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Diversity of Species and Benefits of Telajakan Plant as a Potential Tourism Attraction in Bali

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Abstract

Telajakan is a place of reforestation, one of the elements of traditional green open space in Balinese homes. Plants planted in various species are diversified, in some categories of plant and have various benefits in Balinese society. The study was conducted in 2018 in the Cengkilung village, Denpasar Municipality and Penglipuran Village, Bangli Regency, Bali Province. Data collection methods are carried out through observation with inventory and identification of plants, interviews with owners of taxation. The plants planted in these two villages are mostly used for beauty or ornamental plants increase the family's economy, ceremonies or rituals, and protectors. The highest Important Value (IV) on trees category in Telajakan plants at the Cengkilung village are the cabbage tree (Cordyline australis) as much as namely 129%. The shrub and herbaceous categories are Crotons 'Wide leaf' (Codaium variegatum) and Japanese grass (Zoysia japonica) amounting respectively 75.3% and 43.4%. The Telajakan plants at Penglipuran Village, which are on the category of trees, shrubs and herbs with the highest important values are the Cananga tree (Cananga odorata), Dwarf umbrella tree (Schefflera grandiflora), and spider plant (Chloropithum comosum) 109%, 33.4% and 64.6%.

Keywords: identification; plant species; usability; telajakan; ecotourism.

JelClassification: Q23; L83.

Introduction

The Plant species planted in the yard of the house consist of various species, with various categories of growth and have many benefits. The yard according to some researchers divides into local culture, utilization or ethno-cultural studies. A study of community relations with the plant environment. The plant species that are planted in field are several of plants with various benefits. Rahayu and Prawiroatmodjo (2005) reported that there were 40 species of plants planted in home yards in Lampeapi Village, Wawoni Island, Southeast Sulawesi-Indonesia. Species of forty plants are namely 5 species of commodities that affect family income. Also known there are species that are planted as medicinal plants and aesthetics. Fajri and Supartini (2015) found 139 species of

plants with a research area of 2.16 ha in community gardens, especially Tem'bak Hamlet, Sintang District, West Kalimantan with vegetation analysis, tengkawang (Shorea macrophylla, S. stenoptera, S. beccariana) plants dominated the valley area and rubber plants (Havea braziliensis) which dominated hilly areas. The composition of garden plants can be classified according to the categories of herbs or grass, shrubs, trees.

The species of garden plants are often grouped based on the benefits of these plants such as medicinal plants, ornamental plants, ceremonial plants, fruit plants, vegetable plants and others. Sari *et al.* (2015) in West Java, Central Java, East Java and Bali found that medicine plants were planted in home yards. This is related to the tradition of an area that is used to drinking herbal medicine. The yard in Bali is based on the Tri Angga concept, a concept consisting of 3 members of the body which includes the head, body and the lower part. The head in this case means place of worship of the Balinese (temple). Body analogous house and the lower part is the backyard. Among the three places that are usually planted with plants, there is a section called telajakan. Telajakan is the space in front of the wall of the house which is also often planted with various kinds of plants. According to Dwijendra (2013) telajakan is a place of reforestation, one of the elements of traditional green open space in Balinese houses. The plants planted are subjected to various types but are still less in number than plants planted in the backyard or yard. This is caused by the telajakan area is smaller than the area of the home yard or backyard. The plants planted in the telajakan area in Bali, in addition to the three groups, are groups of grass plants, ornamental plants, and fruit trees, also shrubs, trees and creeping plants. This research was conducted to find out whether the types of plants, whether the level of category, what are the benefits and whether the important value of plants are planted in the Telajakan area of in two villages in Bali, namely Cengkilung, Denpasar City and Penglipuran Village, Bangli Regency, Bali Province.

1. Research Methods

The study was conducted in 2018 in Cengkilung Village, Denpasar City and Penglipuran Village, Bangli Regency, Bali Province. Cengkilung village has won several contests about eradicating mosquito nests and cleaning the city in Denpasar as the 2nd winner in 2011 as far as North Denpasar District. One of the criteria in the competition is the condition of the investigation. Penglipuran Village is one of the famous tourist villages and is visited by many domestic and foreign tourists. Penglipuran Village is one of the 3 best villages in the world. The three villages are Giethoorn Village in the Netherlands, Mawlynnong Village in India and Penglipuran Village in Bali (Tracy 2016). This village has many uniqueness, one of which is well-maintained and organized taxation. Data collection methods are carried out through: observations by inventorying and identifying plants planted in house reams, interviewing tax owners about the benefits of taxation.

2. Results and Discussion

2.1 Identification of Telajakan Plants in Two Research Sites namely the Cengkilung village of Denpasar-Bali and the Penglipuran Village of Bangli-Bali

Results of the research on Telajakan plants planted in Cengkilung village, Denpasar, Bali found 40 species of plants in 3 levels of categories, namely herbs, shrubs and trees. The herbs categories are 15 types, the shrubs categories are 15 types and the tree categories are 10 types. Herbs and shrub categories including plant categories with a height of no more than 5 meters make up 23, while tree categories are plants that have a height of more than 5 meters totaling 12 species (Table 1). The plants planted at the farm in the village of Penglipuran in Bangli consist of 77 types which are divided into 3 categories of groups, namely the category of herbs, shrubs and trees, each of which amounts to 23, 44, 10 species (Table 2). The categories of plants that are less than 5 meters high are herbs and shrubs that are planted more because herbaceous plants and shrubs do not require so much land compared to trees. In accordance with the extent of telajakan which only measures 0.5-1.2 m x 9-21 m.

Table 1. Plant groups, local names, species names and benefits in Cengkilung Village, Denpasar, Bali

No	Plant Groups	Common Names	Scientific Names	Benefits
1	Herbs	Giant crinum lily	Crinum asiaticum	1, 2, 3
2	Herbs	Yellow iris	Iris pseudacorus	2, 3
3	Herbs	Creeping-oxeyes	Widelia biflora	3
4	Herbs	Castor oil plant	Ricinus comunis	3
5	Herbs	Orchid	Orchid sp	2, 3
6	Herbs	Japanese lawn grass	Zoysia japonica	2, 3
7	Herbs	Taro	Colocasia esculenta	2, 3

No	Plant Groups	Common Names	Scientific Names	Benefits
8	Herbs	Wild plantain	Heliconia sp	2, 3
9	Herbs	Lily	Amaryllis	2
10	Herbs	The boat lily	Rhoeo discolor	3
11	Herbs	Morning glory	Ipomoea batatas 'Marguerette'	2, 3
12	Herbs	The white clover	Trifolium repens	8
13	Herbs	Skullcaps	Nothopanax scutellaium	3
14	Herbs	Spider plant	Chloropithum comosum	3
15	Herbs	Cogon grass	Imperata cylindrica	8
16	Shrubs	Good luck plant	Cordyline fruticosa	1, 2, 3
17	Shrubs	Crotons 'Narrow leaves'	Codaeum variegatum	1, 2, 3
18	Shrubs	Crotons 'The leaves are rather wide'	Codaeum variegatum	1, 2, 3
19	Shrubs	Crotons 'Wide leaves'	Codaeum variegatum	1, 2, 3
20	Shrubs	Liligundi	Vitex trifolius	2, 3, 7
21	Shrubs	Wild petunias	Ruellia simplex	2, 3
22	Shrubs	Snake plant	Sanseiviera	2, 3, 6
23	Shrubs	Jasmin	Gardenia jasminoides	1, 2, 3
24	Shrubs	Asian pigeon wings	Clitoria ternate	1, 2, 3
25	Shrubs	Ming aralia	Nothopanax fruticosum	1, 3
26	Shrubs	Colloquially	Hibiscus rosa-sinensis	1, 2, 3
27	Shrubs	Giant calotrope	Calotropis gigantea	1, 3
28	Shrubs	Jungle geranium	Ixora paludosa	1, 2,3
29	Shrubs	The caricature-plant	Graptophyllum pictum	1,3,5
30	Shrubs	Don seligi/kayu sisih	Phyllanthus buxifolius	1,3
31	Tree	Golden cane palm	Dypsis lutescens	2, 3, 4
32	Tree	Siamese rough bush	Streblus asper	2, 3
33	Tree	The cananga tree	Cananga odorata	1, 2, 3, 4
34	Tree	Lillipillies	Oleina syzygium	3, 4
35	Tree	Frangipani 'Sudamala'	Plumeria acuminate	1, 2, 3, 4
36	Tree	Cemetery tree	Polyalthia longifolia	3, 4
37	Tree	The cabbage tree	Cordyline australis	1, 2, 3, 4
38	Tree	Red frangipani	Plumeria rubra	1, 2, 3, 4
39	Tree	Soursop	Anona muricata	2, 4, 5
40	Tree	Christmas palm	Veitchia merillii	2, 3, 4

Information: 1 = ceremony, 2 = economy, 3 = beauty, 4 = canopy, 5 = medicine, 6 = preventing pollution, 7 = anti mosquito, 8= unknown function (wild)

Table 2. Plant Groups, Local Names, Species Names and Benefits in Penglipuran Village, Bangli, Bali

No	Plant Groups	Common Names	Scientific Names	Benefit
1	Herbs	Pandan	Pandanus spinosus	1, 2, 3
2	Herbs	Pandan	Pandanus amaryllifolius	1, 2, 3
3	Herbs	Stag horn fern	Platycerium coronarium	1, 2, 3
4	Herbs	Taro	Colocasia esculenta	2, 3
5	Herbs	Napier grass	Penisetum purpureum	3
6	Herbs	Wild plantain	Heliconia sp	2, 3
7	Herbs	Giant crinum lily	Crinum asiaticum	2, 3
8	Herbs	Eggplant	Solanum melongena	2, 3
9	Herbs	Lily	Amaryllis variegata	2, 3
10	Herbs	The crown of thorns	Euphorbia milii	2, 3
11	Herbs	Big leaf hydrangea 'Red flower'	Hydrangea macrophylla	1, 2, 3
12	Herbs	Big leaf hydrangea 'White flower'	Hydrangea macrophylla	1, 2, 3
13	Herbs	Chinese evergreens	Aglonema simplex	2, 3
14	Herbs	Betel	Piper betle	1, 2, 3
15	Herbs	Orchid	Orchid sp	3
16	Herbs	Spider plant	Chloropithum comosum	3
17	Herbs	Garden balsam 'Red flower'	Impatien balsamina	1, 2, 3
18	Herbs	Dwarf mondo grass	Ophiopogon japonicus	3
19	Herbs	Rose moss 'Yellow flower'	Portulaca grandiflora	3
20	Herbs	Rose moss 'Orange flower'	Portulaca grandiflora	3
21	Herbs	Rose moss 'Red flower'	Portulaca grandiflora	3

No	Plant Groups	Common Names	Scientific Names	Benefit
22	Herbs	Garden balsam 'Pink flower'	Impatien balsamina	1,2,3
23	Herbs	Giant taro	Alocasia	3
24	Shrubs	Cockscomb 'Red flower'	Celosia cristata	2, 3
25	Shrubs	Cockscomb 'White flower'	Celosia cristata	1, 2, 3
26	Shrubs	Egyptian star cluster 'Purple flower'	Pentas lanceolatus	3
27	Shrubs	Egyptian star cluster 'Pink flower'	Pentas lanceolatus	3
28	Shrubs	Egyptian star cluster 'Yellow flower'	Pentas lanceolatus	3
29	Shrubs	Egyptian star cluster 'Red flower'	Pentas lanceolatus '	3
30	Shrubs	Egyptian star cluster 'Orange flower'	Pentas lanceolatus	3
31	Shrubs	The scarlet sage'Purple flower'	Salvia splenden	3
32	Shrubs	The scarlet sage 'Pink flower'	Salvia splenden	3
33	Shrubs	The scarlet sage'White flower'	Salvia splenden	3
34	Shrubs	Bird's nest anthurium	Anthurium plowmanii.	2, 3
35	Shrubs	Lollipop plant	Pachystachys lutea	2, 3
36	Shrubs	Good luck plant	Cordyline fruticosa	1, 2, 3
37	Shrubs	Great bougainvillea	Bougenvillea spectabilis	1, 2, 3, 4
38	Shrubs	Chinese perfume plant	Aglaia odorata	1, 2, 3
39	Shrubs	Snake plant	Sansevieria trifasciata	2, 3, 6
40	Shrubs	Madagascar periwinkle	Catharanthus roseus	1, 2, 3
41	Shrubs	Mexican creeper	Antigonon leptopus	2, 3
42	Shrubs	Crotons 'Narrow leaves'	Codaeum variegatum	1, 2, 3
43	Shrubs	Crotons 'The leaves are rather wide'	Codaeum variegatum	1, 2, 3
44	Shrubs	Jungle geranium	Ixora paludosa	1, 2, 3
45	Shrubs	Physic nut.	Jatropha curcas	1, 3, 8
46	Shrubs	Golden trumpet	Alamanda cathartica	1, 2, 3
47	Shrubs	Ming aralia	Nothopanax fruticosum	1, 2, 3
48	Shrubs	Lavender	Lavandula afficinalis	2, 3, 7
49	Shrubs	China aster 'Pink flower'	Aster chinensis	2, 3
50	Shrubs	China aster 'Red flower'	Aster chinensis	2, 3
51	Shrubs	Jasmin	Gardenia jasminoides	1, 2, 3
52	Shrubs	Asian pigeon wings 'Purple flower'	Clitoria ternatea	1, 2, 3
53	Shrubs	Globe amaranth	Gomphrena globose	1, 3
54	Shrubs	Colloquially	Hibiscus rosa-sinensis	1, 3
55	Shrubs	Indian fig opuntia	Opuntia vulgaris	3
56	Shrubs	Asian pigeon wings 'White flower'	Clitoria ternatea	1, 3
57	Shrubs	Asian pigeon wings 'Purple flower'	Clitoria ternatea	1, 2, 3
58	Shrubs	Dwarf umbrella tree	Schefflera arboricola	1, 2, 3, 4
59	Shrubs	Arabian jasmine	Jasminum sambac	1, 2, 3
60	Shrubs	Peacock flower	Caesalpinia pulcherrima	1, 3
61	Shrubs	Four o'clock flower	Mirabilis jalapa	3
62	Shrubs	Tomato	Solanum lycopersicon	2, 3
63	Shrubs	Climbing wool-plant	Aerva sanguinolenta	3
64	Shrubs	Hybrid tea rose	Rosa hybrida	1, 2, 3
65	Shrubs	Ming aralia	Polyscias fruticosa	1, 3
66	Shrubs	Colloquially	Hibiscus rosa-sinensis	1, 3
67	Shrubs	Chili pepper	Capsicum frutecens	2, 3
68	Tree	Lillipillies	Oleina syzygium	3, 4
69	Tree	Golden cane palm	Dypsis lutescens	2, 3, 4
70	Tree	Christmas palm	Veitchia merillii	1, 2, 3, 4
71	Tree	The suren toon	Toona sureni	1, 2, 3, 4
72	Tree	Japanese Glory bower	Clerodendrum japonicum	2, 3, 4
73	Tree	The cabbage tree	Cordyline australis	1, 2, 3, 4
74	Tree	Champak	Michellia champaca	1, 2, 3, 4
75	Tree	The cananga tree	Cananga odorata	1, 2, 3
76	Tree	Frangipani 'Sudamala'	Plumeria acuminate	1, 2, 3
77	Tree	The wild mussaenda	Musaenda frondosa	1, 2, 3

Information: 1 = ceremony, 2 = economy, 3 = beauty, 4 = canopy, 5 = medicine, 6 = preventing pollution, 7 = anti-mosquito, 8 = biodiesel

Residents already understand the wide range of conditions that are so narrow that they plant plants that are broadly suitable for their crops and their roots do not disturb the walls. But sometimes residents plant trees because of their benefits such as canopy, beauty and increasing the family's economy. According to Narendreswari *et al*., (2014) that herbaceous and shrub plants were also found in identifying Landscape plants on the Green Line Laksda Adisucipto street, Urip Sumoharjo, and Jendral Sudirman Yogyakarta, Indonesia.

2.2 The Benefits of Telajakan Plants in Two Research Locations, namely the Cengkilung village of Denpasar-Bali and the Penglipuran Village of Bangli-Bali

The Plants are planted in Telajakan are dominated by plants that are beneficial for beauty both in the villages of Cengkilung and in the village of Penglipuran (Figures 1 and 2). Many plants that are beneficial to beauty are included in the herb and shrubs level category. Beauty can come from the color of leaves, stems and flowers. Telajakan is a small garden in front of a house that is a leading garden from home so the homeowner gives a good image of the front view of the house. Ornamental plants that are planted in the Telajakan area that function for beauty greatly support villages in Bali as tourist villages. Kato *et al.* (2017), once reported that plants planted in Telajakan in large part function as beauty.

Various types of ornamental plants are planted in Penglipuran Village, which is a type of Egyptian star cluster (Pentas lanceolatus) with various varieties or cultivars and the scarlet sage (Salvia splenden) also with various varieties and cultivars. Both of these plants have many attractive colored flowers that support the development of Penglipuran village as a tourist village. The planting of these two plants which were imported from the Bogor, West Java area then the planting process which was coordinated by the traditional institution of Penglipuran village was supported by the community. According to Andriyani *et al*., (2017) that the success of a village as a tourist village is partly due to the empowerment of its people in the process of developing the tourism village.

The development of Penglipuran tourism village in addition to the beautiful telajakan arrangement also maintains the uniqueness of traditional house arrangement with its Angkul-angkul (entrance to the house) using a bamboo roof (Figure 3B), its culinary uniqueness such as Loloh Cemcem drinks and Loloh Teleng. Bamboo is a native plant and many are found in Penglipuran village and there are even bamboo forests that are still preserved today. Loloh cemcem is a traditional drink in the village of Penglipuran made from wild (or forest) mango (Spondias pinata). Loloh Teleng is made from squeezed Asian pigeonwings 'Purple flower' (Clitoria ternatea) (Darmadi 2017). So the development of tourism in an area is one of them by developing original potential that becomes a unique area that is not found in other regions. According to Suhartini *et al.,* (2013) that the diversity of plants cultivated in the yard has the potential to be developed into a tourist village based on superior plant products (*e.g*. salak produced in Sleman Jogjakarta village), a craft-based tourist village made from plants (bamboo and mendong), a tourist village because of the beauty of its environment.

For Cengkilung Village, besides the use of Telajakan plants for beauty or decoration, it is also to increase the family economy (Figures 1 and 2). The cabbage tree (Cordyline australis) planted by people for resale to other communities in Bali. This plant (C. australis) leaves are needed by Barong craftsmen in Bali. The cabbage tree leaves can be used for making Balinese Barong hair (Figure 3A). Utilization of yard plants for additional family income has also been studied by Khomah and Fajarningsih (T.T.) that garden plants are planted both in the yard and planted with polybag in the yard of the house can be used to meet food needs, especially for vegetables and fruit. Yard plants can also reduce family expenses and can increase family income. Oelviani and Utomo (2015) that the use of yards to be planted with various crops with integrated farming systems can increase family income and support sustainable family food security.

Plants planted on land both in the village of Cengkilung and in the village of Penglipuran are also widely used for Balinese Hindu ceremonies (Figures 1 and 2). Flowers from ornamental plants can be used by means of Canang. Canang is one of the means of worshiping Hindu Balinese. Other parts besides flowers such as leaves, stems, fruit, and seeds can be used for Balinese Hindu religious ceremonies. Other studies have also been reported by Suhartini *et al.* (2013) that plants planted in yards in the Sleman area of Jogjkarta are also used for custom and diversity. The research found ten plants for traditional and religious activities, namely Champak (Michelia alba), frangipani (Plumeria acuminata), coconut (Cocos nucifera), cananga (Cananga odorata), rose (Rosa sp.), Jasmine (Jasminum sambac), palm (Chrysalidocarpus lutescens), cypress (Cupressus lusitanica), plantain (Musa paradisiaca), cane wulung (Saccharum officniarum). Pramita *et al.* (2013) stated that the Tengger community in Ngadas village in conserving plants intended for Kasada traditional ceremonies and surrender of crops. The types of plants used are edelweiss (Anaphalis longifolia) 96%, rice (Oryza sativa) 94%, potatoes (Solanum tuberosum) 90%, leek (Allium fistulosum) 86%, putihan (Buddleja asiatica) 84%, cabbage (Brassica

oleraceae) 80%, earrings (Fuchsia magellanica) 78%, plantain (Musa paradisiaca) 74%, telotok (Curculigo latifolia) 70%, kenikir/gumitir (Cosmos caudatus) 68%, areca (Areca catechu) and banyan (Ficus benjamina) 46%, danglu (Engelhardia spicata) 40%, coconut leaf Janur (Cocos nucifera) 30%, betel (Piper betle) 28%, and corn (Zea mays) 24%. Karina (2014) found 3 types of garden plants used for ritual purposes in mixed communities in Layana Indah Village, Palu Timur Subdistrict, Central Sulawesi. The three types of plants are the frangipani (Plumeira acuminata) at the mitoni ceremony (the seven-month ceremony of pregnancy). The Sidaguri "Silaguri" plant (Sida acuta L) is used by people who set up new homes and cayenne (Capsicum frutescens) plants used in the fetish poppet to ward off the magic science "Marisa mbaso".

Plants that are planted in Telajakan are also useful as canopy plants or shade. The number of shade plants planted in the farm is less than for ornamental plants or for beauty, plants to improve the family economy and ceremonial plants. Shade plants include tree level categories. A level category that has a height of more than 5 meters. Shade plants require a wider area than herbaceous plants and shrubs. Shade plants have characteristics that are many branches, with thick shade from leaves and twigs so that those who plant them feel shaded from the hot sun. Rahayu and Prowiroatmodjo (2005) have reported that maja and ketapang plants (Terminalia catappa) in Lampeapi Village, Wawoni Island, Southeast Sulawesi, are shade plants. Silalahi (2016) once reported that plants planted in the yard of the Indonesian Christian University (UKI) Campus in Cawang, East Jakarta were dominated by shade plants.

Figure 1. Benefits of plants grown in the Telajakan of Cengkilung village, Denpasar, Bali, bea = beauty, eco = family economy, cer = ceremony, can= canopy, med = medicine, pol = anti pollution, mos = mosquito repellent

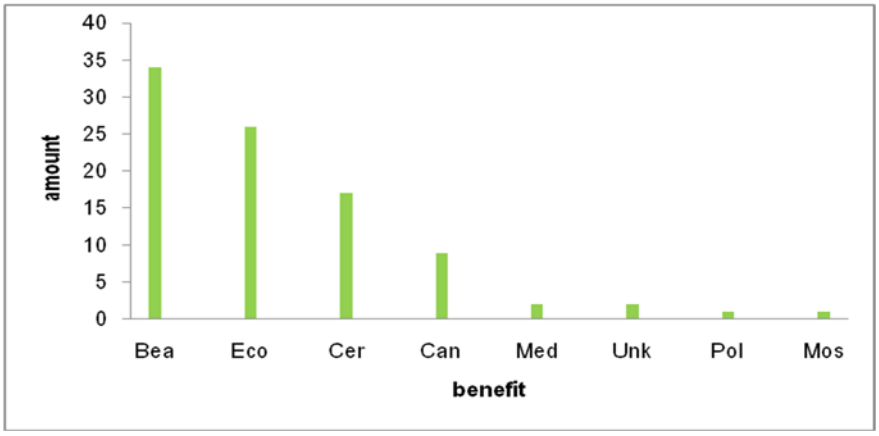


Figure 2. Benefits of plants grown in Telajakan in Penglipuran village, Bangli Regency, Bali province, bea = beauty, eco = family economy, cer = ceremony, can = canopy, mos = mosquito repellent, bio = biodiesel

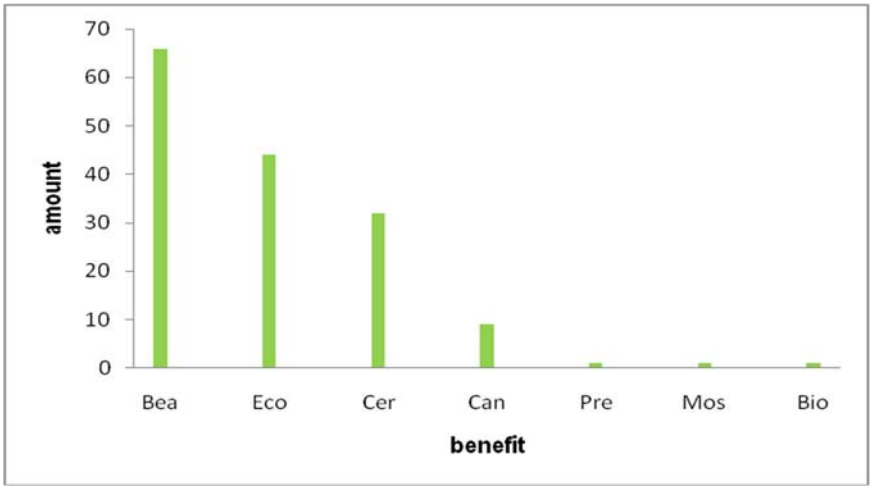
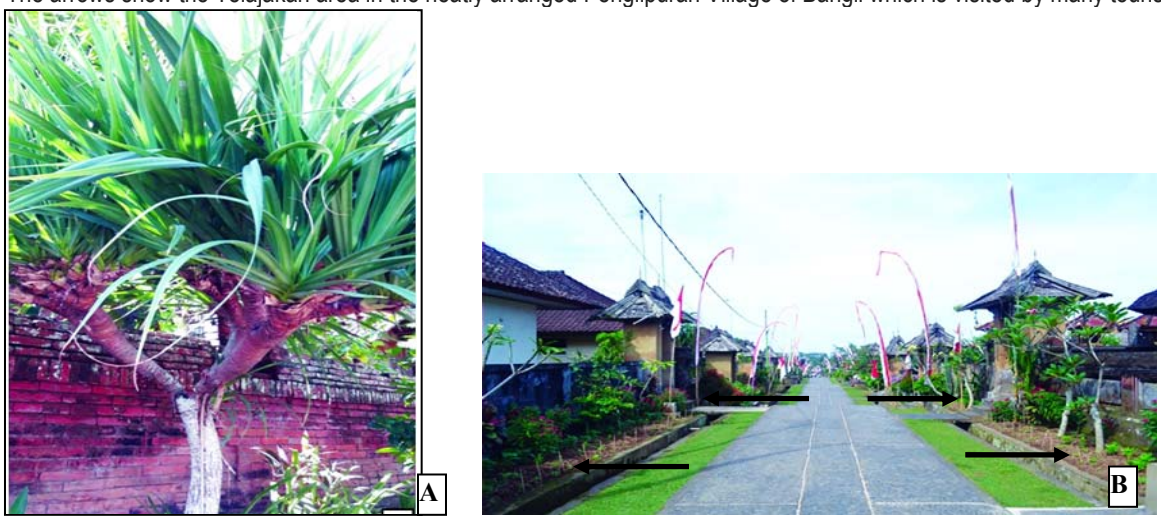


Figure 3. A. The cabbage tree (*Cordyline australis*) planted in Telajakan in Cengkilung Village, Denpasar, B. The arrows show the Telajakan area in the neatly arranged Penglipuran Village of Bangli which is visited by many tourists



Source: Darmadi 2017

2.3 Vegetation Analysis

The average size of telajakan in Cengkilung Village is ± 21m long and 1.2m wide. The results of vegetation analysis of plants that grow in Cengkilung Village with the highest important value in the tree category are the cabbage tree (Cordyline australis) plants which are equal to 129% (Table 3). This plant is widely planted in the village of Cengkilung because of its economic value for the Cengkilung community. This plant after being planted in Telajakan and will be sold later to the people in need. This plant is useful as an ornamental plant in the garden, also the leaves can be used to make hair from barong crafts. After The cabbage tree, Frangpani 'Sandalwood' or (Plumeria acuminata) plants also have a high important value of 101% (Table 3). This plant is widely planted in Cengkilung Village because it is easily planted, fast growing and big fast. This plant blooms a lot with the color of yellow flowers and the flower smell is fragrant like the smell of sandalwood. Once upon a time in Bali the price of dried flowers on the market was expensive, which ranged from 100,000-150,000 rupiah per kilogram and Frangpani 'Sandalwood' flowers were the prima donna at that time. According to Maya-ethnobotany (2017) that frangipani flowers belonging to the Plumeria clan are used for ceremonies by the Mayans. According to Verma (2016), Plumeria rubra plant as well as an ornamental plant, this plant is also used for medicine. This plant has biological activities as antipyretic, antifungal, antiviral, analgesic, anticancer, antioxidative and hypolipidemic, proteolytic, cytotoxic activities etc.

In the shrub category which has the highest importance is Croton “Wide leaf” plant (Codaeum variegatum) with an important value of 75.3% (Table 3). These dominating plants are planted in the Telajakan by residents. This plant is widely used by residents for Balinese Hindu ceremonies. The leaves of this plant are widely used to decorate Penjor. According to Dutta (2004) Codaeum plants are tropical ornamental plants that have very beautiful leaf color variations.

In the herbal category which has the highest important value are Japanese grass plants (Zoysia japonica) with a value of 43.4% (Table 3). Japanese grass plants are planted because this type of grass is easy to plant and very beautiful for garden landscaping.

The size of the Telajakan average in Penglipuran Village is ± 9m long and 0.57m wide. The highest important value in the tree category is the cananga tree (Cananga odorata) with a value of 109%. This plant is widely planted because this plant is useful for ceremonies. This plant has fragrant flowers. In the category of shrubs of Dwarf umbrella tree leaves (Schefflera grandiflora) with the highest important value of 33.4% (Table 4). This plant is widely planted by residents because it is useful for repellent reinforcements. In the category of shrub types of Chicken combs 'Purple flowers', ‘Red flowers' (Celosia cristata), Egyptian star cluster ‘Red flowers', ‘Ping flowers' and 'Purple flowers' (Pentas lanceolata), China aster ’Pink flower', 'Red flowers', and ‘Purple flower' (Aster chinensis) has a high importance. This plant blooms a lot, with beautiful, colorful, but short-lived flower colors. This plant supports the activities of the penglipuran flowering festival.

The herb category is dominated by the spider plant (Chloropithum comosum) with the highest important value of 64.6%. This plant is used for decoration. At the herb level it is also dominated by Water henna plants

(Impatien balsamina 'Red flower',' Ping flowers'). Flowers of this flower are used for ceremonies and decorations (Table 4).

Table 3. Relative Density (RD), Relative frequency (RF), Relative Dominance (RD) and Value Important (VI) for several. Telajakan plants in Cengkilung Village, Denpasar, Bali

No	Plant Group	Common Names	Species Names	RD (%)	RF (%)	RD (%)	VI (%)
1	Tree	The cabbage tree	Cordyline australis	47	32.1	50.1	129
2	Tree	Frangpani 'Sandalwood'	Plumeria acuminata	41	25.6	33.8	101
3	Tree	Frangipani 'Bali white'	Plumeria acuminata	4.3	12.8	4.9	22
4	Tree	Sour sop	Anona muricate	2.9	7.7	4.05	14.6
5	Tree	Cemetery tree	Polyalthia longifolia	1.4	7.7	3.9	13
6	Tree	Frangipani 'Pink flower'	Plumeria acuminata	1.4	6.4	3.1	10.9
7	Tree	The cananga tree	Cananga odorata	1.4	7.7	0.3	9.43
8	Shrub	Croton 'Wide leaf'	Codaeum variegatum	43	15	17.3	75.3
9	Shrub	Colloquially	Hibiscus rosa-sinensi	14	15	19.2	48.2
10	Shrub	Jasmine	Gardenia jasminoides	9.5	15.4	23	47.9
11	Shrub	Wild plantain	Heliconia	4.8	7.7	15.9	28.4
12	Shrub	Good luck plant	Cordilyn fruticosa ' Red leaf'	4.8	7.7	11.5	24
13	Shrub	The caricature-plant	Graptophyllum pictum	4.8	7.7	5.3	17.8
14	Shrub	Liligundi	Vitex trifolius	4.8	7.7	3.7	16.2
15	Shrub	Don seligi/kayu sisih	Phyllanthus buxifolius	4.8	7.7	3.2	15.7
16	Shrub	Crotons 'Narrow leaves'	Codaeum variegatum	4.8	7.7	0.5	13
17	Shrub	Asian pigeonwings 'Pink flower'	Clitolaria ternate	4.8	7.7	0.39	12.9
18	Herbs	Japanese lawngrass	Zoysia japonica		14	29.4	43.4
19	Herbs	The white clover	Trifolium repens		14	24.5	38.5
20	Herbs	Skullcaps	Nothopanax scutellaium		14	16	30
21	Herbs	Creeping-oxeyes	Widelia biflora		14	9.8	23.8
22	Herbs	Spider plant in english	Chloropithum comosum		14	9.8	23.8
23	Herbs	Yellow iris	Iris pseudacorus		14	9.8	23.8
24	Herbs	Cogon grass	Imperata cylindrica		14	0.98	15

Table 4. Relative Density (RD), Relative Frequency (RF), Relative Dominance (RD) and Value Important (VI) for several. Telajakan plants in Penglipuran Village, Bangli, Bali

No	Plant group	Local Names	Species Names	DR (%)	FR (%)	Dom (%)	NP (%)
1	Tree	The cananga tree	Cananga odorata	39	32	38	109
2	Tree	Frangipani 'Sudamala'	Plumeria acuminate	32	32	40	104
3	Tree	Frangipani 'Bali white'	Plumeria acuminata	16	20	18	54
4	Tree	Frangipani 'pink flower'	Plumeria acuminata	6.5	8	3	17.5
5	Tree	The wild mussaenda	Musaenda frondosa	3.2	4	0.6	7.8
6	Tree	Lillipillies	Oleina syzygium	3.2	4	0.2	7.4
7	Shrubs	Dwarf umbrella tree	Schefflera grandiflora	1	2.4	30	33.4
8	Shrubs	Cockscomb 'Red flower'	Celosia cristata	24	4.8	1.8	30.6
9	Shrubs	Great bougainvillea	Bougenvellia spectabilis	1	2.4	26	29.4
10	Shrubs	Egyptian star cluster 'Red flower'	Pentas lanceolata	8.2	9.6	8	25.8
11	Shrubs	Asian pigeon wings 'Purple flower'	Clitoria ternate	3.1	2.4	15	20.5
12	Shrubs	China aster 'Pink flower'	Aster chinensis	8.2	7.2	1.6	17
13	Shrubs	Hybrid tea rose	Rosa hybrida	4.1	9.6	2.6	16.3
14	Shrubs	Egyptian star cluster 'Pink flower'	Pentas lanceolata	8.2	4.8	2.4	15.4
15	Shrubs	Cockscomb 'Red flower'	Celosia cristata	8.2	4.8	0.6	13.6
16	Shrubs	Egyptian star cluster 'Purple flower'	Pentas lanceolata	3.1	7.2	0.5	10.8
17	Shrubs	China aster 'Red flower'	Aster chinensis	4.1	4.8	1.1	10
18	Shrubs	Arabian jasmine	Jasminum sambac	3.1	2.4	1.7	7.2
20	Shrubs	Peacock flower	Caesalpinia pulcherrima	2.1	2.4	1.4	5.9
21	Shrubs	China aster 'Pink flower'	Chrysanthemum indicum	3.1	2.4	0.3	5.8

No	Plant group	Local Names	Species Names	DR (%)	FR (%)	Dom (%)	NP (%)
23	Shrubs	Yellow liligundi		1	2.4	0.7	4.1
24	Shrubs	Four o'clock flower	Mirabilis jalapa	1	2.4	0.7	4.1
25	Shrubs	Tomato	Solanum lycopersicon	1	2.4	0.7	4.1
26	Shrubs	Climbing wool-plant	Aerva sanguinolenta	1	2.4	0.7	4.1
27	Shrubs	Mexican creeper	Antigonon leptopus	1	2.4	0.7	4.1
28	Shrubs	Hybrid tea rose	Rosa hybrida	1	2.4	0.4	3.8
29	Shrubs	Ming aralia	Polyscias fruticose	1	2.4	0.4	3.8
30	Shrubs	Colloquially	Hibiscus rosa-sinensis	1	2.4	0.4	3.8
31	Shrubs	Golden trumpet	Alamanda catarthica	1	2.4	0.3	3.7
33	Shrubs	Chili pepper	Capsicum frutecens	1	2.4	0.3	3.7
34	Shrubs	Egyptian star cluster 'Purple flower'	Pentas lanceolata	1	2.4	0.2	3.6
35	Shrubs	Jasmine	Gardenia jasminoides	1	2.4	0.2	3.6
36	Herbs	Spider plant	Chloropithum comosum		28.6	36	64.6
37	Herbs	Garden balsam 'Red flower'	Impatien balsamina		23.8	11	34.8
38	Herbs	Dwarf mondo grass	Ophiopogon japonicus		14.3	17	31.3
39	Herbs	Rose moss 'Yellow flower'	Portulaca grandiflora		4.76	10	14.8
40	Herbs	Rose moss 'Orange flower'	Portulaca grandiflora		4.76	8.9	13.7
41	Herbs	Big leaf hydrangea	Hydrangea macrophylla		4.76	5.1	9.86
42	Herbs	Rose moss 'Red flower'	Portulaca grandiflora		4.76	3.8	8.56
43	Herbs	Garden balsam 'Pink flower'	Impatien balsamina		4.76	3.8	8.56
44	Herbs	Giant taro	Alocasia		4.76	2.5	7.26
45	Herbs	Giant crinum lily	Crinum asiaticum		4.76	2.5	7.26

Conclusion

From the results of the study it can be concluded that: Telajakan plants in the village of Cengkilung Denpasar consists of 40 species distributed into 3 categories of group growth namely herbs, shrubs and trees each of 15, 15, 10 species. The number of plants in the village of Penglipuran is 77 species in 3 categories of groups, which are herbs, shrubs and trees of 23, 44 and 10 species respectively. Most of the plants planted in the villages are used for beauty (ornamental), adding to the family economy, ritual or ceremony and canopy. The beauty and uniqueness of an environment supports an area as a tourist destination.

The highest important values in the tree category of the Telajakan plants in the village of Cengkilung are the cabbage tree (Cordyline australis) and Frangipani 'Cendana' (Plumeria acuminata 'Sandalwood ') plants of 129% and 101% respectively. In the category of shrubs and herbs respectively are Croton "wide leaf" (Codaeum variegatum) and Japanese grass plants (Zoysia japonica) of 75.3% and 43.4% respectively. Telajakan plants that have the highest importance on the tree, shrub and herbaceous categories in Penglipuran village are Kananga (Cananga odorata), Dwarf umbrella tree (Schefflera grandiflora) and spider plant (Chloropithum comosum), and respectively each of them was 109%, 33.4% and 64.6%.

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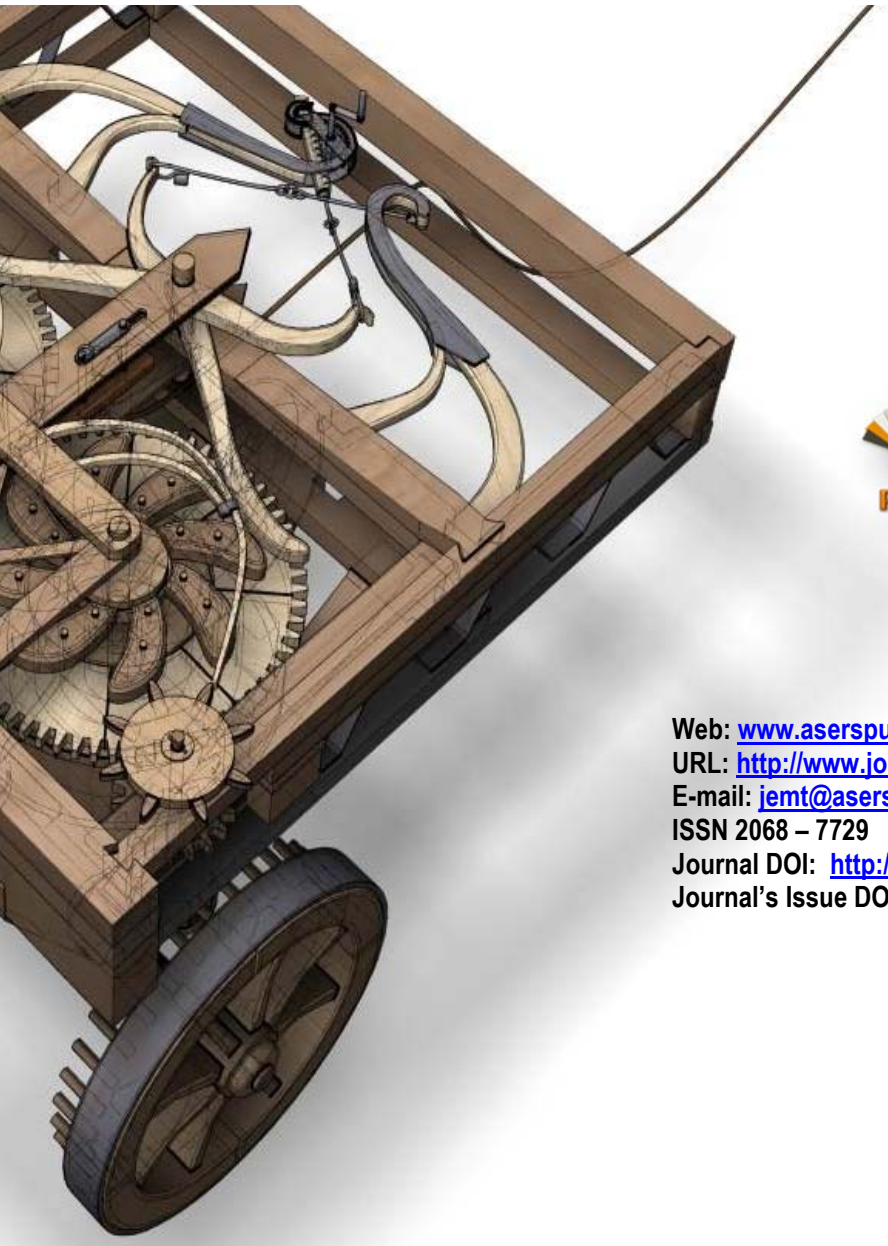

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