and the Satisfaction level was 3.43 for the update data.

Keywords: WAN, herbs, database.

INTRODUCTION

The Sakon Nakorn province has topography basin of the Northeastern, Thailand. Almost middle area going to the north has Phu Phan massif, it has natural sources water for

agriculture such as Nong Han marsh, Song Khram river, Pung river, Yam river, Pha Hang river, Oon river, Kam river. The origins and genetic resources is important tropical greenery WAN and herbs diverse species, that role of being a way of life in the area long

live. WAN and herbs is resources and it is proof of Thailand wisdom to inherited methods by used as food, medicines and amulets fortune and as anchor the belief of traditional knowledge, but current WAN and herbs to destroyed by human ignorance. The growth of technology, the change of environment and ecology or by natural disaster causing the loss of WAN and herbs and Thailand wisdom inherited for evidence to be difficult.

Biodiversity there are resources such as WAN and herbs of Sakon Nakorn province. If to create a database of biodiversity intact of WAN and herbs in Sakon Nakorn province, to serve as a center of information for benefit education and research. Thailand wisdom inherited not to get lost and learning to balance a process driven into tangibles. Lead to useful applications the nation and mankind.

MATERIALS AND METHOD

1. Explore the WAN and Thai herbs in Sakon Nakhon (begin 01/01/2010 end 31/05/2011) They are explore to area community place, for collect data WAN and Thai herbs in 18 amphur of the Sakon Nakhon province, in on October 2010 finish in May 2011. As Kut Bak, Ku Su Man, Kum Ta Kla, Khok Si Suphan, Charoen Sin, Tao Ngoi, Nikhom Nam Un, Ban Muang, Phanna Nikhom, Phang Khon, Phon Na Kaeo, Phu Phan, Maung Sakon, Warit Cha Phum, Sawang Dandin, Song Dao, Arkad Aum Naow, Wanon Niwat

2. Study and collect the data from secondary data source (begin 01/11/2010 end 31/05/2011) They collected the data from data secondary in public library, and all temple in 18 amphurs, get document important of history about with write medicine story.

3. Screen data for the proper dissemination by without affecting the data owner (begin 01/02/2011 end 31/05/2011) Lead the data were classified species by references.

4. Design and create WAN and Thai herbs database system. Using current technology in a systematic. (begin 01/04/2011 end 30/06/2011)

5. Use descriptive statistic and inferential statistic (t-Test: Two-Sample Assuming Equal Variances) to analysis data from survey form. Use samples of 200 person from use website URL : <http://natres.skc.rmuti.ac.th/WAN/index.html>

RESULTS AND DISCUSSION

1. WAN.DBF (Table 1) is database and the researcher have presented to change website at URL : <http://natres.skc.rmuti.ac.th/WAN/index.html> (Fig. 1, Fig.2) and documentation (Fig.3, Fig.4, Fig.5)

Table 1 WAN.DBF

File Name		Data				
Name	Meaning	Name	Meaning	Type	Length	Dec.
WAN.D BF	WAN and Thai herbs in Sakon Nakorn province	Code	Code wan	C	150	-
		Plant_Na	Name wan	C	150	-
		Scientific_Na	Scientific name	C	150	-
		Family_Na	Family name	C	150	-
		Another_Na	Another name	C	225	-
		Character_1	Type of WAN#1	C	225	-
		Character_2	Type of WAN#2	C	225	-
		Character_3	Type of WAN#3	C	225	-
		Property_1	Property of WAN#1	C	225	-
		Property_2	Property of WAN#2	C	225	-
		Property_3	Property of WAN#3	C	225	-
		Habitat_1	Habitat of WAN#1	C	225	-
		Habitat_2	Habitat of WAN#2	C	225	-
		Habitat_3	Habitat of WAN#3	C	225	-
		Image_1	Image of WAN#1	Jpg	JPG	-
		Image_1	Image of WAN#2	Jpg	JPG	-
Image_1	Image of WAN#3	Jpg	JPG	-		
Name	Name of owner	C	255	-		

notes : Type --> C = Character, Jpg = image Jpeg

2. In addition this study also presents the database of the herbs through the Internet to determine the performance of database system. The understanding of database were test in the sample of 200 persons by t-Test Two-Sample Assuming analysis with the factor of with or without the understanding.

The results of the study in term of the knowledge showed what the performance of the database and Thai herbs after receiving training were 3.96 at a high level ($P>0.05$) (Table 2)

Table 2 The performance of the database system

t-Test: Two-Sample Assuming Equal Variances		
	ฐานข้อมูลครอบครัว	ฐานข้อมูลครอบครัว
Mean	1	3.96
Variance	0	0.852663317
Observations	200	200
Pooled Variance	0.426331658	
Hypothesized Mean Difference	0	
df	398	
t Stat	-45.33336107	
P(T<=t) one-tail	1.4516E-159	
t Critical one-tail	1.648691174	
P(T<=t) two-tail	2.9032E-159	
t Critical two-tail	1.965942248	

3. The studied group could be understand for the database after training which differ with statistical significance at the 0.05 and the satisfaction level was 3.43 for the update data. (Table 3)



Fig.1 Web site for WAN and Thai herbs in Sakon Nakhon province



Fig.2 Web site for WAN and Thai herbs of About page

Table 3 Result of complacency of User to use WAN.DBF at URL: <http://natres.skc.rmuti.ac.th/WAN/index.html>

Item	complacency
1. The database covers botany of WAN and Thai herbs	3.96
2. Time access to the database quickly	3.12
3. Quick search data of WAN and Thai herbs	4.09
4. Modern database systems to use as much	3.70
5. Easy and convenient of web site first page	4.10
6. No complicated of web site	3.46
7. Information of WAN and Thai herb is accurate	3.96
8. A notification in error of web site	2.47
9. A function to assist in the search data	2.81
10. A data security copy protection and copyright infringement	2.69
Average	3.43

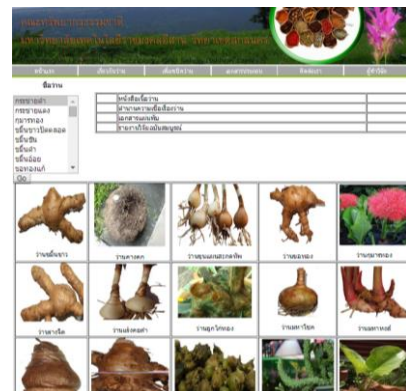


Fig.3 Web site for WAN and Thai herbs of document page

