

Revealing Nature/Culture Linkages at Chiang Mai Old City Through Literary Works

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Abstract

This article examines plants in Lanna literary works that inscribed in Lanna languages in 1357-1952 AC., with a landscape context, scenery description, and emotional expression in literature. Plants were studied in six groups as tree, shrub, ground cover, climber, epiphytic plant, and aquatic plant. The outstanding species by number of frequency from this study are Cogon grass (*Imperata cylindrica*), Bodhi tree (*Ficus religiosa*), White Fig (*Ficus lacor*), Coconut (*Cocos nucifera*), Banana (*Musa spp.*) and Red Waterlily (*Nymphaea lotus*) and these plants still available in Chiang Mai Old City area and relate with many cultural and historical evidences. The result of this study has present the linkage between nature and culture that reflected from literary works to the natural element. The result of this paper can to document the perception of the plant in Lanna literary works to make more understanding in landscape plant and place-making in Chiang Mai Old City.

Keywords: Landscape Plant, Literary Works, Lanna, Chiang Mai, Place Making.

A. Introduction

Plants give a character to the place and identify the conquest of the inhabitants over their natural environment (Loumou & Giourga, 2003). The plant is an element in making and managing the connection between people and place; it engages the full range of sense and feeling in space (Robinson, 2004). Plants constitute an essential component of the

anthropological landscape and are living artifacts of local history and culture. People value trees as vital assets, landmarks, markers of religious, social, and symbolic interest (Read, 2000). Natural characteristics and qualities, such as a statue, longevity, vitality, and self-regenerative power, support the conceptualization of plant as a representation of unity, continuity, social organization, and sanctity (Rival, 2001).

In the northern of Thailand, Chiang Mai province, was acknowledged as the former capital city of Lanna Kingdom in ancient time in 1296–1768 (Penth, 2000), located on flat land along the foothills of Doi Suthep Mountain which sloped down from the west to the great river basin in the east, with nearly 1959 species of ferns and flowering plants on the mountain surrounded the City (Rerkasem & Rerkasem, 1995). From the numerous endemic plant species in Chiang Mai ecosystem, the people who were living in adopted many kinds of plants into life and connected to them believe in the city inescapably, then develop to their culture harmoniously.

Art as a cultural phenomenon can be characterized by time as well as space, which has to be considered the function of communication networks and centers rather than specific natural conditions (Kaufmann & Pilliod, 2017). A study of art such as literature, poetry, painting, religion, and other human endeavors should convince us that plants have served as meaningful signs, indexical, iconic, and symbolic, in many cultures because they are living beings possessing features that evoke the attribution of meaning to a very considerable degree (Krampen, 1981). For seven centuries, Chiang Mai has been the center of lively culture and

civilization in the hills of what is now northern Thailand. Owing to widespread literacy art and energetic intellectual life. One of the most important of these, the Chiang Mai Chronicle, was written in 1827 to explain the growth and strength of the Kingdom of Lan Na, which Chiang Mai dominated. This literature also described the unique auspicious plants, such as cogon grass (*Imperata cylindrical*), a giant White fig tree (*Ficus lacor*) that existed in this area before the city constructed (Wonglangka, 2015).

In the present day, Chiang Mai is a place very much alive and exuberant, with a population of more than 1.6 million, of whom 172,000 live in the city of Chiang Mai itself, with the influx of tourists about 5 million per year (UNESCO, 2016). There are also unskilled workers who migrated from the neighboring areas who take up all kinds of jobs with over-development, rapid urbanization, that are currently treat can harmful to the integrity of Chiang Mai as a whole. Vegetation can play an important role in the city's image and sense of place (Tuan, 2001), interrelated with the landscape ecology, Chiang Mai Old City, located in the fertile geographical character that can grow various varieties of landscape plants. This issue reflex to the sensitivity of endemic plants species, that connected with the culture of Chiang Mai Old City, among rapid urbanization and influx of tourist, by the unobtrusive of the landowner, many species of exotic plants have planted in Chiang Mai Old City area by reason of landscape modernization and tourism attractiveness, irrelevant with the culture and history and of the place without any regulation and guideline in landscape planting, Chiang Mai Old City has

declined in character and sense of place, and will lose all before long. This study aims to compile and analyze plant species from plants mentioned in all the literary works that reveal with Ching Mai Old City in order to contribute to a better understanding of the perception and uses of plants in the Lanna landscape.

B. Methodology

This study is about the naturalistic representation of plants in all literary works that inscribed in Lanna languages and referred to Chiang Mai Old City in the story. From this condition, 18 literary works that wrote in 1357-1952 AC. were selected (Table 1), collecting all reference to plant, plant communities, and products derived from plants. The botanical species to which the local name correspond were assigned on the reference of Lanna medicinal plant dictionary (Manosroi, Manosroi, & Rungrueangsri, 2009) and A Field Guide to the Forest Trees of Northern volume 1-19 (Gardner, Sidisunthorn, & Anusarnsunthorn, 2000). For each plant cited in the text, analyzing of place and emotional that revealed with plant in the literature works also collected. In order to categorization, plants their occurrences were grouped by types of plants, type of place that found the plant in the literary works, type literary using, and emotional of literature when they use this plant mentioned in the works.

Table 1. Selected literary work that inscribed in Lanna languages and mentioned to Chiang Mai Old City in the story.

Thai Name	English Name	Type	Year
ตำนานมูลศาสนา	The Cronicle of Religion	Chronicle	1357
มหายานคำวี่	The Scripture of Mahayana buddhism	Tale	1477
ซีกกาลมาลีปกรณ์	Epochs of the Conqueror	Tale	1517
นิราศหรือภูอูชัย	The Joumey to HariphunCahi	Poem	1517
มังฆราวรบเชียงใหม่	The Battle of Mangtra and Chaing Mai	Chronicle	1615
ตำนานคดอยสุเทพ	The Chonicle of Suthep Mountain	Chronicle	1640
โคลงพื้นวัดพระสิงห์	The poem of Prasingha Temple	Chronicle	1827
ตำนานพื้นเมืองเชียงใหม่	The Cronicle of Chiang Mai	Chronicle	1843
ราชวงศ์บ้านนาคีเมืองเชียงใหม่	The Poem of Ciang Mai Royal Family	Chronicle	1847
โคลงคดอยสุเทพ	The Poem of Suthep Mountain	Chronicle	1873
ตำนานพระเจ้าเสียบโลก	The Cronicle of Buddha in Lanna	Tale	1882
ตำนานสิบห้าราชวงศ์	The Cronicle of 15 Dynasty	Chronicle	1889
ตำนานโยนก	The Cronicle of Yonok	Chronicle	1906
คำทูลขอพระราชชายาเจ้าดารารัศมี	The Greeting poem of Lanna Princes : Dararasmí	Poem	1910
ตำนานวัดสวนดอก	The Cronicle of Suan Dok Temple	Chronicle	1917
คำทูลขอเรื่องตำนานแลสร้างวัดสวนดอกไม้จันทร์เชียงใหม่	The Poem of Suan Dok Temple Estabilshment	Chronicle	1931
ตำนานเชียงใหม่ปางเดิม	The Cronicle of Primitive Chaing Mai	Chronicle	1952

C. Result

Plants are an essential element in Lanna literature since they appear in a multitude of passages with many functions and multiple meanings, such as a description of landscape or the emotional expression of the story. From 17 pieces of literature, 141 occurring with 81 species of plants were found in this study (Table 2). Considerate by plant type, the tree is the most significant group found in Lanna literature as 58 species, while shrub, ground cover, climber, aquatic plants, and epiphytic plant were found as 12, 3, 3, 2 species respectively.

Table 2. Categories of plant in literary work that inscribed in Lanna languages and mentioned to Chiang Mai Old City in the story by types pf plant.

Type	Local Name	Common Name	Scientific Name	Family	Found
Tree	โพธิ์	Bodhi tree	<i>Ficus religiosa L.</i>	MORACEAE	9
	ผักเหือด	White fig	<i>Ficus virens Aiton.</i>	MORACEAE.	8
	มะพร้าว	Coconut	<i>Cocos nucifera L.</i>	PALMAE	6

กล้วย	Banana	<i>Musa sapientum</i> Linn.	MUSACEAE	4
ตาล	Toddy palm	<i>Borassus flabellifer</i> L.	PALMAE	4
ประตู่	Burmese Rosewood	<i>Pterocarpus indicus</i> Willd.	FABACEAE	3
ยางนา	Yang	<i>Dipterocarpus alatus</i>	DIPTEROCARPACEAE	3
หมากสง	Betel Nut Palm	<i>Areca catechu</i> L.	ARECACEAE	3
กุ่ม	Indian ash tree	<i>Lannea coromandelica</i>	ANACARDIACEAE	2
จัน	Diospyros decandra	<i>Diospyros decandra</i>	EBENACEAE	2
จำปา	Orange champak	<i>Magnolia champaca</i>	MAGNOLIACEAE	2
ตะขบป่า	Ramontchi	<i>Flacourtia indica</i>	SALICACEAE	2
เต็ง	Siamese Sal	<i>Shorea obtusa</i> Wall. ex Blume	DIPTEROCARPACEAE	2
ทองกวาว	Flame of the forest	<i>Butea monosperma</i> (Lam.) Taub.	PAPILIONOIDEAE	2
มะขวิด	Wood Apple	<i>Feronia limonia</i>	RUTACEAE	2
มะตูม	Bael tree	<i>Aegle marmelos</i> L.	RUTACEAE	2
มะม่วง	Mango	<i>Mangifera indica</i> L.	ANACARDIACEAE	2
สัก	Teak	<i>Tectona grandis</i> L.f.	VERBENACEAE	2
เหียง	Hairy Keruing	<i>Dipterocarpus obtusifolius</i>	DIPTEROCARPACEAE	2
กระดังงา	YlangYlang	<i>Cananga odorata</i>	ANNONACEAE	1
กระพุ่ม	Wild cinchona	<i>Neonauclea purpurea</i>	RUBIACEAE	1
ซีหนอน	-	<i>Zollingeria dongnaiensis</i>	SAPINDACEAE	1
จวง	-	<i>Cinnamomum porrectum</i>	LAURACEAE	1
กระพี้จั่น	-	<i>Millettia brandisiana</i> Kurz	LEG.PAPILIONOIDEAE	1
จิกน้ำ	-	<i>Barringtonia acutangula</i>	LECYTHIDACEAE	1
จำปี	White Chempaka	<i>Michelia alba</i> (DC.) Figlar	MAGNOLIACEAE	1
ชมพู่	Rose Apple	<i>Syzygium aqueum</i>	MYRTACEAE	1
แดง	Iron wood	<i>Xylia xylocarpa</i>	FABACEAE	1
ตาล	Toddy Palm	<i>Borassus flabellifer</i>	PALMAE	1
บุนนาค	Iron wood	<i>Mesua ferrea</i> L.	GUTTIFERAE	1
ไผ่ป่า	Wild Bamboo	<i>Bambusa bambos</i>	POACEAE	1
ไผ่รวก	Long sheath Bamboo	<i>Thyrsostachys siamensis</i>	POACEAE	1
ไผ่หก	Hamilton's bamboo	<i>Dendrocalamus hamiltonii</i>	POACEAE	1

พะยอม	-	<i>Shorea roxburghii</i> <i>G.Don</i>	DIPTEROCARPACEAE	1
พลวง	-	<i>Dipterocarpus</i> <i>tuberculatus</i>	DIPTEROCARPACEAE	1
พะยอม	-	<i>Shorea roxburghii</i> <i>G.Don</i>	DIPTEROCARPACEAE	1
พิกุล	Bullet wood	<i>Mimusops elengi L.</i>	SAPOTACEAE	1
มณฑา	Magnolita	<i>Talauma candollei Bl.</i>	MAGNOLIACEAE	1
มะก้อ	Chinquapin	<i>Castanopsis</i> <i>diversifolia</i>	FAGACEAE	1
มะกอก	Hog plum	<i>Spondias pinnata (L.</i> <i>f.) Kurz</i>	ANACARDIACEAE	1
มะขาม	Tamarind	<i>Tamarindus indica L.</i>	LEG.CAESALPINIOIDEAE	1
มะเดื่อ	Fig	<i>Ficus racemosa L.</i>	MORACEAE.	1
มะพลับ	Bo Tree	<i>Diospyros malabarica</i> <i>var. Siamensis</i>	EBENACEAE	1
มะแฟน	-	<i>Protium serratum</i>	BURSERACEAE	1
มะไฟ	Burmese grape	<i>Baccaurea ramiflora</i> <i>Lour.</i>	PHYLLANTHACEAE	1
ยมหิน	Indian mahogany	<i>Chukrasia tabularis</i>	MELIACEAE	1
พยูง	Siamese rosewood	<i>Dalbergia</i> <i>cochinchinensis</i>	FABACEAE	1
รัง	Burmese sal	<i>Shorea siamensis</i>	DIPTEROCARPACEAE	1
ลาน	Talipot Palm	<i>Corypha</i> <i>umbraculifera L.</i>	PALMAE	1
กร่าง	Banyan tree	<i>Ficus drupacea</i>	MORACEAE	1
ส้มแก้ว	Tangor	<i>Citrus nobilis</i>	RUTACEAE	1
ส้มจุก	Mandarin Orange	<i>Citrus reticulata</i>	RUTACEAE	1
สะแก	Combretum	<i>Combretum</i> <i>quadrangulare</i>	COMBRETACEAE	1
สารอง	Malva nut	<i>Scaphium</i> <i>macropodum</i>	MALVACEAE	1
สีเสียด	Catechu tree	<i>Acacia catechu</i>	FABACEAE	1
หว่า	Java Plum	<i>Syzygium cumini (L.)</i> <i>Skeels</i>	MYRTACEAE	1
หาด	Monkey Fruit	<i>Artocarpus lacucha</i>	MORACEAE	1
อโศกน้ำ	Saraca	<i>Saraca indica L.</i>	FABACEAE	1
Total			58 Species	

Table 2. (Continued)

Type	Local Name	Common Name	Scientific Name	Family	Found
Shrub	หญ้าคา	Cogon Grass	<i>Imperata cylindrica</i>	POACEAE	10
	งา	Sesame	<i>Sesamum indicum</i>	PEDALIACEAE	2
	เลา	Wild Sugarcane	<i>Saccharum spontaneum</i>	POACEAE	2
	อ้อย	Sugarcane	<i>Saccharum officinarum</i> L.	POACEAE	2
	ข่า	Galanga	<i>Alpinia galanga</i>	ZINGIBERACEAE	1
	ข้าว	Rice	<i>Oryza sativa</i>	POACEAE	1
	ข้าวโพดเทียน	Waxy Corn	<i>Zea mays</i>	POACEAE	1
	ถั่ว	Mung Bean	<i>Vigna radiata</i>	FABACEAE	1
	บอน	Wild Taro	<i>Colocasia esculenta</i> var. <i>aquatilis</i>	ARACEAE	1
	มหาหงส์	-	<i>Hedychium coronarium</i> J.Koenig	ZINGIBERACEAE	1
	เมี่ยง	Tea	<i>Camellia sinensis</i>	THEACEAE	1
	หม่อน	Mulberry	<i>Morus nigra</i>	MORACEAE	1
Total				12 Species	
Ground Cover	-	-	<i>Eragrostis uniolooides</i>	POACEAE	2
	หญ้ามงกระต่าย	Bermuda Grass	<i>Cynodon dactylon</i> (L.) Pers.	POACEAE	1
	หญ้าแห้วหมู	Nut grass	<i>Cyperus rotundus</i>	CYPERACEAE	1
Total				3 Species	
Epiphyte	อ้านางกลาย	-	<i>Pecteilis susanna</i>	OCHIDACEAE	1
	เอื้องผึ้ง	Lindley's dendrobium	<i>Dendrobium lindleyi</i>	OCHIDACEAE	1
Total				2 Species	
Climber	พลู	Betel Laef	<i>Piper bettle</i> L.	PIPERACEAE	2
	ขจร	Cowslip creeper	<i>Telosma minor</i>	APOCYNACEAE	1
	หวาย	Rattan	<i>Calamus caesius</i>	ARACEAE	1
Total				3 Species	
Aquatic	บัวสายแดง	Waterliity-Red	<i>Nymphaea lotus</i> Linn.	NYMPHAEACEAE	4
	บัวสายขาว	Waterliity-White	<i>Nymphaea lotus</i> Linn.	NYMPHAEACEAE	1
	บัวหลวง	Lotus	<i>Nelumbo nucifera</i> Gaertn.	NELUMBONACEAE	1
Total				3 Species	

From Table 2, The botanical element mentioned most frequently in Lanna literary works are categorized by type of plants. Bodhi tree (*Ficus religiosa*) reached the highest frequency of trees that available in the pieces of literature, while Cogon grass (*Imperata cylindrica*) reached the highest frequency in a group of shrubs. Some plants from the study have the same species, such as Waterlily (*Nymphaea lotus*), but the literature has mentioned in specific detail of color, Red-Waterlily has the most frequently mentioned than WhiteWaterlily. The categorized plants by location in literature works can show the variation of plants in a different place. Table 3 showed three significant groups of locations as Urban area, Sub-urban area, and Natural area; the tree is the primary type of plant that figured in all locations, followed by shrub, aquatic plant, ground cover, climber, and epiphytic plant respectively

Table 3. Number of appearance of plants in difference location from selected Lanna literary works.

Place Type		Plant Type						Total
		Tree	Shrub	Climber	Ground Cover	Epiphytic Plant	Aquatic Plant	
Urban	Public Area	38	2	2			4	
	Garden	6						
	Temple	2				1		
	Total	46	2	2	0	1	4	55
Sub-Urban	Grove	13						
	Orchard	6	3	1			1	
	Farm		2					
	Residential Area	1						
	Field		1					
Total	20	6	1	0	0	1	28	
Natural	Mountain	28	3	0		1		
	Grassland	1	12	0	4			
	Flat Land	5						
	Wet land	1	1	0			1	
	Total	35	16	0	4	1	1	57
Grand Total		101	24	3	4	2	6	

Table 4. Number of appearance of plants in difference location from selected Lanna literary works.

Emotion	Common Name	Scientific Name	Type	No. Found
Auspicious	White fig	<i>Ficus virens Aiton.</i>	Tree	6
	Bodhi tree	<i>Ficus religiosa L.</i>	Tree	5
	Congo Grass	<i>Imperata cylindrica</i>	Shrub	5
	Burmese Rosewood	<i>Pterocarpus indicus Willd.</i>	Tree	3
	Banana	<i>Musa sapientum Linn.</i>	Tree	2
	Siamese Sal	<i>Shorea obtusa Wall. ex Blume</i>	Tree	2
	Indian ash tree	<i>Lannea coromandelica</i>	Tree	1
	Galanga	<i>Alpinia galanga</i>	Shrub	1
	Water Liity-Red	<i>Nymphaea lotus Linn.</i>	Aquatic	1
	Coconut tree	<i>Cocos nucifera L.</i>	Tree	1
	Sugarcane	<i>Saccharum officinarum L.</i>	Shrub	1
			Total	28
Impressive	Waterliity-Red	<i>Nymphaea lotus Linn.</i>	Aquatic	3
	Yang	<i>Dipterocarpus alatus</i>	Tree	2
	Coconut tree	<i>Cocos nucifera L.</i>	Tree	2
	Pipal tree	<i>Ficus religiosa L.</i>	Tree	2
	Orange champak	<i>Magnolia champaca (L.) Baill. ex Pierre</i>	Tree	2
	Ramontchi	<i>Flacourtia indica</i>	Tree	2
	Wood Apple	<i>Feronia limonia</i>	Tree	2
	YlangYlang	<i>Cananga odorata</i>	Tree	1
	Banana	<i>Musa sapientum Linn.</i>	Tree	1
	Wild cinchona	<i>Neonauclea purpurea</i>	Tree	1
	Indian ash tree	<i>Lannea coromandelica</i>	Tree	1
	-	<i>Zollingeria dongnaiensis</i>	Tree	1
	-	<i>Cinnamomum porrectum</i>	Tree	1
	Diospyros decandra	<i>Diospyros decandra</i>	Tree	1

-	<i>Millettia brandisiana</i> Kurz	Tree	1
-	<i>Barringtonia acutangula</i> (L.) Gaertn.	Tree	1
White Chempaka	<i>Michelia alba</i> (DC.) Figlar	Tree	1
Flame of the forest	<i>Butea monosperma</i> (Lam.) Taub.	Tree	1
Waterliity-White	<i>Nymphaea lotus</i> Linn.	Aquatic	1
Lotus	<i>Nelumbo nucifera</i> Gaertn.	Aquatic	1
Iron wood	<i>Mesua ferrea</i> L.	Tree	1
-	<i>Dipterocarpus tuberculatus</i>	Tree	1
-	<i>Shorea roxburghii</i> G.Don	Tree	1
-	<i>Hedychium coronarium</i> J.Koenig	Shrub	1
Chinquapin	<i>Castanopsis diversifolia</i>	Tree	1
Hog plum	<i>Spondias pinnata</i> (L. f.) Kurz	Tree	1
Tamarind	<i>Tamarindus indica</i> L.	Tree	1
Fig	<i>Ficus racemosa</i> L.	Tree	1
Bo Tree	<i>Diospyros malabarica</i> var. <i>Siamensis</i>	Tree	1
	<i>Protium serratum</i>	Tree	1
Burmese grape	<i>Baccaurea ramiflora</i> Lour.	Tree	1
Mango	<i>Mangifera indica</i> L.	Tree	1
Indian mahogany	<i>Chukrasia tabularis</i>	Tree	1
Siamese rosewood	<i>Dalbergia cochinchinensis</i>	Tree	1
Burmese sal	<i>Shorea siamensis</i>	Tree	1
Banyan tree	<i>Ficus drupacea</i>	Tree	1
Wild Sugarcane	<i>Saccharum spontaneum</i>	Shrub	1
Tangor	<i>Citrus nobilis</i>	Tree	1
Mandarin Orange	<i>Citrus reticulata</i>	Tree	1
Cowslip creeper	<i>Telosma minor</i>	Climber	1
Malva nut	<i>Scaphium macropodum</i>	Tree	1
Catechu tree	<i>Acacia catechu</i>	Tree	1
-	<i>Eragrostis uniolooides</i>	Ground Co	1

	Mulberry	<i>Morus nigra (black mulberry)</i>	Shrub	1
	Betel Nut Palm	<i>Areca catechu L.</i>	Tree	1
	Java Plum	<i>Syzygium cumini (L.) Skeels</i>	Tree	1
	Monkey Fruit	<i>Artocarpus lacucha</i>	Tree	1
	Hairy Keruing	<i>Dipterocarpus obtusifolius</i>	Tree	1
	Saraca	<i>Saraca indica L.</i>	Tree	1
	Lindley's dendrobium	<i>Dendrobium lindleyi</i>	Epiphyte	1
			Total	58
Sorrowful	Wild Bamboo	<i>Bambusa bambos</i>	Tree	1
	Betel Nut Palm	<i>Areca catechu L.</i>	Tree	1
	Betel Laef	<i>Piper bettle L.</i>	Climber	1
	Coconut tree	<i>Cocos nucifera L.</i>	Tree	1
	Rattan	<i>Calamus caesius</i>	Climber	1
			Total	5

Even trees are the most frequently found in many places of Lanna literary works, however from the detail of location, the tree is not available in farm and field area, and ground cover only mentions in a natural area in Lanna literature. The public space of urban area from literature such as roadside, moat, plaza mentioned as the place with abundantly plants in highest number and various types from this study, while in the sub-urban area showed the highest number of plants in grove, and natural area, forest is contained the highest number of plants mentioned from literary works. Plants in Lanna literary works also appear to magnify the emotion. In order to analyze the reference s to plant, their occurrences with emotional describing were grouped in three major categories as 1) Impressive 2) Sorrowful 3) Auspicious. The result of this study showed in table 4. 50 species of plants were used for representing the impression of the story, 11 species available in auspiciousness moment, and five species use to

describe the sorrowful scenery. Some species are available more than one category of emotions such as Red-Waterlily (*Nymphaea lotus*), Banana (*Musa spp.*), Bodhi tree (*Ficus religiosa*) also available in the impressive and auspicious scene of Lanna literary works. Climber plants found only represent sorrowfully, and one notable plant species that available in all categories is Coconut (*Cocos nucifera*).

D. Discussion and Conclusion

Reading from 18 Lanna literary works wrote in 1357-1952 AC reflect the importance of plant that cannot isolate from Chiang Mai Old City. The significant plant mentioned in the literature not only by the large size or an abundant flower blooming or edible plant but also mention in small plants that have meaning in Lanna's life. The outstanding species by number of frequency from this study are Cogon grass (*Imperata cylindrica*), Bodhi tree (*Ficus religiosa*), White Fig (*Ficus lacor*), Coconut (*Cocos nucifera*), Banana (*Musa spp.*) and Red Waterlily (*Nymphaea lotus*), these plant still available in Chiang Mai Old City area.

Cogon grass (*Imperata cylindrica*) is the most frequently found in this study, this plant mentioned in impressive scenery of literature and regarded as the auspicious sign, use of Cogon grass still available in the traditional ceremony in Chiang Mai Old City, At the conclusion of the ceremony, the holy water is sprinkled on the ceremonial attendants and premises with a bunch of dried Cogon grass. It is believed that holy water, which is sprinkled on a person's head, will bring the person luck, safety, and success (Fig. 1a).

Study of Wonglangka and Han 2018, Bodhi tree is the majority tree in Lanna temple of Chiang Mai Old City, and both with White Fig (*Ficus lacor*) still regard as the auspicious tree of the city with the yearly offering

(Wonglangka, 2013) (Fig.1c). The connection of plant to religions in the Old City, from antiquity up to today shows the great everlasting importance of plant not only in the natural form, plant also found in symbolic of religious such as Red Waterlily (*Nymphaea lotus*) are plenty available in decoration motif of Lanna temple (Fig. 1b), while Coconut (*Cocos nucifera*) and Banana (*Musa spp.*) are ordinary use as an offering material in ceremony (Fig. 1d).

Plants in Lanna literature works from this study also connected with historical evidence that has an active link with the identity of place from ancient times. This study showed the outstanding of Coconut (*Cocos nucifera*), that found in the literature are related with historical evidence such as the first modern Map of Chiang Mai surveyed by James McCarthy in 1893 in Chiang Mai Old city area that illustrated the graphic of Coconut clearly (Fig. 1e), and supported with a photograph of Chiang Mai in early 19th century that can show the abundant of Coconut in the Old City area (Fig. 1f).





Fig. 1. Plants and relation in cultural and historical evidence in Chiang Mai Old City

- a) Bulk of Cogon grass (*Imperata cylindrica*) for holy water sprinkled
- b) Waterlily petal (*Nymphaea lotus*) in floral motif of pagoda, Wat Pan Wan temple
- c) The offering of support to a holy Bodhi tree (*Ficus religiosa*), Wat Tung Yu temple
- d) The offering of prolonging ceremony by Coconut (*Cocos nucifera*) and Banana (*Musa spp.*), Wat Pra Singha temple
- e) Coconut graphic the map of Chiang Mai Old City 1893
- f) Coconut in the scenery of Chiang Mai Old City in early 1900th

Plants material can express the experience of space by the result of human sensory perception (Goldfinger, 1941). The plant also played as urban elements that important to contribute the self-identity, sense of community, and sense of place (Hull, Lam, & Vigo, 1994). The study of the plant in literary works can make more understanding in that available plant in the city and also understand in place identity that linked to meanings and perception held by the people in relation to their environment. Meaning and attachment affected image ability and influenced by culture and experience (Rapoport, 1977). It influences the people's identity and support continuity of life and socio-cultural values. The study of the plant in Lanna literary works can support in place attachment dimensions that can be used as the constructs for identification of the identity of a place considering the significance of place in

developing and maintaining self-identity and group identity of and the composites of its characteristic features.

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