



## An Inventory of Ornamental Plants in The Home Yards of The Community of Ujumbou Village Sirenja Sub-District and Their Utilisation as Learning Media

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Ornamental Plants, Ujumbou village, Learning Media

### **ABSTRACT**

*This research aims to describe the types of ornamental plants in the yard of the Ujumbou Village community and produce learning media that are suitable for use. This type of research is descriptive qualitative using exploration method with free sampling technique. The results of the study obtained 76 types of ornamental plants from 37 families and 56 genus found in Ujumbou Village. Assessment of learning media in the form of pocket books conducted by each expert lecturer obtained a score of 82.85% material experts, 97.5% design experts, 69.23% media experts, and 92.25% student trials. The average percentage obtained was 85.45%. These results indicate that the pocket book that has been made is very feasible to use as learning media.*

## INTRODUCTION

Ornamental plants are plants that have unique shapes, colors, aromas, and properties. In Indonesia, ornamental plants are plants that have great potential to be preserved with various interests to be utilized. Ornamental plants are one of the horticultural plants that are in great demand by the wider community. Apart from being a home beautifier or garden filler, ornamental plants are also developed as export products (Handayani, 2019; Wugaje et al., 2023).

The word yard refers to the land surrounding a community settlement that is managed so that it can fulfill the wishes of the homeowner. A yard is a traditional usable land that is located near the house and can be planted with various plants (Wakhidah et al., 2019). The beginning of the emergence of

ornamental plants in people's home gardens has been done since centuries ago. Cultivation of ornamental plants is easy to do in Indonesia because this country has the potential for fertile soil and a tropical climate to support the creation of the habit of planting ornamental plants

Ujumbou Village is a village located in Sirenja District, Donggala Regency, Central Sulawesi Province. Ujumbou village consists of 3 hamlets consisting of 552 houses with a total population of 1931. This village is one of the most populous villages in Sirenja District with an area of 828 Ha. The cultivation of ornamental plants is often found in the yard of the Ujumbou Village community and is cultivated directly by housewives in the village.

The results of preliminary observations that have been made there are several ornamental plants that are widely cultivated by the community, namely aglomera, croton, caladium, kalatea, tongue-in-law, hibiscus, anthurium and asoka. The existing ornamental plants are deliberately planted by the community to add value to the beauty and beauty of the yard. The amount of information about ornamental plants during the pandemic that has not long ended, it seems as if people are competing to plant ornamental plants in their yards, especially people in Ujumbou Village. These home yards have many ornamental plants that can be used as learning resources, but are still not optimally utilized. For this reason, identification must be carried out so that the results can be used as learning media that can help in the biology teaching process (Nurharini et al., 2024).

Learning media is a method of delivering information for the purpose of conveying messages. Learning media helps students understand the learning material that will be explained (Rahmi et al., 2023; Rochman et al., 2024). Especially in the current era of technological development, teachers can utilize the available media to the fullest (Khoir & Aghni, 2021; Muaziyah et al., 2023). When learning materials are available at school, teachers have no difficulty in helping students understand the learning materials provided. The use of media in learning activities can create an interesting and enjoyable learning atmosphere (Sinaga & Rakhmawati, 2022; Ismail et al, 2024).

There are many media that can be used in the learning process, including print media. Print media is a visual medium that contains teaching materials or content to achieve learning objectives (Juminah et al., 2023). The learning media that will be developed in this study is a pocket book containing photos and morphological descriptions of ornamental plants to make it easier to find out the types of ornamental plants in the yard of the Ujumbou Village community, Sirenja District. Learning media in the form of pocket books is developed with the hope that it can be a learning media that is suitable for use in learning. Pocket books are small books with attractive designs and clear layouts that are easy to store in bags and carry anywhere, thus increasing students' motivation to read and learn and helping them understand the contents better and more easily (Asyhari & Salvia, 2016). This thin-bound book is used as a tool to convey one-sided information about teaching materials and develop the potential of its readers (Saputro et al., 2020). A well-designed pocket book can be an effective and efficient teaching aid. The use of appropriate images and colors in the card design will increase reading interest (Sari et al., 2020; Desi et al., 2023).

The focus of this research is "Inventory of Ornamental Plants in the Home Yard of Ujumbou Village Community, Sirenja Subdistrict and Its Utilization as Learning Media". This research was conducted to identify the types of ornamental plants in the yard of Ujumbou Village community. The resulting data is expected to be a teaching material in the form of a pocket book. In addition to being a learning resource for students at school, the results of this study are expected to be able to provide information about the diversity of ornamental plant species and can also be of economic value to the Ujumbou Village community.

## **METHOD**

This research is a descriptive research with an exploratory method by making direct observations. Exploratory research is research that seeks to explain or describe a phenomenon of interest when the researcher does not yet have an explanatory direction for the phenomenon (Mudjiyanto, 2018) while the descriptive research method is a method that describes phenomena systematically, accurately, and accurately and relates these phenomena to one another (Rukajat, 2018).

The tools used in this research are ornamental plant diversity identification book, observation

sheet, camera to document the types of ornamental plants, and writing utensils. ornamental plants, and stationery. The materials used in this study were all types of ornamental plants obtained in the yard of the community's house. Ujumbou Village, Sirenja Subdistrict. Arikunto (2010), the data analysis used in the assessment of learning media can be used as follows learning media assessment can be used the following formula:

$$\text{Average} = \frac{\text{total overall percentage}}{\text{number of assessment aspect items}}$$

## RESULTS AND DISCUSSIONS

### Observation Results of Ornamental Plants in Ujumbou Village, Sirenja Sub-district

The research that has been conducted as a whole found 76 species of ornamental plants consisting of 37 families and 56 genus in Ujumbou Village. The observation results can be seen in Table 1.

**Table 1.** Types of Ornamental Plants in Ujumbou Village

No.	Divisio	Species	Indonesian Name	Habitus
1.	Pteridophyta	<i>Asplenium nidus</i>	Bird's Nest Spikes	Epiphyte
		<i>Adiantum tenerum</i> L.	Suplir spikes	Bush
		<i>Nephrolepis exaltata</i>	Mountain spikes	Bush
		<i>Phymatosorus scolopendria</i> Burm. F	Wire spikes	Herba
		<i>Selaginella plana</i>	Plana spikes	Herba
		<i>Phymatosorus scolopendria</i> Burm. F	Wire spikes	Herba
2.	Pinophyta	<i>Cycas revolute</i> Thunb.	Cycas	Bush

No.	Divisio	Species	Indonesian Name	Habitus	
3.	Magnoliophyta	<i>Aechmea caundata</i> Lind.	Silver vase	Bush	
		<i>Agave angustifolia</i> Haw.	Agave	Bush	
		<i>Agave desmettiana</i> Jacobi	Crown agave	Bush	
		<i>Aglaonema Commutatatum</i> L.	Sri rejeki	Herba	
		<i>Aglaonema crispum</i>	Silver queen	Herba	
		<i>Aglaonema rotundum</i> N.E.B	Aglaonema rotundum	Herba	
				Aceh	
		<i>Aglaonema</i> sp. Var Big Roy	Aglonema	Herba	
		<i>Aglaonema</i> sp. Var Cochinchinense L.	White Aglonema	Herba	
		<i>Aglaonema</i> sp. Var Cochin Paramuay	Aglonema kocin	Herba	
		<i>Aglaonema</i> sp. Var Dona Carmen L.	Aglonema	Herba	
		<i>Alocasia macrorrhizos</i> ‘variegata’	Keladi gaint taro	Herba	
		<i>Alocasia sandariana</i>	Skull caladium	Terna	
		<i>Aloe vera</i> L. Burm. F.	Crocodile container	Bush	
		<i>Anthurium andraeanum</i> Linden ex Andre.	Pendant	Herba	
		<i>Anthurium crystallinum</i>	Elephant ear Anthurium	Herba	
		<i>Anthurium jenmanii</i>	Love wave	Herba	
		<i>Anthurium plowmanii</i> Croat.	Bromelia	Bush	
		<i>Bromelia</i> sp.	Keladi	Bush	
		<i>Caladium humboldtii</i>	Keladi	Herba	
		<i>Caladium tricolor</i> Vent.	Prayer plants	Herba	
		<i>Calathea bachemiana</i> E.Morren.		Herba	
		<i>Calatea oenata</i> L.	Kalatea batik	Herba	
		<i>Calathea</i> sp.	Kalatea peacock	Herba	
		<i>Canna lily</i>	Cana	Bush	
		<i>Chlorophytum comosum</i> (Thunb.) Jacques	Lili paris	Herba	
		<i>Cordyline fruticose</i> (L.) A. Chev.	Red Andong	Shrub	
		<i>Cryptanthus zonatus</i> (Vis.) Beer.	Cryptantus zebra	Bush	
		<i>Dracaena fragrans</i>			
		<i>Dracaena reflexa</i> Lam.	Sri gading	Bush	
		<i>Drimiopsis maculate</i> Lindl.	Suji	Bush	
		<i>Epipremnum aureum</i>	Frog caladium	Herba	
		<i>Euphorbia tithymaloides</i>	Betel ivory	Herba	
		<i>Goepertia lancifolia</i> (boom) borchs. & S. Suarez	Sig-sag	Herba	
		<i>Hippeastrum puniceum-urba</i>	Kalatea quill	Herba	
		<i>Impatiens balsamina</i> L.	Amarilis	Shrub	
<i>Licuala grandis</i> H. Wendl	Water Boyfriend	Terna			
<i>Maranta arundinacea</i> L.	Fan flower	Palm			
<i>Maranta leuconeura</i> E.Morren	Arrowroot tubers	Herba			
<i>Monstera adansonii</i> Schott.	Moss leaves	Herba			
<i>Oxalis triangularis</i> A.St.-Hill.					
<i>Philodendron burle-marx</i>		Liana			

No.	Divisio	Species	Indonesian Name	Habitus
		<i>Proiphys amboinensis</i>	Widow with a hole	Herba
		<i>Sansevieria trifasciata</i> Var. Laurentii	Butterfly flower	Liana
		<i>Sansevieria trifasciata</i> Var. Black gold	Philo brekele	Herba
		<i>Spathiphyllum wallisii</i>	Lili ambon	Herba
		<i>Tradescantia pallida</i> D.R. Hunt.	Tongue-in-law	Herba
		<i>Zamioculcas zamiifolia</i> Schott.	Tongue-in-law	Herba
		<i>Zephyranthes candida</i>	Lili peace	Herba
		<i>Adenium obesum</i> (Forsk.) Roem. & Schult	Purple heart	Herba
		<i>Bougainvillea spectabilis</i> Willd.	Dollar leaf	Herba
		<i>Bryophyllum pinnatum</i> (Lam.) Oken.	White rain lily	Shrub
		<i>Caesalpinia pulcherrima</i>	Cambodia bonsai	Herba
		<i>Catharanthus roseus</i> (L.) G. Don.	Paper flowers	Shrub
		<i>Chrysothemis pulchella</i> (Donn ex Sims). Decne	Cocor duck	Herba
		<i>Codiaeum</i> sp.	Peacock flower	Shrub
		<i>Codiaeum</i> sp.	Blood tread	Shrub
		<i>Codiaeum</i> sp.	Blood tread	Herba
		<i>Codiaeum</i> sp.	Twilight chimes	Herba
		<i>Codiaeum</i> sp.	Dollar turtle	Shrub
		<i>Codiaeum</i> sp.	Puring garuda	Shrub
		<i>Codiaeum</i> sp.	Cultivar croton	Shrub
		<i>Codiaeum</i> sp.	Anchovy turtle	Shrub
		<i>Graptophyllum pictum</i> L.	Batik suharto	Shrub
		<i>Hibiscus rosa-sinensis</i> L.	Hibiscus	Shrub
		<i>Iresine diffusa</i> F. Herbstii	Chicken gizzards Yellow	Herba
		<i>Ixora coccinea</i> L.	Asoka	Shrub
		<i>Ixora javanica</i> DC.	Asoka	Shrub
		<i>Mammillaria longimamma</i> DC.	Cactus	Herba
		<i>Murraya paniculata</i>		
		<i>Piper crocatum</i> Ruiz & Pav	Delicious night	Shrub
		<i>Polyscias scutellaria</i> (Burm.F.)	Red betel nut Mangkokan	Liana
		<i>Rosa hybrida</i> L.		Herba
		<i>Syzygium oleana</i> Wright.	Rose	Herba
		<i>Zinnia violacea</i> Cav.	Red shoots	Bush
		<i>Zinnia violacea</i> Cav.	Kemang paper	Tree
		<i>Zinnia violacea</i> Cav.	Kemang paper	Shrub

### Validator Results Learning Media Feasibility Criteria

The results of the pocket book assessment by a team of validators and 30 Biology Education students are presented in Table 2.

**Table 2.** Validator Results Learning Media Feasibility Criteria

No.	Validator	Persentase (%)
1.	Content Expert	82,85
2.	Design Expert	97,5
3.	Media Expert	69,23
4.	Biology Education Student Test	92,25
	Amount	341,83
	Average	85,45

Ornamental plants are all types of plants that have ornamental value, such as flowers, stems, crowns, branches, leaves, aromas, roots, and have an artistic or artistic impression. These parts make ornamental plants often used to beautify various places, such as houses, parks, offices, restaurants, and so on. The results of ornamental plant research conducted in Ujumbou Village, Sirenja Subdistrict found 76 types of ornamental plants, where in the pteridophyta division consisted of 5 types, pihophyta division 1 type and magnoliophyta division 70 types. The ornamental plants found have different characteristics.

The most common ornamental plants found in the yard of the Ujumbou Village community are from the Araceae family totaling 20 species. According to Hartanti et al. (2020) there are around 25 Araceae or 31 plant genera in Indonesia. Araceae is one of the plant families that is very important to mankind and its species are widely used in everyday life, such as handicraft materials, food, drinks, traditional medicines, decorations, and building materials (Kurniawan et al., 2020). Araceae is the name of a family of plants that can be cultivated or found in the natural environment (Bago, 2020). Plants from the Araceae family are utilized by the local community as food, medicine, and ornamental plants (Hutasuhut, 2020).

Plants from the Araceae family are ornamental plants that can grow throughout the year and are popular plants because of the beauty of their leaves both in shape and color. The habitat of this plant tribe is strongly influenced by environmental factors such as temperature and humidity (Muslimin, 2019). Plants from the Araceae family are found in Ujumbou Village because the characteristics of this village area fulfill the growing conditions of plants, namely having good soil for plant growth, having good sun intensity, having air temperatures ranging from 25oc - 30oc which is the optimum temperature for plant growth so that plants can adapt well.

The types of ornamental plants in Ujumbou Village are very diverse so that the treatment given in cultivating them is also different. There are several ornamental plants planted by the people of Ujumbou Village that require special treatment, such as Aglaonema, Anthurium, and Turquoise. Through interviews conducted with several people in Ujumbou Village who cultivate ornamental plants, they are lovers of ornamental plants so that the cultivation of ornamental plants has been done long before these ornamental plants were popular in the wider community. People's interest in ornamental plants is influenced by the beauty of these plants because they can beautify and cool the yard, calm the heart and mind, and can relieve stress. Ornamental plants also have positive environmental benefits seen from their function (Hamidah, 2023).

The increasing knowledge gained from fellow ornamental plant lovers and social media has made Ujumbou Village people who cultivate ornamental plants more active in planting these plants. The ornamental plants that are planted are not only sourced from the Ujumbou Village area but some are found from other areas, for example from neighboring villages, other sub-districts and even from outside the Central Sulawesi region, so that the initial way of care must be considered so that the ornamental plants can adapt to the Ujumbou Village environment.

Ornamental plants that come from other regions, such as aglaonema, anthurium, kalathea, croton, and keladi are plants that are easily attacked by pests and are a little difficult to adapt to a new

environment. Aglaonema plants are susceptible to diseases and pests that can interfere with their growth. Identification and treatment of diseases and pests in Aglaonema plants is very important to maintain the health and productivity of these plants (Akbar, 2021). Plant diseases are disorders found in plants and are caused by several factors, namely, viruses, bacteria, fungi, and insects. Plant diseases are disorders or abnormalities that occur in plants and are caused by various factors such as viruses, bacteria, fungi, and insects (Sari, 2023).

Special care that is carried out on the above plants, namely watering, loosening the soil, carrying out regular fertilization needs to be applied. In addition, using good planting media and placing plants in open areas with minimal direct sunlight needs to be done so that ornamental plants do not die easily. Planting substrate is a container where plants grow, where roots grow and develop, and where roots support plants to stand firmly (Sita, 2021). The growing medium determines how well the plants grow and ultimately affects the production yield. There are various types of planting media. Different types of plants require different characteristics and characteristics of the planting area (Harahap et al., 2022). The planting media used by the Ujumbou Village Community is husk charcoal soil because it is easier to find.

Husk charcoal is one of the agricultural wastes that can store water because it is porous and lightweight. Husk charcoal can be used to increase plant growth and improve soil fertility (Handayani, 2024). The addition of husk charcoal to the plant substrate or agricultural soil also improves the ventilation system (air exchange) in the plant root zone (Rudi, 2019).

Media has become a means or tool that plays an important role in the learning process. Media is a necessity used by teachers to convey information and learning materials (Fadilah, 2023). The learning media made in this study is a pocket book. Pocket books are small-sized books that are easy to carry anywhere, so we can read them at any time, and contain more targeted messages on certain topics (Khoiriyah et al., 2018). Pocket books have many advantages, including saving time and energy because they are printed in a small format and can be carried anywhere and anytime. Brief and easy-to-understand paperback materials and images improve learning outcomes (Farikhah & Saroinsong, 2020).

The pocket book made measures 14 x 11 cm. The contents of the pocket book are in the form of pictures of ornamental plants, classification and description so that it is easy for readers to understand. Data collection from the content of this learning media is by taking pictures, identifying and describing various types of ornamental plants in the yard of the Ujumbou Village community. Furthermore, media validation was carried out by 3 validators, namely content experts, design experts and media experts who are lecturers of the Ujumbou Village Program. design experts and media experts who are lecturers in the Biology Education Study Program and 30 Biology Education students were tested.

The assessment of the feasibility of pocketbooks by content experts gets a percentage of 82.85% with a category very feasible to use. the assessment of design experts gets a percentage of 97.5% with a category very feasible to use. the assessment by media experts gets a percentage of 69.25% with a category feasible to use as learning media with. while in the trial to 30 students got a percentage of 92.25% with criteria very feasible to use as learning media. based on the results of the assessment of each expert and the 30 student trial of the pocketbook that has been made, the percentage is 85.45% with the category that the pocketbook is very feasible to use as a learning medium.

## **CONCLUSION AND SUGGESTION**

Based on the results of the study, it can be concluded that ornamental plants in the yard of the Ujumbou Village community are very diverse with a total of 76 species from 37 families and 56 genus. The results of the assessment of learning media in the form of pocket books were declared very feasible to use as learning media with a percentage of 85.45%. It is necessary to conduct further research on various types of plants, so that it can develop learning media and complete data on the types of plants found in Ujumbou Village, Sirenja District. about the types of plants found in Ujumbou Village, Sirenja District.

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