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Diversity of Angiosperm Plants in the Tugu Square, Malang City

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Abstract: This research was conducted in Malang City Monument Square, East Java. The purpose of this study was to determine the diversity of angiosperm plants in Malang City Monument Square. This research was conducted using a quantitative method because it requires observation to obtain the desired data such as the types and characteristics of the angiosperm plants. In this study, sampling and identification of the morphology of the angiosperms were carried out by means of a descriptive analysis of the roots, stems and leaves. The analysis was carried out based on literature studies from various sources. Based on the results of these observations, 19 species of plants were found in Malang City Monument Square including Seroja, Nusa Indah Flowers, and Ganyong.

Keywords: Angiosperms; Diversity; Malang City Monument Square

Introduction

Malang City Monument Square is a symbol of important events in Malang City, East Java as a manifestation of the birth of the Indonesian nation after being ruled by the Dutch. The location of this square is in the middle of the city, precisely on Jalan Tugu Kiduldalem, Kec. Klojen, Malang City, East Java. The purpose of establishing this square is to pay homage to the services of Governor 2005ral Jaan Pieterzoen Coen who was the founding general of Batavia (Fahmi, 2021).

Malang City Tugu Square is in the shape of a circle with a monument in the middle that is straight and tapering which is the center of the place. Around the monument there is a fish pond with a lotus flower on it. Apart from that, the monument is also surrounded by a garden with various types of plants, one of which is an angiosperm plant (Daniswari, 2022).

Angiosperms are flowering plants (Magnoliophyta) (Eriawati, 2015) which is the largest group of vascular

plants belonging to the kingdom plantae which has a large number of species. Angiosperms can also be interpreted as vascular seed plants in which the eggs are fertilized and develop into seeds inside a closed hollow ovary or spermatophyta. Its distinctive feature is that it has flowers that function as reproductive organs and there are ovum in these flowers which will then become seeds and have seeds which, if spread, can dominate terrestrial ecosystems (Huda, Amrul, & Susilo, 2020).

Angiosperms are composed of two words namely "Angio" which means flower and "Spermae" which means seed plants. Angiosperms are closed seed plants. Because, the seeds of these plants are always covered by a body that comes from the leaves of the fruit or is called the ovary. Then, the ovary and other parts of the flower will grow into fruit and the ovary that has become a seed will remain in it (Hidayah, 2020).

Angiosperms are divided into two subclasses namely dicots and monocots. Dicots are flowering plants that have two cotyledonous leaves. The characteristics of

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dicots are taproots, cambium stems and branches, leaf veins pinnate and have open collateral vascular bundles, have flower petals in multiples of four and five, for example roses, tomatoes, ylang, and others (Hidayah, 2020). Meanwhile, monocots are flowering plants whose seeds do not divide because they only have one institutional leaf. The characteristics of monocots are fibrous roots, non-woody stems and not many branches, parallel or curved leaf veins, have flower petals in multiples of three, indistinguishable petals and corolla, and have scattered vascular bundles, for example, wheat, corn, rice, and others (Wulandari et al., 2016).

The characteristics of angiosperms include plants that have taproots and fibers, have thick fleshy fruits, have a complete body structure (roots, stems, leaves, and flowers), have leaf veins that vary (pinnate, parallel, and finger), experience double fertilization, has stems with cambium and no cambium, and has flowers consisting of petals, corolla, pistils and stamens (Atap, 2021).

Angiosperms have many benefits in human life, including: a.) As an ornamental plant, b.) As food, c.) As a dressing material, d.) As a medicinal ingredient, e.) As a building material.

Some angiosperms are harmful to humans because they are weeds, for example, reeds, nutgrass, and water hyacinth. Apart from that, there are also poisonous angiosperms such as cannabis, coca, and Papaver sommiferum (Wardati, 2020).

Method

Time and place

This research was conducted in November 2022 by visiting the observation site, namely Malang City Monument Square which is located on Jalan Tugu, Kiduldalem, Kec. Klojen, Malang City.

Tools and materials

The material tools used in the observation of this study are in the form of writing instruments such as books and pens to record important matters related to research. In addition, there is also a cellphone camera that is used to document the plants studied. The materials used in this study were several types of angiosperm plants in Malang City Monument Square.

Types of Methods and Data Sources

This research uses quantitative research methods because this research requires observation to determine the characteristics of the diversity of plants in the Angiospermae family, especially in the Tugu Square, Malang City. The research instrument used is the researcher himself by developing the data obtained and completing the data. The data sources used are research results and other supporting sources, such as books and

the internet. The data collection that will be carried out is by coming to the research location, namely in the Malang City Square. The objects observed were the many species of Angiospermae plants, the differences in their structure were observed.

Analysis

The data is taken from the results of research that has been done then the data will be analyzed in a qualitative description. Of all the samples of the Angiospermae plants observed which were then compared, there were two comparisons, namely a morphological comparison whether there was a difference in character between the Angiosperm species that had been found. The differences in characters between species indicate that there are variations in the morphological characters of the Angiospermae plants that grow in the Tugu Square, Malang City.

Result and Discusion

Seroja



Kingdom: Plantae Division: Magnoliophyta Class: Magnoliopsida Order: Nymphaeales Family: Nelumbonaceae

Genus: Nelumbo

Species: Nelumbo nucifera Gaertn

Figure 1. Seroja

Seroja has an upright flower stalk with flowers that do not float on the surface of the water. The stalk is an empty tube in the middle as a way for air to pass. The leaves are located on the surface of the water, coming out of stalks that come from rhizomes that are in the mud at the bottom of ponds, rivers or swamps. The leaves are round and wavy at the edges. The diameter of the leaves can reach 60 cm. The pink flowers rise from the stalks and rise above the surface of the water (Puspita, 2018).

Usually in Indonesia it is called Seroja or Padma, Chinese Lotus, Indian Lotus, and sometimes it is called the Lotus because it has a resemblance to the flower crown with other lotuses. In Indonesia it is usually used as an ornamental pond plant because of its beauty. However, in several other Asian countries it is used as a source of food and traditional medicine. The seeds can be used to treat food absorption disorders, diarrhea, and vaginal discharge in women. The flowers can be used for bleeding and treating wounds. Seroja originates from mainland Asia and spreads to almost all tropical and sub-tropical regions. It usually grows stagnant in swamp water and ponds (Magandhi, 2015).

Palem Kipas



Kingdom: Plantae Division: Magnoliophyta

Class: Liliopsida Order: Arecales Family: Arecaceae Genus: Livistona

Species: Livistona chinensi

Figure 2. Palem Kipas

Fan palms can usually grow 9-15 m tall. The leaves reproduce openly (form like a fan) with a width of up to 4 m. based on morphology, the shape of this palm is classified as a medium-sized tree with a trunk that is not too high but quite shady. The shape of the fan palm leaves resembles a semicircle with a diameter of 30-50 cm (Alkhairi, 2021).

Usually in Indonesia it is called Palm Fan. Palm Fan is not only used as an ornamental plant, but can also be used as a raw material for handicrafts and light construction materials. In Java, the leaves are used as a basis for woven. Apart from that, the fan palm can also be used as a shade plant because it has wide leaves. The Palm Fan comes from the forests of Madagascar (Prabowo, 2022). Judging from its habitat, Palm Fans can be found from southern Japan, Taiwan, the Ryukyu Islands, as well as southeastern China and Hainan, even Java Island (Alkhairi, 2021).

Ajeran



Kingdom: Plantae Division: Magnoliophyta Class: Magnoliopsida Order: Asterales

Family: Asteraceae Genus: Bidens

Species : Bidens pilosa L.

Figure 3. Ajeran

Ajeran plants have plant stems that are upright, branched, square, and hairless with a height of up to 120 cm. This plant has leaves with leaf bud shapes ranging from oval to sharp. This plant has a small flower shape, white and yellow. The flowers are narrow in length and the stalk at the end of the stem is thin. Each flower has a short, wide, white petal head and is equipped with many small yellow flowers (Pebriani, 2016).

In Indonesia it is usually known as Ajeran, Hereuga, Network, Ketul Kebo, Ketul Sapi, Ketulan, and Lancituwa. In Indonesia, the roots are usually used as a decoction for eye medicine. This plant also contains flavonoids which function as antibacterial antioxidants (Pebriani, 2016). Ajeran plants originate from South America and are commonly found in areas with tropical and subtropical climates. This plant can grow well in areas with low altitudes to altitudes above 2000 meters in Papua New Guinea (Pebriani, 2016).

Bunga Nusa Indah



Kingdom: Plantae Division: Magnoliophyta Class: Magnoliopsida Order: Rubiales

Family: Rubiaceae Genus: Mussaenda

Species: Mussaenda philippica A.

Figure 4. Bunga Nusa Indah

Nusa Indah Flower Plants are classified as shrubs. The stems can grow to a height of 2-3 meters. This plant has many branches on its stem and grows lush even though it has a single leaf. The flowers are star-shaped with a diameter of about 10 mm and have a single sepal. Mussaenda interest is a compound interest. The flower crown has a tubular base with loose ends with fine hairs on the surface (Calvin, 2017).

In Indonesia it is usually known as Nusa Indah. However, the Sumatran Malay community calls it Daun Putri. Nusa Indah Flower Plants can be used to treat fever due to hot air, treat food poisoning, prevent breast cancer, treat diarrhea, treat bronchitis, and treat food poisoning. Nusa Indah originates from Africa and Asia and is spread across tropical and subtropical regions (Kaffi, 2018).

Puring



Kingdom: Plantae Division: Magnoliophyta Class: Magnoliopsida Order: Euphorbiales Family: Euphorbiaceae Genus: Codiaum

Species: Codiaeum variegatum (L.)

Figure 5. Puring

Puring plants have an average height of 90 cm-3.5 m. Puring has a spiral leaf arrangement with round and wavy leaf types. The beauty of this plant lies in the shape of the leaves which are very varied. Puring stems are woody, cambium, and branched with roots belonging to fibrous roots (Sulistiani, 2016).

In Indonesia it is usually known as Puring plant. Croton plants can be used as pollutant absorbent plants, ornamental plants, medicinal plants, absorbers or catchers of phosphorus elements, symbols of peace and people's welfare. Puring plants also have properties as

antibacterial, antioxidant and anti-amoeba (Sulistiani, 2016). Puring originates from Malaysia and the Pacific. But now it has spread throughout the tropics and subtropics, and has become a symbol of tourism (House, 2020).

Bunga Asoka



Kingdom: Plantae Division: Spermatophyta Class: Dycotyledonae Order: Rubiales Family: Rubiales Genus: Ixora

Specias : Ixora cocinae L.

Figure 6. Bunga Asoka

Ashoka flowers have a type of taproot that grows spreading downwards. Ashoka root color is brown. Ashoka trees can grow to a height of 7 meters. Ashoka stems grow upright and round. Ashoka flowers have various colors, including orange and yellow. Ashoka leaves are oval, tapered, with a blunt base and tip, slightly serrated flat edges (Rimbakita, 2020).

In Indonesia it is usually known as Bunga Soka or Bunga Asoka. Flower The name Ashoka comes from Sanskrit, which means free from sorrow. Asoka flowers can be used as a medicine for wounds and bruises, medicine for leg cramps, medicine for dysentery, and can be used to brighten the skin. Ashoka flowers originate from India. This plant can grow well and flower productively in the lowlands to an altitude of 700 meters above sea level. Appropriate environmental conditions, namely in the open (get direct sunlight) (Widyastuti, 2018).

Cambodian Flowers



Kingdom: Plantae Division: Magnoliophyta Class: Magnoliopsida Order: Gentianales Family: Apocynaceae Genus: Plumeria

Species: Plumeria obtusa L.

Figure 7. Cambodian Flowers

In Indonesia it is usually known as the Cambodian Flower. The Cambodian plant is about 3-7 m high, and has a white sap. The Cambodian flower has five large petals and almost the same shape. The color of the flowers also varies greatly, one of which is white. Cambodian leaves are about 30-40 cm long with rounded edges, some are tapered according to their type with a size of about 20-30 cm. The leaf surface is shiny,

some are not shiny with clearly visible leaf veins (Nadiyah, 2020).

Cambodian plants can be used as traditional herbal medicine. Cambodian Flower Oil is also useful for cleaning and moisturizing the skin, as well as tightening pores. Cambodian leaves are also efficacious as a nerve sedative, overcome insomnia, headaches, and boils. The root is used as a remedy for hemorrhoids (hemorrhoids), the sap also has uses to remove calluses on the palms and feet. Cambodia comes from Tropical America, such as Mexico, Colombia and Ecuador, and spreads to other hot climates, such as Asia including Indonesia and can also grow in sub-tropical climates. (Nadiyah, 2020).

Ganyong



Kingdom : Plantae Division : Magnoliophyta

Class : Liliopsida Order : Zingiberales Family : Cannaceae Genus : Canna

Species: Canna glauca L.

Figure 8. Ganyong

It has stems formed from leaf midribs, unbranched, and green in color. The leaves are elongated and narrow with a length of about 28 cm-70 cm and a width of 1.5 cm-14 cm, pinnate, the tip of the leaf is sharp, and green. The roots are rhizomes. It has yellow flowers with a length of about 7 cm-10 cm and can grow up to 1 meter (NParks, 2022).

Canna Red



Kingdom : Plantae Division : Magnoliophyta

Class : Liliopsida Order: Zingiberales Family : Cannaceae Genus : Canna

Species: Canna indica L.

Figure 9. Canna Red

Another name for this plant is Maraca amarilla, in Indonesia it is known as Ganyong, Bunga Kana, Tasbih Flower, Laos Jambe, Lumbong, Nyindro, Senitra, Laos Mecca, and Midro. In Indonesia, the tubers can be used as starch, the young tubers can be eaten as a vegetable or boiled, the shoots can be used as animal feed, and can be used as traditional medicine to cure various diseases such as antipyretics, hypertension, urinary tract, heartburn, and ulcers (Suhartini, 2010). This plant is also found in tropical areas such as Southeast Asia. In Indonesia, it can be found in East Java, Central Java,

West Java, Yogyakarta, Lampung, Jambi, Riau, Kalimantan, Sumatra, Sulawesi and Maluku. This plant grows in moist and shady soils such as around lakes or river banks. Tasbih flower is a foreign type of plant originating from South America (Sunaryanti, 2010).

Stems contain water, formed from leaf sheaths that cover one another, reaching 150 cm or more in height. Complete single leaf, green, pinnate leaf bones, pointed leaf tips, and flat leaf edges. The root is rhizome (serious). It has red flowers, shaped like a funnel, has 3-5 flower crowns that are small to large (Portal Taman Kita, 2022).

In Indonesia it is known as Cana Flower, Tasbih Flower, Canna, Red Canna, Puspa Mjindra, Canna Wono, Canna Alas, and Canna Forest (Sunaryanti, 2010). In Java, the crushed seeds are used as a dressing to help cure headaches. The leaves can be used to treat bladder stones (Hidayat et al., 2016). Canna Red is widespread throughout the world and is widely cultivated in the tropics. In Indonesia, it is widespread throughout the region, especially in the areas of Java, Sumatra and Bali. Canna Red is a foreign plant species originating from South America (Riandini & Hartana, 2015).

Sea Fir



Kingdom: Plantae Division: Magnoliophyta Class: Magnoliopsida Order: Casuarinales Family: Casuarinaceae Genus: Casuarina

Species: Casuarina equisetifolia L.

Figure 10. Sea Fir

It has a hard stem, is small, has branches, and is brown in color. The leaves are small, shaped like sticks, have segments, and are green in color. The root is a taproot. Has a single flower (Siktiyana, 2022).

Other names for this plant are Australian Pine and Beach She-Oak. In Indonesia it is known as Sea Pine. As an ornamental, perndang, cooling, windbreak and abrasion plant that occurs around the coast (Alisani et al., 2022). Sea Cypress is widely distributed on subtropical and tropical coastlines covering areas of Australia, southern Thailand, Malaysia (Peninsula Malaysia, Sabah and Sarawak), the Philippines, Indonesia, Melanesia and Polynesia. In Indonesia, many of them are found in the areas of Java and Madura. Sea Pine is a foreign plant species originating from warm tropical and subtropical regions in Southeast Asia and Australia (Wisanti et al., 2021).

Red Shoots



Kingdom: Plantae Division: Magnoliophyta Class: Magnoliopsida Order: Myrtales Family: Myrtaceae Genus: Syzygium

Species: Syzygium paniculatum

Gaertn

Figure 11. Red Shoots

Stem shape cylindrical, hard, woody, and brown. The leaves are oval in shape, the tips of the leaves are sharp, the young leaves are red, the old leaves are green (Inriana, 2021), and the leaf surface is shiny (Helmi, 2016).

Has a taproot. This plant is known as red shoots or red shoots. As an ornamental plant, herbal tea, medicine for diabetes, lowering blood sugar levels, increasing immunity and food coloring. Red Shoots is a native plant from southeast Asia which can be found in Bangladesh, Myanmar, Borneo, Java, Sumatra, the Malay Peninsula, the Philippines and Thailand. This plant is commonly found on roadsides, vards, and vards (Onggodjojo, 2021). Red Shoots are native plants from Southeast Asia including Indonesia (Onggodjojo, 2021).

Purple Kent



Kingdom: Plantae Division: Magnoliophyta Class: Magnoliopsida Order: Lamies

Family: Acanthaceae Genus: Ruellia

Species: Ruellia simplex C. Wright

Figure 12. Purple Kent

The stem is cylindrical, not woody, branched, has fine hairs, and is brown in color. The leaves are elongated, the tips of the leaves are tapered, and they are green (Alamsyah & Rachmadiarti, 2021). It has purple flowers and is shaped like a trumpet.

Other names for this plant are R. brittoniana, R. coerulea, R. malacosperma, and R. tweediana. In Indonesia it is known as Kencana Ungu, Ruellia Ungu or Rowlia Ungu (Nurfadillah, 2022). As an ornamental plant and used for medicine such as lowering blood sugar levels. Purple Kent is spread all over the world, especially in countries with tropical climates and also in Southeast Asia. Purple Kent is a foreign plant originating from Central America (Irsyam et al., 2022).

Nusa Indah Putih



Kingdom: Plantae

Division: Magnoliophyta Class: Magnoliopsida Order: Rubiales Family: Rubiaceae Genus: Mussaenda

Species: Mussaenda philippica A.

Rich.

Figure 13. Nusa Indah Putih

It has an erect stem, cylindrical, branched, rough surface, and brown. The leaves are large, oval in shape, the base and tips of the leaves are tapered, the edges are flat, the veins are pinnate, the leaf surface is hairy, and the color is green. Flowers are small, yellow to orange, and are located at the ends of branches or stems. The roots are fibrous roots (Indriana, 2021).

In Indonesia it is known as the Nusa Indah Putih plant. As an ornamental plant, anti-bacterial, antiinflammatory, blood purifier, influenza medicine, fever, cough, and breast cancer prevention. Nusa Indah Putih is spread across many countries such as India, Nepal, Sri Lanka, Cambodia, Vietnam, Malaysia and Indonesia. Nusa Indah Putih is a foreign plant species originating from the Philippines (Megumi, 2020).

Copperleaf



Kingdom: Plantae

Division: Magnoliophyta Class: Magnoliopsida Order: Euphorbiales Family: Euphorbiaceae Genus: Acalypha

Species : Acalypha wilkesiana Mull.

Arg.

Figure 14. Copperleaf

It has an erect, cylindrical, hard or woody, brown stem. The leaves are wide, oval-shaped, green with red markings, pointed leaf tips, pinnate leaf veins, and serrated leaf edges. The flowers are small, grain-shaped, the petals are shaped like a bowl, and are purple in color. Has a taproot (Inriana, 2021).

Another name for this plant is Copperleaf. As an ornamental plant, a coloring agent, as an antibacterial, antifungal, lowers cholesterol in the blood, inhibits the growth of tumor cells, and can repair damaged cells (Kebun Raya Bogor, 2021). Copperleaf is spread in tropical areas such as Africa, America and Asia. In Indonesia, it is widespread on the island of Java (Cintawati, 2020). Copperleaf is a foreign plant that comes from Fiji and islands around the Pacific Ocean (Handayani, 2022).

Spider Lily



Kingdom: Plantae

Division: Magnoliophyta

Class: Liliopsida Order: Asparagales Family: Amaryllidaceae Genus: Hymnocallis

Species: Chlorophytum comosum

Figure 15. Spider Lily

Spider Lily is an ornamental plant that comes from the genus Chlorophytum, family Amaryllidaceae and species Chlorophytum comosum. The beautiful Spider Lily plant is usually used as a hanging ornamental plant because of its long leaves and beautiful patterns (Astarini et al., 2019).

Another name for this plant is Lycoris radiata or Spider Lily. This Spider Lily plant is useful in removing toxic substances from the air. Types of dirt such as dust that enter the room through media such as shoes, cloth, food, and others can be removed through this plant. In addition, the function of the physical barrier is owned by plants. Spider Lily plants come from. These flowers come from China, Korea and Nepal, then to Japan then to America and finally to the whole world.

Taiwan Beauty



Kingdom: Plantae

Division: Magnoliophyta Class: Magnoliopsida Order: Myrtales Family: Lythraceae Genus: Cuphea

Species: Cuphea hyssopifolia

Figure 16. Taiwan Beauty

Cuphea Hyssopifolia in Indonesia, known as the Taiwan Beauty plant, is a beautiful ornamental plant at a low price. Taiwan beauty is a bush plant that is about 30 to 40 cm tall with beautiful small flowers with beautiful colors (Litani, 2013).

In Indonesia it is known as Taiwan Beauty. The function of the leaves and flowers contained in Taiwan Beauty can be used as an insecticide. Apart from the leaves and flowers, the seeds of cuphea are said to be very rich in fatty acids and many industrial oils make use of them. Taiwan Beauty is a plant that originates from Mexico, the continent of North America (Forester, 2020).

Iapanese Iasmine



Kingdom : Plantae Division : Magnoliophyta Class : Magnoliopsida Order : Scrophulariales Family : Acanthaceae Genus : Pseuderanthemum

Species: Pseuderanthemum

reticulum

Figure 17. Japanese Jasmine

Japanese Jasmine plant which has the Latin name Pseuderanthemum reticulatum has a height of about 1.5-2 m. The type of plant stem that is owned is woody. The Japanese jasmine plant has leaves with a yellowish green color and the color on the leaf bones is darker. Japanese jasmine can flower all year round with flowers that appear terminally on the stems and have small flowers. This flower has a predominant white color and a purple spotted pattern (Fascavitri et al., 2015).

In Indonesia it is known as Japanese Jasmine. Japanese jasmine can be used as an ornamental plant. Japanese jasmine is a roadside plant that can be used to reduce the bad effects of air pollution (Fascavitri et al., 2015). In addition, this plant can also be used as a raw material for the cosmetics, perfume, textile, and tea flavoring industries. This flower is widely cultivated in countries where the climate is similar to the area of origin because it can grow in places where water needs are sufficient, soiled and shady (Sinox Nursery, 2019).

Prayer Beads



Kingdom : Plantae Divisi : Magnoliophyta Kelas : Liliopsida Ordo : Zingiberals

Famili : Cannaceae Genus : Canna

Spesies: Canna indica

Figure 18. Prayer Beads

Tasbih flower is a plant that is classified as an external plant that is often found growing in forests and mountains. Usually, Tasbih Flowers are often used as ornamental plants in yards and city parks. This is because tasbih flowers have a dazzling color. In addition, Tasbih Flowers are a type of external plant that is often found in forests and mountains (Bisay et al., 2019).

In Indonesia it is known as Tasbih Flower. Tasbih flower plants can be used as herbal medicine. This plant contains compounds that are beneficial to the health of the body and protect against all diseases. For example, alkaloid compounds that can function as a sedative for the nerves. In addition, there are antioxidant compounds that function to protect against the effects of free radicals. Tasbih flowers come from the tropical regions of the American continent (Melta Elnando, 2020).

Princess Palm



Kingdom : Plantae Division : Magnoliophyta

Class : Liliopsida Order : Arecales

Family: Aracaceae / Palmaceae

Genus: Adonidia

Species: Adonidia merrillii

Figure 19. Princess Palm

The Putri Palm tree has a single gray trunk and green leaves. Palem Putri height can reach 5 meters. This plant has the characteristics of green pinnate leaves and lives in tropical climates. This plant is a type of tropical ornamental palm that is widely cultivated as a constituent of parks and roadside plants, especially in cities (Sumiasri et al., 2010).

In Indonesia it is known as Palem PutriAside from being an ornamental plant, this princess palm plant can absorb various forms of pollutants well. If the princess palm is planted around the house, then this plant can properly reduce pollution that enters the house. This plant is often found in Asian countries and Australia (Sinox Nursery, 2020).

Conclusion

From the results of observations made at the Tugu Square in Malang City using quantitative research methods to determine the characteristics of the diversity of existing plants, several angiosperm plants were obtained, namely Seroja (Nelumbo nucifera Gaertn), Palm Fan (Livistona chinensis), Ajeran (Bidens pilosa L.), Nusa Indah (Mussaenda philippica A. Rich.), Croton (Codiaeum Variegatum), Ashoka Flower (Ixoracocinae L.), Cambodia (Plumeria obtusa L.), Ganyong (Canna glauca), Red Canna (Canna indica L.), Cypress (Casuarina equisetifolia), Red Shoot (Syzygium paniculatum Gaertn), Kencana Ungu (Ruellia simplex C. Wright), Nusa Indah Putih (Mussaenda philippica A.), Copperleaf (Acalypha wilkesiana Mull. Arg), Spider Lily (Chlorophytum comosum) Taiwan Beauty (Cuphea Hyssopifolia), Japanese Jasmine (Pseuderanthemum reticulatum), Tasbih Flower (Canna indica), Palm Tree, and Pseuderanthemum Carruthersii var. atropurpureum.

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Author Contribution

Conceptualization, A.D.A.Y., E.H.M., L.R.H., Q.A., S.A.D.A., and S.R.; methodology, E.H.M.; software, L.R.H., Q.A., and S.A.D.A.; formal analysis, A.D.A.Y., E.H.M., L.R.H., Q.A., and S.A.D.A.; investigations, A.D.A.Y., E.H.M., L.R.H., S.A.D.A., and S.R.; resources, A.D.A.Y., E.H.M., L.R.H., Q.A., S.A.D.A., and S.R.; data curation, L.R.H., Q.A., and S.A.D.A.; wrote a preparatory original draft, A.D.A.Y.; writing reviews and editing, A.D.A.Y. and Q.A.; supervision, I.F. All authors have read and agree to the published version of the manuscript.

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Conflicts of Interest

The authors declare no conflict of interest in this research.

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