

Evaluation Of Preferences And Willingness To Pay Of Aglaonema Consumers In Sleman District, Yogyakarta

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Abstract

Indonesia has natural conditions that are very supportive of horticultural growth, especially in the ornamental and consumer crops subsectors such as vegetables and fruits. Yogyakarta is one of the largest producers of ornamental plants in Indonesia. There has been a significant increase in the harvest area and production of several types of ornamental plants, such as aglaonema, which shows great potential for further development. The Covid-19 pandemic had a positive impact on the demand for ornamental plants, including aglaonema. People tend to seek new hobbies such as gardening or collecting ornamental plants to cope with stress and maintain mental health during periods of social distancing. Consumer preference for post-pandemic aglaonema in Sleman Regency is determined by attributes such as color, shape, size, motif, leaf texture, number of leaves, and plant appearance. This research uses descriptive and analytical methods with Chi-Square, Multiattribut Fishbein, and linear regression analysis techniques to identify consumer preferences and factors that influence willingness to pay for aglaonema plants. The results showed that the majority of buyers in Sleman Regency are women aged 30-40 years with an undergraduate education level (S1). The majority of respondents' income ranged from Rp 3,000,000 to Rp 4,000,000 per month with the average respondent having 2 Aglaonema plants. Consumers tend to like Aglaonema with a number of 5-10 leaves, batik motifs, red leaf color, oval leaf shape, thick leaf texture, and healthy plant appearance with many leaves with the most considered attributes in purchasing Aglaonema in Sleman Regency are leaf color, plant appearance, leaf shape, leaf motif, leaf texture, leaf size, and price. Aglaonema consumers' willingness to pay is between Rp 100,000 to Rp 500,000. Factors such as price perception, age, trends, and physical attributes of Aglaonema have a significant influence on consumers' willingness to pay more for Aglaonema plants.

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I. Introduction

Indonesia's natural conditions support the growth of horticulture very well. Horticulture is one of the subsectors that has the potential to be developed because it has a fairly high economic value, diversity of types, and can be absorbed by domestic and foreign markets. Based on its usefulness, horticultural crops can be grouped into horticultural crops that are consumed, namely vegetables, fruits, and horticultural crops that are not consumed, namely ornamental plants, including leaf and flower ornamental plants.

The Special Region of Yogyakarta is one of the provinces with the largest production of ornamental plants in Indonesia. In 2022 Yogyakarta ranks 6th with the largest production of ornamental plants (trees) in Indonesia. In the previous year, the production of ornamental plants (trees) in the Special Region of Yogyakarta amounted to 59,480 trees, ranking 5th in Indonesia. The increase from 2021 to 2022 indicates that the Special Region of Yogyakarta has great potential in the ornamental plant trade (BPS, 2023a).

The condition of ornamental plant farming in the Special Region of Yogyakarta alone recorded 12 types of ornamental plants that experienced an increase in harvest area compared to the previous year. Among them are aglaonema, heliconia, potted orchids, roses and sansevieria. The increase in harvest area was respectively aglaonema up 1.67 hectares (158.23 percent), heliconia up 1.48 hectares (215.41 percent), potted orchids up 0.81 hectares (23.58 percent), roses up 0.33 hectares (171.80 percent) and sansevieria up 0.13 hectares (8.89 percent). The largest absolute increase in harvested area occurred in aglaonema, which amounted to 1.67 hectares and was mostly located in Sleman Regency, reaching 93.03 percent of the total harvested area of aglaonema flowers throughout the Special Region of Yogyakarta. The largest harvested area of aglaonema in the Special Region of Yogyakarta was Sleman Regency at 2.54 hectares, followed by Yogyakarta City at 952 m² or 3.49 percent and Bantul Regency at 950 m² or 3.48 percent of the total harvested area of aglaonema in the Special Region of Yogyakarta. This increase in harvested area was also accompanied by an increase in aglaonema production in 2022 which experienced an increase of 33,840 trees (171 percent) from the previous year. The increase in Aglaonema production is shown in Table 2.

Table 2. Harvested Area, Production, and Productivity of Aglaonema in Yogyakarta Special Region 2016-2022.

Tahun	Luas Panen (m2)	Produksi (pohon)	Produktivitas (pohon/m2)
2016	16.340	35.889	2,20
2017	14.053	108.706	7,74
2018	10.550	64.541	6,12
2019	12.637	55.516	4,39
2020	14.912	62.794	4,21
2021	10.571	19.881	1,88
2022	27.297	53.721	1,97

Source: (BPS, 2023a)

Local aglaonema has great potential to grow because this plant has a good parent (aglaonema rotundum) which in other countries cannot live well. In addition, local aglaonema has advantages compared to non-local aglaonema such as the ability to adapt, has a stalk, relatively stronger roots, has thicker leaves and more rigid / not lunglai, has a very diverse style, has a more compact figure / lush and sturdy, and most importantly is relatively more resistant to pests and diseases (Purwanto, 2006).

The development of the ornamental plant business, especially aglaonema, must certainly be addressed wisely as the demand for these plants increases. During the pandemic, ornamental plants, especially Agalonema, have increased. This is because the impact of this large-scale national restriction occurs in all aspects of life, including social, economic, business, work, worship, education, public services, and others (Belawati & Nizam, 2020). The application of social distancing has an impact on people's psychology, for example, people feel bored, bored and even feel stressed. According to Sarafino & Timothy (2012) stress is a feeling of tension and discomfort caused because individuals feel unable to handle demands. Planting activities or collecting ornamental plants by some people is one of the practical choices to maintain a positive mentality during the Covid-19 pandemic (Imam et al., 2021).

Changes in consumer behavior and preferences will affect the development of the Aglaonema business. Consumer preferences can be defined as the choice of whether or not to like a person's liking for the product consumed. Consumer preferences for ornamental plants change relatively quickly from time to time or the existence of ornamental plant trends. Access to marketing information related to consumer preferences and changes in ornamental plant commodities during the Covid-19 pandemic is adequate. Consumers can choose potted ornamental plants that have beautiful flowers, beautiful colors, and beautiful leaves. This is supported by the results of research (Nurmalinda & Hayati, 2016) and (Purnamawati et al., 2017) showing that the main consideration for consumers is type, then color, size, shape, durability, and finally price. Consumer preferences for ornamental plants are also influenced by demographic factors, namely gender, age, education, and income (Nurmalinda & Hayati, 2014). The results of research (Damayanti & Susanti, 2021) also state that trends, lifestyles, and the uniqueness of plants have a positive and significant influence on consumer preferences in purchasing decisions for ornamental plants during the pandemic. A previous study by (Wijayanti, et al., 2021) revealed that consumers highest preference for Aglaonema ornamental plants lies in post-purchase behavior. Personal factors are also significant in influencing consumer preferences for Aglaonema ornamental plants, and consumer attitudes towards ornamental plants include all psychological actions that motivate purchase, use, and aftercare, with the aim of acquiring and collecting Aglaonema ornamental plants. Consumer preference for a product will also determine willingness to pay. The price component of a product is one of the most important criteria in consumer purchasing considerations (Benedicta et al., 2023). In determining the price, there are factors based on value and based on cost. Willingness to Pay (WTP) which is defined as the amount of money that consumers are willing to pay for a product or service is pricing based on the perceived value of the buyer (Kotler & Armstrong, 2007). Willingness to Pay (WTP) is an important issue that is interesting to research because it can be used to explain the attitude of consumers' willingness to be willing to pay more including buying products. In addition to this, Aglonema, which is a type of ornamental plant that is susceptible to changes in trends and other psychological factors, makes it important to study in terms of preference and willingness to pay. Therefore, this study aims to find out (1) how consumer preferences for Aglaonema after the pandemic; (2) what attributes are most considered by consumers in buying Aglaonema plants in Sleman Regency; and (3) factors that influence willingness to pay.

II. Research Methods

The basic methods used in this research are descriptive and analytical methods. The research location sampling method is purposive sampling, Sleman Regency was chosen because it is the area with the largest increase in Aglaonema planting area in Yogyakarta in 2022. The population of this study are consumers who live and buy branded rice in Sleman Regency. Accidental sampling was used in selecting the sample where the total respondents were 100 branded rice consumers. The number of respondent samples was taken from the Slovin calculation, where the population was unknown with $\alpha = 10\%$. The analysis method used to answer the research objectives is:

1. Chi-Square Analysis

Chi square analysis is used to see the influence or relationship between consumer behavior factors on Aglaonema consumer preferences. To determine consumer preferences for aglaonema in Sleman Regency, *Chi Square* analysis is used with the following formula:

$$X^2 = \sum_{i=1}^k \left[\frac{(f_o - f_e)^2}{f_e} \right]$$

Description:

X^2 = *Chi Square*

f_o = The number of respondents who chose the category in attribute aglaonema

f_e = The expected number of respondents in the category of attribute aglaonema

i, k = Attribute categories in aglaonema attributes. (leaf color, leaf shape, leaf pattern, leaf size, leaf texture, leaf appearance, and price)

$$f_e = \frac{R_i \times C_i}{\sum R_i}$$

Description:

R_i = Sum of 1st row

C_i = Sum of 1st column

$\sum R_i$ = Total Observations

The hypothesis used in the *chi square* analysis:

H_0 = There are no differences in consumer preferences for the attributes that exist in aglaonema.

H_1 = There are differences in consumer preferences for the attributes of aglaonema

Testing at the 95% confidence level with the test criteria:

- 1) If $X^2 \text{ count} > X^2 \text{ table}$, then H_0 is rejected and H_1 is accepted, meaning that there are differences in consumer preferences for the attributes that exist in aglaonema.
- 2) If $X^2 \text{ count} \leq X^2 \text{ table}$, then H_0 is accepted and H_1 is rejected, meaning there is no difference in consumer preferences for the attributes that exist in aglaonema. (Sugiyono, 2017).

2. Multiatribut Fishbein

In the fishbein model, a person's attitude towards a particular object is measured based on consumer evaluations and beliefs. The Fishbein model is based on the view that attitudes are formed by beliefs and evaluation components. To find out the attributes of aglaonema that are most considered by consumers in Sleman Regency, Multiatribut Fishbein analysis is used with the formula:

$$A_o = \sum_{i=1}^n b_i \cdot e_i$$

Description

A_o = Consumer attitude towards aglaonema

B_i = The level of consumer confidence that aglaonema has certain attributes (i th attribute)

E_i = Dimension of consumer evaluation of the i th variable owned by aglaonema

N = Number of attributes owned by aglaonema

The steps are as follows:

- a. Determining the assessment of trust in durian fruit attributes (b_i) by determining the scoring standard using a Likert scale. The Likert scale relates to statements about a person's attitude towards something, namely:
 - 5 = very good
 - 4 = good
 - 3 = neutral
 - 2 = not good
 - 1 = very unfavorable

Then to find the value of trust in aglaonema (b_i) is done by dividing the number of consumer answers by the number of consumers, namely:

$$b_i = \frac{5 \cdot a + 4 \cdot b + 3 \cdot c + 2 \cdot d + 1 \cdot e}{a + b + c + d + e}$$

Description:

b_i = confidence value of aglaonema

a = number of consumers who choose very good

b = number of consumers who choose either

c = number of consumers who choose neutral

d = number of consumers who choose not good

e = number of consumers who chose very unfavorable

- b. Determine the evaluation of the attributes (e_i) by determining the standard (scoring) using the Likert Scale as above, then the score of each attribute is multiplied by the frequency of consumer answers and divided by the number of consumers to determine the value of consumer evaluation of aglaonema attributes.
- c. Determine the attitude towards the object (A_o) with the formula:

$$A_o: b_i \cdot e_i$$

Where:

A_o : consumer attitude towards aglaonema.

b_i : the level of consumer confidence that the aglaonema purchased has certain variables

e_i : the evaluative dimension (evaluation) of consumers on the i -th variable owned by aglaonema. (Simamora, 2012)

To determine which attributes are dominantly considered by consumers is to sort the consumer attitude index from the highest to the lowest value. The highest consumer attitude index (A_o) to an attribute of aglaonema indicates that the attribute is the dominant attribute considered by consumers in aglaonema purchasing decisions.

3. Linear Regression Analysis

In order to determine the factors that influence the *willingness to pay for Aglaonema plants* using *multiple linear regression* with OLS approach. The determinants used in this study are age, income, number of Aglaonema kept, trend of keeping, physical attributes and price by formula:

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 \dots\dots\dots(1)$$

Where Y is the *willingness to pay for Aglaonema plants*, B0 constant and B1-B6 are the coefficients of the determinant variables namely age, income, number of Aglaonema kept, trend of keeping, physical attributes and price.

III. Results And Discussion

Respondent Characteristics

Respondent characteristics are a description of the general condition of the respondent. The characteristics of respondents in this study were seen based on gender, age, education level, income per month and the number of Aglaonema plants maintained which were taken from research (Vorasayan et al., 2018). The following are the characteristics of respondents in this study:

Table 2. Respondent Characteristics

<u>Uraian</u>	<u>Kategori</u>
Age	30-40 years
Gender	Female
Education	Bachelor's Degree (S1)
Income	Rp 3.000.000-Rp 4.000.000
Number of Aglaonema owned	2 plants

Source: Processed data, 2024

Table 2 describes the characteristics of respondents who buy Aglaonema in Sleman Regency. The results showed that the age of respondents was mostly in the adult category, namely in the age range of 30-40 years. Aglaonema buyers are dominated by women. The average number of Aglaonema in the respondent's house is 2 plants. The highest level of education is Bachelor (S1). Bachelor's degree is a level of education that is considered high enough, so they already pay attention to what they consume. Most respondents have an income between Rp 3,000,000- Rp 4,000,000.

Table 3. Information on Aglaonema Plants in Sleman Regency

Aglaonema Type	Amount	Price	Description
Pink Lipstick	1	Rp 30.000-Rp 50.000	Leaf color includes green in the center of the leaf, while the edges are red light, slightly dark leaf shape and short stalks
Butterfly	10	Rp 40.000-Rp 70.000	Stems are pink or red in color young to the leaf bone, color The leaves are green with white patterns
Bidadari	11	Rp 70.000-Rp 500.000	Leaf color pink, yellow, And little color green light color, Shape leaf shape oval and wide like a heart shape with a tip slightly tapered and leaf bones striped upright
Widuri	11	Rp 85.000- Rp 150.000	Part bone leaf main that visible red flaming. Strands yellowish leaves due to spotting There is little greenery. There are also spots the green is wide and dominated with color pink color. In addition to That The shape of the leaves is oval while the surface is slightly concave.
Red	20	Rp 100.000- Rp	Colored upper leaves pink with green stems.

Anjamani		300.000	
Diana	9	Rp 50.000- Rp 250.000	Generally plain motifs, yellow color bright red bones that widden
Red Kochin	10	Rp 20.000- Rp200.000	Redder color with touchngreen at edges of the leaves. Then, it has a stalk that long
Super White	7	Rp 50.000- Rp 100.000	The leaves are plain white and clean with a spot of jiau around stem and leaf blade
Tiara	8	Rp 50.000- Rp 1.000.000	The leaves are evenly colored green and Spot color red small and lit.
Legacy	6	Rp 70.000- Rp 300.000	The leaves are yellowish-green in color, there are dark green patches that spread evenly on the surface of the leaves. The shape is round but tapered at the end of the leaf. The unique feature of this aglonema legacy is that the leaves are bordered by soft red leaf bones.
Adelia	5	Rp 80.000- Rp 200.000	Shape leaf that long and slender at the end, leaf pattern dominant green dark green, and there are spots yellowish and pink spots that look random.
Claudia	2	Rp 80.000- Rp 200.000	leaf surface which is pale green or yellowish green in color. leaf surface which is pale green or yellowish green in color. The leaf structure is neat and evenly distributed evenly distributed, composition located also very organized

Source: Primary Data Analysis, 2024

Table 3 shows that Aglaonema species sold in Sleman Regency include Pink Lipstick, Butterfly, Bidadari, Widuri, Red Anjamani, Diana, Red Kochin, Super White, Tiara, Legacy, Adelia, Claudia. The most popular Aglaonema species is Red Anjamani followed by Widuri and Bidadari. All types of Aglaonema plants are sold in Sleman Regency with prices ranging from Rp 30,000-Rp 1,000,000.

Table 4. Respondents' Preferences for Aglaonema Ornamental Plants

Attribute	Product Categories	Number of Respondents
Appearance	Healthy, Many Leaves	86
Shape	Oval	63
Size	Width	95
Motive	Batik	51
Texture	Thick	86
Color	Red	42
Number of Leaves	5-10 Leaves	74

Source: Primary Data Analysis, 2024

Respondents' preferences for the physical attributes of Aglaonema ornamental plants in Sleman Regency can be known by looking at the categories or attribute criteria that are most chosen by respondents, this can be seen in Table

The results showed that Aglaonema ornamental plants most preferred by respondents in Sleman Regency are Aglaonema ornamental plants that have a total of 5-10 leaves, batik leaf motifs, red leaf colors, oval round leaf shapes, thick leaf textures and plant appearances that look healthy with many leaves.

Consumer preferences for Aglaonema plant attributes in Sleman Regency

Consumer preference for Aglaonema plant attributes in Sleman Regency means a person's choice of likes or dislikes for Aglaonema plant attributes. Respondents have different choices from one another. Consumer preferences for Aglaonema plant attributes during the Covid-19 pandemic were analyzed using Chi Square analysis. The attributes of Aglaonema plants studied include leaf color, leaf shape, leaf size, leaf motif, leaf texture, number of leaves and plant appearance. The number of respondents who chose each attribute category (fo) and the number of consumers expected in each category of Aglaonema plant attributes (fe) can be seen in Table 5.

Table 5. Chi- Square Calculation Result Source: Primary Data Analysis, 2024

Attribute	Product Category	Observed (Fo)	Expected (Fe)	X ² Count	Df	X ² label	Description
Leaf color	green	7	20	45,2	4	9,487	significant
	red	42	20				
	orange	29	20				
	white	9	20				
Leaf Shape	color gradation	13	20	54,0254	3	7,814	significant
	round	34	33,33				
	oval	63	33,33				
	delta	3	33,33				
Leaf Size	amorphous	0	0	81	1	3,841	significant
	narrow	5	50				
Leaf Motif	batik	51	33,33	26,66267	3	7,814	significant
	others	0	0				
	gradation	39	33,33				
Leaf Texture	thick	10	33,33	51,84	1	3,841	significant
	thin	86	50				
	<5	14	50				
Number of Leaves	5-10 leaf blade	2	33,33	81,68817	2	5,991	significant
	>10	74	33,33				
	healthy, lots of leaves	24	33,33				
Appearance	healthy, few leaves	86	50	51,84	1	3,841	significant
		14	50				

Source: Primary Data Analysis, 2024

Table 5. shows the frequency obtained from observations (fo) and the expected frequency (fe) of each category of attributes that become consumer preferences. Consumer preferences for an attribute of Aglaonema plants can be known by looking at the attribute category that is most chosen by consumers which can be seen from the frequency value of the observations (fo). Differences in consumer preferences can be influenced by several factors, both internal and external factors. The existence of the Covid- 19 pandemic also causes differences in consumer preferences for Agalonema plant attributes, including leaf color, leaf shape, leaf size, leaf motif, leaf texture, number of leaves and plant appearance. Consumers see a product from the attributes attached to the product. According to Angriva and Sunyigono (2020) each consumer has a different perception of product attributes according to their respective interests.

The frequency of respondents who chose each category of attributes of Aglaonema plants was then analyzed using Chi Square analysis. Chi Square analysis was conducted to determine whether there is a consumer preference for Aglaonema plant attributes.

Testing is done at a confidence level of 95% with the criteria if $x^2 \text{ count} > x^2 \text{ table}$, then H_0 is rejected, meaning that there are differences in consumer preferences for Aglaonema plant attributes. If $x^2 \text{ count} \leq x^2 \text{ table}$, then H_0 is accepted meaning there is no difference in consumer preferences for Aglaonema plant attributes. Based on the results of the Chi Square test analysis regarding the attributes that become consumer preferences can be seen in Table 5, it can be seen that there are significant differences in consumer preferences for Aglaonema plant attributes. The number of leaves of Aglaonema ornamental plants preferred by consumers in Sleman Regency is plants with 5-10 leaves, because the number of leaves determines the age of the plant and the price of the plant, the more the number of leaves, the older the ornamental plant will be and the more expensive the selling price. Aglaonema ornamental plants have many leaf motifs, batik motifs are one of the motifs favored by Sleman Regency consumers in addition to unique motifs, this motif also has a price that is not cheap and has a uniqueness that makes consumers interested in buying it compared to other motifs.

The leaf color on Aglaonema plants that is most attractive to consumers in Sleman Regency is red. Plants with this color tend to be common and can be accepted by people both who understand ornamental plants and those who do not understand ornamental plants. Consumers in Sleman Regency also like the oval leaf shape, apart from being unique, the oval shape is also quite rare compared to the oval shape which is quite common. This leaf shape does not require a large space when compared to the oval leaf shape. The texture of the leaves is the choice

of consumers in Sleman Regency is thick leaves, because when compared to the texture of thin leaves, thick leaves are stronger and do not tear easily, if the leaves are thin, they tend to tear easily and affect the growth of the plant. The appearance of healthy and leafy plants is also the preference of consumers in Sleman Regency because it tends to be more sturdy and strong if the plants are placed outdoors.

Attributes Most Considered by Consumers in Buying Aglaonema plants in Sleman Regency

The attitude of Aglaonema plant consumers is a description of the choice of Aglaonema plants whether they like it or not. Attitude is able to give birth to behavior because attitude is a person's evaluation of an object by giving a response. Consumer attitudes are formed from consumer beliefs and evaluations of a product. Consumer attitudes are measured using Fishbein's multi-attribute analysis which includes belief (bi) and evaluation (ei) components. Measurement of the level of trust is used to assess the performance of each attribute of the Aglaonema plant. Evaluation measurements are useful for knowing how much the level of importance of Aglaonema plant attributes in general based on consumer assessments. The attitude value (Ao) is obtained from the result of multiplying the level of trust (bi) and the evaluation of each attribute (ei) from consumer perceptions of each Aglaonema plant attribute.

Table 6. Consumer trust value (bi) on Aglaonema plant attributes in Sleman Regency

Attribute	Value					Total	Average
	1	2	3	4	5		
Plant display	0	6	8	61	25	100	4,05
Leaf Shape	0	12	24	244	125	405	4,42
	0	0	7	44	49	100	
	0	0	21	176	245	442	
Leaf Size	0	0	24	68	8	100	3,84
Leaf Motif	0	0	72	272	40	384	3,97
	0	1	22	56	21	100	
Leaf Texture	0	2	66	224	105	397	3,81
	0	7	30	38	25	100	
Leaf Color	0	14	90	152	125	381	3,88
	0	1	19	71	9	100	
Price	0	2	57	284	45	388	3,37
	0	9	48	40	3	100	
	0	18	144	160	15	337	

Source: Primary Data Analysis, 2024

Table 7. Evaluation value (ei) of Aglaonema plant attributes in Sleman Regency

Atribut	Value					Total	Average
	1	2	3	4	5		
Plant Display	0	2	41	52	5	100	3,6
	0	4	123	208	25	360	
Leaf Shape	0	7	62	29	2	100	3,26
	0	14	186	116	10	326	
Leaf Size	0	3	65	23	9	100	3,38
Leaf Motif	0	6	195	92	45	338	3,53
	0	4	39	57	0	100	
Leaf Texture	0	8	117	228	0	353	3,6
	0	2	41	52	5	100	
Leaf Color	0	4	123	208	25	360	3,86
	0	0	22	70	8	100	
Price	0	0	66	280	40	386	2,79
	1	24	70	5	0	100	
	1	48	210	20	0	279	

Source: Primary Data Analysis, 2024

Based on the results of respondents' assessment of attribute trust (bi) and also evaluation (ei) of Aglaonema plants in Table 6 and Table 7. The results show that respondents on attribute trust (bi) show the attribute of leaf shape has the highest score followed by plant appearance, leaf motif, leaf color, leaf size, leaf texture and price. While the results of respondents' assessment of the evaluation value (ei) of Aglaonema plants show that plant color has the largest score. Followed by leaf texture and plant appearance, leaf motif, leaf size, leaf shape and price.

Tabel 8. Result Responden Attitude (Ao) terhadap keyakinan dan evaluasi menggunakan Multiatribut Fishbein

Atribut	Trust (Bi)	Evaluation (Ei)	Attitude (Ao)	Rating
Leaf Color	3,88	3,86	14,9768	1
Plant Display	4,05	3,6	14,58	2
Leaf Shape	4,42	3,26	14,4092	3
Leaf Motif	3,97	3,53	14,0141	4
Leaf Texture	3,81	3,6	13,716	5
Leaf Size	3,84	3,38	12,9792	6
Price	3,37	2,79	9,4023	7

Source: Primary Data Analysis, 2024

The results of Fishbein's multiattribute analysis show the magnitude of the consumer attitude index so that it can be seen that the attributes of Aglaonema plants that are considered in the decision to purchase Aglaonema plants after the Covid-19 pandemic in a row from the most considered to the least considered, namely the level of leaf color, plant appearance, leaf shape, leaf motif, leaf texture, leaf size and price. The leaf color attribute is ranked first because consumers consider color enough when making the process of buying ornamental plants because Aglaonema plants have many and varied colors. In the second position, the plant appearance attribute is considered because after the Covid-19 pandemic, consumers believe that the appearance of the plant must look healthy and sturdy if the plant is placed outdoors. In the third rank, leaf shape is a consideration because consumers believe that the shape of Aglonema leaves on the market is the best attribute from consumer perceptions. This shows that Aglonema plants are considered good in terms of leaf shape because they have a uniqueness that can be enjoyed for its beauty as the first consideration because the shape of the leaves is the determinant of whether or not the plant will be purchased. The leaf motivation attribute is ranked fourth with the consideration that Aglaonema plants have unique motifs, this motif also has a price that is not cheap and has a uniqueness that makes consumers interested in buying it compared to other motifs (Wijayanti et al., 2021). Furthermore, in the fifth rank, the texture of the leaves is in this rank because consumers have a tendency to choose this attribute as a second consideration because the texture of Aglaonema leaves can be seen with the naked eye when purchasing Aglaonema ornamental plants. Rank six is the leaf size attribute and then in the last rank there is a price, the results of which are in accordance with research (Isnugroho & Winarno, 2019; Sihotang et al., 2022).

Willingness to pay of Aglaonema consumers and its influencing factors

This research also examines willingness to pay as a follow-up after consumer preferences for Aglaonema plants are described. The average willingness to pay for Aglaonema plants can be divided into 3 groups, namely <Rp100,000, Rp100,000- Rp500,000 and >Rp500,000. Most willingness to pay respondents were in the Rp 100,000- Rp 500,000 group of 94 respondents as shown in table 9.

Table 9. Willingness to Pay of Aglaonema Consumers

willingness to pay	Amount
< Rp 100.000	0
Rp 100.000- Rp 500.000	94
>Rp 500.000	6

Source: Primary Data Analysis, 2024

After knowing the willingness to pay value of Aglaonema plants, this study tries to analyze the factors that affect the willingness to pay of Aglaonema plant consumers in Sleman Regency. The results of the analysis are shown in Table 10.

Table 10. Regression analysis results of willingness to pay for Aglaonema plants

No	Variabel	Koefisien	Std.Err
1	Aglaonema price perception	71032,253***	23027,974
2	Age	2452,482**	1233,511
3	Income	0,003 ^{ns}	0,004
4	Number of Aglaonema	2436,723 ^{ns}	1992,265
5	Trend	58488,219**	28754,450
6	Physical Attributes of Aglaonema	9038,397*	5217,246
7	Constants	-334907,199***	113909,777
8	R ²	0.271	
9	Prob>F	.000	
10	Number of Samples	100	

Source: Primary Data Analysis, 2024

Based on the results of data analysis, it is known that simultaneously the perception of Aglaonema price, age, income, number of Aglaonema maintained, trends and physical attributes of Aglaonema have an influence on the willingness to pay for Aglaonema plants in the Sleman Regency area. Furthermore, individually the factors of Aglaonema price perception, age, trends and physical attributes of Aglaonema have an influence on the willingness to pay for Aglaonema plants in the Sleman Regency area.

The research found that the perception of Aglaonema prices has a positive impact on the willingness to pay for Aglaonema plants in the Sleman Regency area as shown in Table 10. Consumers tend to have more willingness to pay for Aglaonema plants if the price of Aglaonema plants is more expensive. This is related to the prestige felt by consumers when buying Aglaonema at high prices. In addition to this, consumers believe that the higher price of Aglaonema illustrates the better quality of Aglaonema (Dwitanto & Utami, 2023).

The age factor is a factor that has a positive influence on the willingness to pay for Aglaonema plants in the Sleman Regency area. During the Covid 19 pandemic, restrictions on activities made people stay at home and limit activities outside the home. One of the activities that many do is gardening. This condition is usually enjoyed by people with various age groups, although most of those who enjoy it do not come from the teenage and young adult age groups.

The trend factor is the next factor that affects the willingness to pay for Aglaonema plants in the Sleman Regency area. Indirectly, trends are closely related to people's purchasing decisions which ultimately affect the willingness to pay for Aglaonema plants in the Sleman Regency area. The more trending a product is, it will psychologically encourage buyers to buy a product due to external pressure (prestige, FOMO (fear of missing out) and lifestyle) (Dwitanto & Utami, 2023) thus increasing the willingness to pay for Aglaonema plants in the Sleman Regency area.

The last factor that has a positive influence is the physical attributes of Aglaonema. This Aglaonema physical attribute is the entire package including color, size, shape, motif, texture, and overall appearance. The better the physical attributes of a product, the more it will attract consumers to buy and the greater the willingness to pay given by consumers (Alfiani et al., 2023; Noviana et al., 2014).

IV. Conclusions And Suggestions

The conclusions from this research are:

1. The majority of Aglaonema buyers in Sleman Regency are women aged 30- 40 years old with an undergraduate education level (S1). The majority of respondents' income ranges from Rp 3,000,000 to Rp 4,000,000 per month with the average respondent owning 2 Aglaonema plants.
2. Consumers tend to like Aglaonema with 5-10 leaves, batik motifs, red leaf color, oval leaf shape, thick leaf texture, and a healthy plant appearance with many leaves.
3. Based on analysis using Fishbein's multiattributes, the attributes most considered in purchasing Aglaonema in Sleman Regency are leaf color, plant appearance, leaf shape, leaf motif, leaf texture, leaf size, and price.
4. Most respondents (94 out of 100) are willing to pay between Rp 100,000 to Rp 500,000 for Aglaonema plants. Factors such as perceived price, age, trends and physical attributes of Aglaonema have a significant influence on consumers' willingness to pay more for Aglaonema plants.

From the results of this study, traders can develop market segmentation, product innovation, and information dissemination to consumers using technology. Further research to identify other factors that can influence willingness to pay, such as environmental factors or local culture that may also play an important role in consumer purchasing decisions.

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