

## Distribution and Diversity of Plant in the Province of Bengkulu

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### ABSTRACT

Utilization of yard area in the province of Bengkulu is not optimal. Diversity of plants and plants that are in the yard area in the province of Bengkulu were also unknown. This study was aimed to determine the type of crop and plant diversity in their yards in the province of Bengkulu. This study was conducted in six districts/municipalities in the province of Bengkulu, Central Bengkulu, Kaur, South Bengkulu, Bengkulu City, Lebong and Mukomuko in February-September 2014. Sampling was done by purposive in locations that have the diversity and high plant population. The number of samples in each study varied locations adjusted to the level of plant diversity. The size of sampling was 30 yards per Regency/City. Each sampling points was observed to have an average area of 700 m<sup>2</sup>. Data captured includes the name of the plant, the type name, number of species, and use was by the community. The collected data was then analyzed to determine the level of its diversity using the Shannon-Wiener. To determine the dominant plant species planted in their yards made through a percentage. Based on the results obtained as many as 254 species of plants with a diversity index ( $H_1$ ) plant in Bengkulu province are at moderate to high levels. The highest diversity indices in the city of Bengkulu where the value of  $H_1$  amounted to 4.31 indicating that high diversity, ecosystem stability steady, high productivity, resistant to ecological pressures, while the lowest in South Bengkulu where the value  $H_1$  of 1.52. Based on the type of gardener, acquired that type of plantation in the province of Bengkulu is a type of fruit orchards except South Bengkulu and Bengkulu City where the Regency/City is an ornamental garden plant.

**Key words:** distribution, plant, yard, diversity

### INTRODUCTION

The yard is a plot of land located around homes and has clear boundaries and planted with various species of plants (Danoesastro, 1979 and Suhartini, 2012). According to Arifin *et al.* (2008), the yard is a habitat of a family in a house or garden that has a function, among others as a place applied agroforestry, conservation of genetic resources, soil and water conservation, food production from plants and animals, and where the implementation of activities related to the social –culture, especially for the yard in the countryside.

Based on its function, yards have different roles depending on the level of need, social, cultural, educational community as well as physical factors and ecological somewhere (Rahayu and Prawiroatmodjo, 2005). According to Terra (1967) in Sajogjo (1994) that functions yard area is (1) foodstuffs in addition to rice results; (2) vegetables and fruits; (3) herbs, spices and perfumes; (4) materials crafts; (5) firewood; (6) cash; and (7) the livestock and fishing sectors. In addition, according Danosastro (1978) in Mardikanto (1994) there are at least four functions yard area as a source of food, as a producer of cash crops, as the producer of spices or drugs, and as a source of a wide variety of woody (for firewood, building materials and craft materials).

According to Satiadiredja (1984) and Karyono (2000), garden plants have a structure that is different from one place to another place. Factors that affect the structure and development of the yard is the climate factor, edafik and local culture. Generally good grounds to be contained in an area that has a wet climate (rainfall evenly distributed throughout the year) or have a regular watering.

Rahayu research results and Prawiroatmodjo (2005) in the village Lampeapi Wawoni-Southeast Sulawesi island, gained as much as 40 kinds of plants with 5 different types of crops that make money trading commodities, while the rest is a producer of traditional medicine and aesthetics. While based on research results Njurumana *et al.* (2014) the conservation of plant biodiversity in the system kaliwu on Sumba Island gained as much as 145 species of plants in 52 families, 51% of species are found equally in each unit system kaliwu, some of which include species that experienced scarcity (vulnerable) in nature.

Bengkulu Province is a region located to the west of the Bukit Barisan mountain range area of ± 1.97887 million ha or 19788.7 km<sup>2</sup>. The province of Bengkulu in a position extending from the border of West Sumatra Province up to the border province of Lampung with a range of ± 567 kilometers (Central Bureau of Statistics of Bengkulu province, 2013). If the views of the area, allegedly there are many types of plants that can grow and adapt well in the province of Bengkulu. Until now there is no data or research results that do research on the distribution of plant species that are in the province of Bengkulu. So it is necessary to investigate the distribution of plant species in the province of Bengkulu. This study aims to determine the diversity and distribution of species of plants in the province of Bengkulu.

## MATERIALS AND METHODS

Studies conducted in six districts/municipalities in the province of Bengkulu, Central Bengkulu, Kaur, South Bengkulu, Bengkulu City and Mukomuko, in February-September 2014. In general, the location of study is lowland except Lebong are in the highlands (> 500 meters above sea level). To determine the height of each location of the sampling, carried out by measurements using Global Positioning System (GPS).

Data is collected on the yard area chosen deliberately by the diversity and high population of plant species. The number of samples in each location were taken as many as 30 points sampling or based keanekeragaman at each location. Yards each sampling point the observed average has an area of ± 700 m<sup>2</sup>. Data were collected by recording all types of plants that are in their yards, both in the area of the front of house and back of house areas. Data captured includes the name of the plant, the name of the type, amount and type of use was by the community. Collected data were tabulated and analyzed to determine the level of its diversity. The analytical method used to determine the level of crop diversity using the Shannon-Wiener. (Barbour, et al., 1987 in Prasetyo 2007). The equation used is as follows:



|             |       |   |
|-------------|-------|---|
| Description | $H^1$ | = Indeks diversity                              |
|             | $n_i$ | = The number of individuals of each species     |
|             | $N$   | = The total number of individuals in the sample |

The value of the benchmark index of diversity Shannon-Wiener presented in Table 1.

Table 1. The value of the benchmark index of crop diversity

| Value benchmark    | Description  |
|--------------------|--|
| $H' < 1,0$         | Diversity is low, poor, very low productivity as an indication of the pressure that is heavy and unstable ecosystem. |
| $1,0 < H' < 3,322$ | Diversity being, productivity enough, the condition is fairly balanced ecosystem, ecological pressures moderate.     |
| $H' > 3,322$       | High biodiversity, ecosystem stability steady, high productivity, resistant to ecological pressures.                 |

## RESULTS AND DISCUSSION

Based on the results, gained as much as 254 plant species in 84 families with the distribution of the number of species and the number of families that differ between regions. The largest number of plant species in the city of Bengkulu 172 types with 75 families and lows in Lebong 72 types with 44 families (Table 2).

There are several plant families that have quite a lot of types of plants that are Fabaceae (16 species), Euphorbiaceae (15 species) and Zingiberaceae (12 species). The many types of plants cultivated by the people in the province of Bengkulu more than the number of plant species inventory that has been done by Pendong and Arrijani (2004) in Tomohon North Sulawesi as many as 237 species. The higher the number of species cultivated in the province of Bengkulu one of them allegedly because of the land area of the public grounds. In addition, high kind of plant in the city of Bengkulu allegedly caused by high public interest to do cultivation in their yards. Based on the results of studies that have been done Astuti and Honorita (2012) reason for people to seek yard area is 60% of respondents meet the needs of families, 37% to increase family income and 7% because of the beauty of the environment.

Table 2. Distribution of types of plants in each district /city in the Province of Bengkulu

| No.    | District/City    | The number of types | The number of relatives |
|--------|------------------|---------------------|-------------------------|
| 1.     | Bengkulu Tengah  | 141                 | 57                      |
| 2.     | Kaur             | 94                  | 50                      |
| 3.     | Bengkulu Selatan | 142                 | 62                      |
| 4.     | Kota Bengkulu    | 172                 | 75                      |
| 5.     | Mukomuko         | 78                  | 43                      |
| 6.     | Lebong           | 72                  | 44                      |
| Amount |                  | 254                 | 84                      |

Diversity of plant species is one way to learn the structure of a community. According Pendong and Arrijani (2004) Diversity Index value type (IKJ) can be used as bio-indicators of changes in community structure that describes its support for the stability of an ecosystem. The diversity of plants in the yard is measured based on the value IKJ plants obtained by measuring the number of species and individual plants in the yard. Thus, the size of the crop diversity index values in the yard can give you a hint how much the carrying capacity of the ecosystem settlement.

Based on calculations of diversity index (H1), located at values between 1.52 to 4.31 (Table 3). H1 value of the highest in the city of Bengkulu at 4.31 or higher diversity which means that the high plant diversity, steady economic stability, high productivity and resistance to ecological pressure (Restu 2002 in Fitriana, 2006). The high degree of plant diversity in Bengkulu influenced by several factors, one of which is human as owners of their yards. In addition, other factors that affect the diversity of plants is the high adaptation of plant species are cultivated (Prasad, 2007). According Deshmukh (1992) high variability in the tropics is caused by several factors: more species found in each habitat, over the amount of habitat that each contain the same number of species as well as a combination of both. Additionally, Soegianto (1994) confirms that high diversity in a community if composed by many species with an abundance of the same or nearly the same.

Table 3. Index of plant diversity in six districts / municipalities in the Province of Bengkulu

| No. | District/City    | Indiversity ( $H^1$ ) | Description    |
|-----|------------------|-----------------------|----------------|
| 1.  | Bengkulu Tengah  | 3,69                  | High diversity |
| 2.  | Kaur             | 3,52                  | High diversity |
| 3.  | Bengkulu Selatan | 1,52                  | High diversity |
| 4.  | Kota Bengkulu    | 4,31                  | High diversity |
| 5.  | Lebong           | 2,99                  | High diversity |
| 6.  | Mukomuko         | 3,45                  | High diversity |

Type of plant widely cultivated in home gardens in Bengkulu Province is an annual plant. This shows that the composition of the plant in their yards in Bengkulu province tends to be stable. This is consistent with the statement Muliawati *et al.* (2012), that the fruit trees in the yard area is an annual plant will cause the composition of fruit species was almost stable in a long period of time. In addition, the high biodiversity in home gardens allow for the formation of canopy layer structure that can improve the efficiency of harvesting solar energy.

Table 4. Percentage utilization plant communities in the province of Bengkulu

| No. | Utilization plant              | The percentage of each District / City |       |                     |                  |          |        |
|-----|--------------------------------|--|-------|---------------------|------------------|----------|--------|
|     |                                | Bengkulu<br>Tengah                     | Kaur  | Bengkulu<br>Selatan | Kota<br>Bengkulu | Mukomuko | Lebong |
| 1.  | Decorative plants              | 19.86                                  | 27.66 | 26.76               | 34.88            | 28.21    | 16.67  |
| 2.  | Fruit crops                    | 24.82                                  | 30.85 | 21.83               | 20.93            | 33.33    | 31.94  |
| 3.  | Vegetable plants               | 17.73                                  | 15.96 | 16.20               | 11.05            | 19.23    | 11.11  |
| 4.  | Medicinal plants               | 9.93                                   | 6.38  | 6.34                | 13.95            | 3.85     | 9.72   |
| 5.  | Spice plants                   | 9.22                                   | 5.32  | 7.75                | 7.56             | 8.97     | 12.50  |
| 6.  | Plant sources of carbohydrates | 6.38                                   | 6.38  | 6.34                | 3.49             | 6.41     | 6.94   |
| 7.  | Cattle fodder                  | 0.00                                   | 0.00  | 0.70                | 0.58             | 0.00     | 1.39   |
| 8.  | Commodities trading            | 12.06                                  | 7.45  | 14.08               | 7.56             | 0.00     | 9.72   |

In general, based on use was a group of fruit trees is the dominant crop. There are differences in the percentage of plant utilization at each location. The highest utilization percentage on fruit crops in Central Bengkulu district, Kaur, Mukomuko and Lebong indicated that the location is an orchard of fruit trees. The highest percentage of utilization at plants in South Bengkulu and Bengkulu City showed that both the District/City is a type of ornamental garden plant. This is consistent with the statement by Christanty (1990) and Soeseno (1995) that the plants in the garden can be grouped according to its main function, such as ornamental, fruit, vegetables, medicines, spices, a source of carbohydrates, animal feed, and producer money. In other explanations, Christanty (1990) says that the basic types of grounds, both as a village yard or the yard of the city, can be categorized based on the predominant plant species and the main function of the yard. So based on this, the Central Bengkulu district, Kaur, Mukomuko and Lebong can be categorized as orchard fruit crops, while South Bengkulu and Bengkulu City can be categorized as an ornamental garden plant.

## CONCLUSION

1. The amount obtained as many as 254 species spread in Central Bengkulu (141 species), Kaur (94 types), South Bengkulu (142 species), the city of Bengkulu (172 species), Mukomuko (78 species) and Lebong (72 species).
2. The value of diversity index between 1.52 to 4.31 or is at a high level of diversity index was the highest in the city of Bengkulu (H1 4.31) and the lowest in South Bengkulu (H1 1.52).
3. Based on the use was, yards in Central Bengkulu district, Kaur, Lebong and Mukomuko categorized as orchard fruit crops, South Bengkulu and Bengkulu City categorized as an ornamental garden plant.

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Appendix 1. Types of plants in their yards in Bengkulu Province survey results in 2014

| No. | Family         | The number of types | The name of type   |
|-----|----------------|---------------------|--|
| 1   | Acanthaceae    | 5                   | Keji Beling ( <i>Strobilanthes crispa</i> Blume.), Sambiloto ( <i>Andrographis paniculata</i> (Burm.f) Wall.ex.Nees), Pletekan ( <i>Ruellia tuberosa</i> L.), Puding Hitam ( <i>Graptophyllum pictum</i> (L.)Griff.) and Gandarusa ( <i>Justicia gendarusa</i> )   |
| 2   | Achariaceae    | 1                   | Kepayang ( <i>Pangium edule</i> Reinw. Ex.Blume)   |
| 3   | Acoraceae      | 1                   | Jeringau ( <i>Acorus calamus</i> L.)   |
| 4   | Agavaceae      | 1                   | Sedap Malam ( <i>Polianthes tuberosa</i> L.)   |
| 5   | Alismataceae   | 1                   | Melati Air ( <i>Echinodorus palaefolius</i> var. <i>Latifolius</i> )   |
| 6   | Amaranthaceae  | 3                   | Bayam ( <i>Amaranthus</i> L.), Bunga Kenop ( <i>Gomphrena globosa</i> L.), Jengger Ayam ( <i>Celosia cristata</i> )  |
| 7   | Amaryllidaceae | 3                   | Air Beras ( <i>Zephyranthes candida</i> (Lindl.) Herb.), Bawang-bawangan ( <i>Zephyranthes candida</i> (Lindl.) Herb.), Keladi Bakung ( <i>Cynnum asiaticum</i> L.)  |
| 8   | Anacardiaceae  | 5                   | Kemang ( <i>Mangifera kemanga</i> Blume), Bembam ( <i>Mangifera odorata</i> Griffith), Kedongdong ( <i>Spondias dulcis</i> L.), Mangga ( <i>Mangifera indica</i> L.), Macang ( <i>Mangifera foetida</i> Lour)  |
| 9   | Annonaceae     | 4                   | Buah Nona ( <i>Anona reticulata</i> L.), Sirsak ( <i>Annona mucurata</i> L.), Srikaya ( <i>Annona squamosa</i> L.), and Kenanga ( <i>Cananga odorata</i> (Lam.))   |
| 10  | Apocynaceae    | 8                   | Bintaro ( <i>Carbera manghas</i> ), Tapak Dara ( <i>Catharanthus roseus</i> (L.) G.Don), Alamanda ( <i>Allamanda cathartica</i> ), Bunga Jepun ( <i>Nerium oleander</i> L.), Kamboja Lokal ( <i>Plumeria alba</i> ), Adenium ( <i>Adenium obesum</i> ), Jelutung ( <i>Dyera costulacea</i> (Miq.) Hook), and Bunga Kaliandra ( <i>Thevetia peruviana</i> ) |
| 11  | Araceae        | 7                   | Suweg ( <i>Amorphophallus paeoniifolius</i> (Dennts) Nicolson), Talas ( <i>Colocasia esculenta</i> (L.) Schott.), Sri Rezeki ( <i>Aglaonema</i> sp), Keladi ( <i>Caladium bicolor</i> ), Keladi Keris/ Sente ( <i>Alocasia amazonica</i> ), Kuping Gajah ( <i>Anthurium crystallinum</i> Lindl.), Gelombang Cinta ( <i>Anthurium plowmanni</i> Croat.)     |

|    |               |   |   |
|----|---------------|---|---|
| 12 | Aracaceae     | 9 | Palem Kuning ( <i>Chrysalidocarpus tutescens</i> ), Palem Merah ( <i>Cyrtostachys lakka</i> ), Palem Botol ( <i>Hyophorbe lagenicaulis</i> (L.Bailey) H.E.Moore), Aren ( <i>Arenga pinnata</i> (Wurmb.) Merr), Kelapa ( <i>Cocos nucifera</i> ), Pinang ( <i>Areca catechu</i> L.), Rotan (Calamus), Rumbia ( <i>Metoxylon sagu</i> Rottb.), Kelapa Sawit ( <i>Elaeis guineensis</i> Jacq.)                         |
| 13 | Araliaceae    | 1 | Kedongdong Pagar ( <i>Poluscias frusticosa</i> Miq.)  |
| 14 | Aspleniaceae  | 1 | Kadaka ( <i>Asplenium nidus</i> L.)   |
| 15 | Asphodelaceae | 1 | Lidah Buaya ( <i>Aloe vera</i> L.)  |
| 16 | Asteraceae    | 9 | Kenikir ( <i>Cosmos caudatus</i> ), Sambung Nyawa ( <i>Gynura procumbens</i> (Blume) Mig.), Sembung/Capo ( <i>Blumea balsamifera</i> (L.) DC), Tempuyung ( <i>Sonchus arvensis</i> L.), Bunga Matahari ( <i>Helianthus annuus</i> L.), Beluntas ( <i>Pluchea indica</i> L.), Krisan ( <i>Chrysanthemum morifolium</i> ), Kembang Kertas ( <i>Zinnia elegans</i> Jacq.), Bunga Tahi Ayam ( <i>Tagetes erecta</i> L.) |
| 17 | Balsaminaceae | 1 | Pacar Air ( <i>Impatiens balsamina</i> L.)  |
| 18 | Bassellaceae  | 1 | Binahong ( <i>Anredera cordifolia</i> (Ten.) Steenis)   |
| 19 | Begoniaceae   | 1 | Begonia ( <i>Begonia simbristipulata</i> Hance.)  |
| 20 | Bombacaceae   | 1 | Durian ( <i>Durio zibethinus</i> Murray)  |
| 21 | Bromeliaceae  | 1 | Nanas ( <i>Ananas comosus</i> (L.) Merr)  |
| 22 | Cactaceae     | 3 | Kaktus Centong ( <i>Opuntia cochenillifera</i> ), Wijaya Kusumah ( <i>Epiphyllum oxypetalum</i> ), Buah Naga ( <i>Hylecereus undatus</i> )  |
| 23 | Cannaceae     | 2 | Bunga Tasbih ( <i>Canna lily</i> ) and Ganyong ( <i>Canna discolor</i> Lindl.)  |

| No. | Family         | The number of types | The name of type  |
|-----|----------------|---------------------|---|
| 24  | Caricaceae     | 1                   | Pepaya ( <i>Carica papaya</i> L.)   |
| 25  | Casuarinaceae  | 1                   | Cemara Pantai ( <i>Casuarina equisetifolia</i> )  |
| 26  | Coctaceae      | 1                   | Pacing ( <i>Costus speciosus</i> (J. Koning))   |
| 27  | Combretaceae   | 1                   | Ketapang ( <i>Terminalia catappa</i> L.)  |
| 28  | Commelinaceae  | 1                   | Nanas Kerang ( <i>Rhoeo spathacea</i> Swartz)   |
| 29  | Convolvulaceae | 2                   | Kangkung Cabut ( <i>Ipomea reptans</i> ), Ubi Jalar ( <i>Ipomoea batatas</i> L.)  |
| 30  | Crassulaceae   | 1                   | Cocor Bebek ( <i>Kalanchoe pinnata</i> (Lim.))  |
| 31  | Cucurbitaceae  |                     | Waluh/Prengi ( <i>Cucurbita pepo</i> )  |
| 32  |                | 6                   | Gambas ( <i>Luffa acutangula</i> (L.) Roxb.), Gendulo ( <i>Luffa aegyptiaca</i> ), Mentimun ( <i>Cucumis sativus</i> L.), Pare ( <i>Momordica charantia</i> ), Pare Belut ( <i>Trichosanthes cucumerina</i> L.), Bligu ( <i>Benincasa hispida</i> )   |
| 33  | Cupresaceae    | 1                   | Cemara Kipas ( <i>Thuja orientalis</i> L.)  |
| 34  | Cycadaceae     | 2                   | Paku Bindu ( <i>Cycas cylindrica</i> ) and Pakis Sikas ( <i>Cycas rumphii</i> )   |
| 35  | Dioscoreaceae  | 4                   | Gadung ( <i>Dioscorea hispida</i> ), Kentang Gantung ( <i>Dioscorea bulbifera</i> ), Ubi Kayu ( <i>Manihot esculenta</i> Crant.), Uwi/Umbi Hitam ( <i>Dioscorea alata</i> )   |
| 36  | Dracaenaceae   | 2                   | Suji ( <i>Dracaena angustifolia</i> (Medik) Roxb.) and Bambu Jepang ( <i>Dracaena surculosa</i> Lindl.)   |
| 37  | Euphorbiaceae  | 14                  | Ceremai ( <i>Phyllanthus acidus</i> (L.) Skeels), Singkong Daun ( <i>Manihot esculenta</i> ), Ceremai Belanda ( <i>Phyllanthus acidus</i> (L.) Skeels), Rumput Anting-anting ( <i>Acalypha indica</i> L.), Bunga Patah Tulang ( <i>Euphorbia tirucalli</i> L.), Bunga Betadin ( <i>Jatropha multifida</i> L.), Bunga Zigzag ( <i>Pedilanthus tithymaloides</i> (L.) Poit), uphorbia ( <i>Euphorbia milli</i> ), Ekor Kucing ( <i>Acalypha hispida</i> ), Jarak Kepyar ( <i>Ricinus communis</i> Linn.), Jarak Pagar ( <i>Jatropha curcas</i> L.), Jarak Niur ( <i>Jatropha gossypifolia</i> L.), Karet ( <i>Hevea brasiliensis</i> Muell.Arg.), Puring ( <i>Codiaeum variegatum</i> (L.) A.Juss.), and Kemiri ( <i>Aleurites moluccana</i> )  |
| 38  | Fabaceae       | 16                  | Turi ( <i>Sesbania grandifolia</i> (L.) Pers.), Kacang Merah ( <i>Vigna angularis</i> (Willd.) Ohmi & H. Ohashi), Koro ( <i>Canavalia gladiata</i> (Jack.) DC), Kacang Pedang ( <i>Canavalia ensiformis</i> (L.)), Kacang Tunggak ( <i>Viga unguiculata subsp. <i>unguiculata</i></i> (L.)), Kecipir ( <i>Phosophocarpus tetragonolobus</i> (L.)), Bengkuang ( <i>Pachyrhizus erosus</i> ), Asoka ( <i>Saraca asoca</i> (Roxb.) Wildu), Bunga Merak ( <i>Caesalpinia pulcherrima</i> (L.)), Dadap ( <i>Erythrina variegata</i> L.), Gamal ( <i>Gliricidia sepium</i> (Jacq.) Kunth ex Walph), Jengkol ( <i>Archidendron paisiflorum</i> (Benth.) I.C. Nielsen), Petai ( <i>Parkia speciosa</i> ), Kayu Sengon ( <i>Albizia chinensis</i> (Osbeck) Merr.), Kuaw/Kabau ( <i>Archidendron macrocarpum</i> (Benth.) I.C. Nielsen), Lamtoro ( <i>Leucaena glauca</i> (Linn.) Benth.) |
| 39  | Guttiferae     | 1                   | Manggis ( <i>Garcinia mangostana</i> L.)  |
| 40  | Gnetaceae      | 1                   | Melinjo ( <i>Gnetum genmon</i> L.)  |
| 41  | Heliconiaceae  | 1                   | Bunga Pisang ( <i>Heliconia</i> sp.)  |

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| 42 | Labiateae     | 1 | Jawer Kotok ( <i>Coleus scutellarioides</i> Linn.Benth)  |
| 43 | Lamiaceae     | 6 | Nona Makan Sirih ( <i>Clerodendrum thomsoniae</i> ), Ruku-ruku ( <i>Ocimum teuiflorum</i> ), Kumis Kucing ( <i>Orthosiphon aristatus</i> (Blume) Miq.), Kemanggi ( <i>Ocimum xcitriodorum</i> Vis.), Selasih ( <i>Ocimum basilicum</i> L.), Kayu Jati ( <i>Tectona grandis</i> L.) |
| 44 | Lauraceae     | 2 | Alpukat ( <i>Persea americana</i> Miller) and Kayu Manis ( <i>Cinnamomum burmanii</i> (Nees & Th. Nees))   |
| 45 | Laxmanniaceae | 1 | Hanjuang ( <i>Cordyline terminalis</i> )   |
| 46 | Leguminosae   | 2 | Kacang Panjang ( <i>Vigna sinensis</i> ) and Kacang Keripit ( <i>Phaseolus lunatus</i> L.)   |

| No. | Family         | The number of types | The name of type  |
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| 47  | Liliaceae      | 4                   | Bawang Daun ( <i>Allium fistulosum</i> ), Bawang Kucai ( <i>Allium tuberosum</i> ), Bawang Merah ( <i>Allium cepa</i> ), Bunga Asparagus ( <i>Asparagus conchichinensis</i> )   |
| 48  | Lythraceae     | 1                   | Inai Batang ( <i>Lawsonia inermis</i> )   |
| 49  | Mackinlayaceae | 1                   | Pegagan ( <i>Centella asiatica</i> )  |
| 50  | Magnoliaceae   | 1                   | Kantil ( <i>Magnolia x alba</i> )   |
| 51  | Malvaceae      | 6                   | Rosela ( <i>Hibiscus sabdariffa</i> L.), Randu ( <i>Ceiba pentandra</i> ), Kembang Sepatu ( <i>Hibiscus rosa-sinensis</i> ), Kakao ( <i>Theobroma cacao</i> L.), Kayu Bayur ( <i>Pterospermum javanicum</i> Jungh.), Mawar Kapas ( <i>Hibiscus mutabilis</i> L.)  |
| 52  | Marantaceae    | 1                   | Garut ( <i>Maranta arundinacea</i> L.)  |
| 53  | Meliaceae      | 5                   | Dukuh ( <i>Lansium domesticum</i> Correa), Langsat ( <i>Lansium domesticum</i> var: <i>domesticum</i> ), Kayu Bawang ( <i>Melia azedarach</i> L.), Kayu Suren ( <i>Toona sinensis</i> ), Mahoni ( <i>Swietenia mahagoni</i> (L.) Jacq.)   |
| 54  | Menispermaceae | 2                   | Brotowali ( <i>Tinospora crispa</i> (L.) Miers ex Hoff.), Cingcau ( <i>Cyclea barbata</i> Miers.)   |
| 55  | Musaceae       | 1                   | Pisang ( <i>Musa</i> sp)  |
| 56  | Moraceae       | 5                   | Sukun ( <i>Artocarpus altilis</i> (Parkinson) Fosberg), Beringin ( <i>Ficus benjamina</i> ), Beringin Putih ( <i>Ficus benjamina</i> var: <i>varigata</i> ), Murbei ( <i>Morus alba</i> L.), Nangka ( <i>Artocarpus heterophyllus</i> Lam.)   |
| 57  | Moringaceae    | 1                   | Kelor ( <i>Moringa pterigosperma</i> Gaertn.)   |
| 58  | Muntingiaceae  | 1                   | Kersen ( <i>Muntingia calabura</i> L.)  |
| 59  | Myrtaceae      | 9                   | Salam ( <i>Syzygium polyanthum</i> (Wight) Walpers), Ceremai ( <i>Eugenia uniflora</i> L.), Jambu Air ( <i>Syzygium aquaeum</i> (Burm.f.) Alston), Jambu Bol ( <i>Syzygium malaccense</i> (L.) Merr & Perry), Jambu Biji ( <i>Psidium guajava</i> L.), Karimunting ( <i>Rhodomyrtus tomentosa</i> ), Pucuk Merah ( <i>Syzygium oleina</i> ), Cengkeh ( <i>Syzygium aromaticum</i> (L.) Meril & Perry), Jamblang ( <i>Syzygium cumini</i> (L.) Skell.) |
| 60  | Nelumbonaceae  | 1                   | Lotus ( <i>Nelumbo nucifera</i> Gaertn.)  |
| 61  | Nyctaginaceae  | 2                   | Bunga Pukul Empat ( <i>Mirabilis jalapa</i> L.), Bougenvil ( <i>Bougainvillea</i> sp)   |
| 62  | Orchidaceae    | 1                   | Vanili ( <i>Vanilla planifolia</i> )  |
| 63  | Oxalidaceae    | 2                   | Belimbing Manis ( <i>Averrhoa carambola</i> L.), Belimbing Wuluh ( <i>Averrhoa bilimbi</i> L.)  |
| 64  | Palmae         | 1                   | Salak Pondoh ( <i>Salacca zalacca</i> (Gaertner) Voss)  |
| 65  | Pandannaceae   | 1                   | Pandan Wangi ( <i>Pandanus amaryllifolius</i> Roxb.)  |
| 66  | Passifloraceae | 1                   | Markisa ( <i>Passiflora edulis</i> Sims.)   |
| 67  | Pedaliaceae    | 1                   | Wijen Hitam ( <i>Sesamum indicum</i> L.)  |
| 68  | Phyllanthaceae | 3                   | Katuk ( <i>Sauvagesia androgynus</i> ), Air-air ( <i>Baccaera metleyana</i> Muell.Arg.), Ketupak ( <i>Baccaera racemosa</i> (Reinw.) Muell.Arg.)  |
| 69  | Piperaceae     | 3                   | Sirih Biasa ( <i>Piper betle</i> L.), Sirih Merah ( <i>Piper ornatum</i> N.E.Br), Lada ( <i>Piper nigrum</i> L.),   |
| 70  | Poaceae        |                     | Serai ( <i>Cymbopogon citratus</i> (DC) Stapf.), Bambu, Tebu Telur ( <i>Saccarum edule</i> ), Tebu ( <i>Saccarum officinarum</i> L.)  |
| 71  | Portulacaceae  | 1                   | Bunga Ginseng ( <i>Talinum paniculatum</i> Jacq. Gaerth)  |
| 72  | Polypodiaceae  | 1                   | Tanduk Rusa ( <i>Platycerium bifurcatum</i> )   |

| No. | Family      | The number of types | The name of type  |
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| 73  | Punicaceae  | 1                   | Delima ( <i>Punica grantum</i> L.)                                  |
| 74  | Pteridaceae | 1                   | Suplir ( <i>Adiantum</i> sp)  |
| 75  | Rosaceae    | 2                   | Mawar ( <i>Rosa canina</i> ), Melati ( <i>Jasminum sambac</i> Air.) |

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| 76 | Rubiaceae     | 5  | Kayu Jabon ( <i>Anthocephalus cadamba</i> ), Kopi Arabika ( <i>Coffea arabica</i> ), Kopi Robusta ( <i>Coffea robusta</i> L.), Mengkudu ( <i>Morinda citrifolia</i> L.), Kaca Piring Besar ( <i>Gardenia augusta</i> L.)  |
| 77 | Ruraceae      | 1  | Labu Kayu ( <i>Aegle marmelos</i> (L.) Corr.)   |
| 78 | Ruscaceae     | 4  | Sansievera Kuning ( <i>Sansevieria trifasciata</i> ), Sansievera Hijau ( <i>Sansevieria trifasciata var.Prain</i> ), Sansievera Tanduk ( <i>Sansevieria cylindrica</i> ), Lidah Mertua ( <i>Sansevieria trifasciata</i> )   |
| 79 | Rutaceae      | 7  | Jeruk Lemon ( <i>Citrus limon</i> (L.) Burm.f.), Jeruk Kalamansi ( <i>Citrus microcarpa</i> (Bunge) Wijnands), Jeruk Nipis ( <i>Citrus aurantifolia</i> (Christm.&Panzer) Swingle, Jeruk Bali ( <i>Citrus maxima</i> (L.) Burm f.), Jeruk ( <i>Citrus</i> sp.), Jeruk Purut ( <i>Citrus hystrix</i> DC.), Kemuning ( <i>Murraya paniculata</i> L.)  |
| 80 | Salicaceae    | 1  | Lobi-lobi ( <i>Flacourtie inermis</i> Roxb.)  |
| 81 | Santalaeae    | 1  | Cendana ( <i>Santalum album</i> L.)   |
| 82 | Sapindaceae   | 4  | Matoa ( <i>Pometia pinnata</i> ), Rambutan ( <i>Nephelium lappaceum</i> L.), Rambutan Sugi ( <i>Nephelium juglandifolium</i> ), Kelengkeng ( <i>Litchi chinensis</i> Sonn.)   |
| 83 | Sapotaceae    | 3  | Sawo ( <i>Manilkara kauki</i> (L.) Dubard), Sawo Mentega ( <i>Pouteria campechiana</i> ), Sawo Hijau ( <i>Chrysophyllum cainito</i> L.)   |
| 84 | Simaroubaceae | 1  | Empedu beruang ( <i>Brucea javanica</i> (L.) Merr.)   |
| 85 | Solanaceae    | 7  | Kecubung Hitam ( <i>Datura metel</i> ), Tembakau ( <i>Nicotiana tabacum</i> ), Cabe Rawit ( <i>Capsicum frutescens</i> L.), Cabe Besar ( <i>Capsicum annuum</i> L.), Tekkokak ( <i>Solanum ruedemannii</i> L.), Terung Minyak ( <i>Solanum melongena</i> ), Tomat ( <i>Lycopersicon esculentum</i> Mill.)   |
| 86 | Thymelaeaceae | 1  | Mahkota Dewa ( <i>Phaleria macrocarpa</i> (Scheff.Boerl))   |
| 87 | Umbelliferae  | 1  | Seledri ( <i>Apium graveolens</i> L.)   |
| 88 | Verbanaceae   | 2  | Bonsai ( <i>Duranta repens</i> L.), Kayu Sungkai ( <i>Peronema canescens</i> Jack.)   |
| 89 | Zingiberaceae | 11 | Banglai ( <i>Zingiber casamounianum</i> Roxb.), Jahe Merah ( <i>Zingiber officinalis</i> Roscoe.), Kapulaga ( <i>Amomum compactum</i> ), Kunyit ( <i>Curcuma domestica</i> Val.), Kunyit Putih ( <i>Curcuma zedoaria</i> ), Kencur ( <i>Kaempferia galanga</i> L.), Temu Kunci ( <i>Boesenbergia rotunda</i> (L.) Masf.), Kecombrang ( <i>Etingera elation</i> (Jack.) R.M.Smith), Lempuyang ( <i>Zingiber zerumbet</i> L.), Lengkuas ( <i>Alpinia galanga</i> L.), Temulawak ( <i>Curcuma xanthorrhiza</i> Roxb.), Lengkuas Merah ( <i>Alpinia purpurata</i> K.Schum.) |