

## **ANALYSIS OF FARMERS' KNOWLEDGE LEVEL OF OFF-SEASON CULTIVATION TECHNOLOGY, HARVESTING TECHNIQUES, POST HARVEST HANDLING, AND QUALITY OF GEDONG GINCU MANGO FRUITS FOR THE EXPORT MARKET**

**Abirizal Alfarisi, Syahrul Maulana, Dwi Purnomo, Dodi Budirokhman**

Universitas Swadaya Gunung Jati, Indonesia

Email: [dodi.budirokhman@ugj.ac.id](mailto:dodi.budirokhman@ugj.ac.id)

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### **Abstract**

Gedong gincu mango is a food commodity that has good added value with relatively high demand in various markets. Thus, production availability and quality standards can be realized by implementing off season gedong gincu mango cultivation, harvesting and post-harvest techniques that can minimize the level of losses due to improper handling. This research aims to determine the level of farmers' knowledge regarding off season cultivation, harvest techniques, post-harvest handling and fruit quality for the export market. The research was conducted in Sedong District with the consideration that this area is the highest mango production center in Cirebon Regency. The research is planned to be carried out in January 2024. The research design used is descriptive quantitative with survey research techniques. The sample in this study was 54 gedong gincu mango farmers. The data analysis technique was carried out using descriptive statistics with score weighting between 1 and 5. The results of the analysis showed that the level of knowledge of farmers in off season cultivation was 84.86%, harvest techniques were 82.90% and post-harvest handling was 82.04%. so it is classified as very knowledgeable, while farmers' knowledge of the quality of export fruit is 79.77%, so it is classified as knowledgeable.

Keywords: Mango, Quality, Off Season, Post-Harvest, Sedong, Harvest Techniques

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### **INTRODUCTION**

The mango commodity is one of the food commodities that has good added value and has great potential for development (Sholiha & Charina, 2018). Mango plants are generally widely planted in yards and gardens. Mango farming management focuses more seriously on increasing income by ensuring sustainable mango production (Barokah, Sendja, & Andayani, 2021).

Mangoes are classified as seasonal crops so their production is limited only during the season. This condition causes high price fluctuations because when there is no harvest, the price of mangoes is high, while during the peak harvest the price of mangoes is low (Rasmikayati, 2018). These limitations can be minimized by implementing off-season cultivation which can increase mango production significantly. Farmers need to understand off-season cultivation techniques which include components of water management, selection of suitable varieties and management of pests and diseases specific to that season (Kusumo, Rasmikayati, & Mukti, 2018).

One area that has superior mango commodities and is a production center is Sedong District, Cirebon Regency. Based on BPS data from Cirebon Regency in 2022, mango production in Sedong District reached 8,856 tons and was the highest in Cirebon Regency. Most of the mango production in Sedong District is gedong gincu mango.

According to Supriatna, (2010), gedong gincu mango fruit has good development prospects because it meets market specifications. Furthermore, according to Ariningsih, Saliem, Maulana, & Septanti, (2021) this fruit has a sweet taste, distinctive aroma, and lots of fiber, the shape tends to be round and has a medium weight, namely around 200-250

grams/fruit, These conditions cause the gedong gincu mango to have a higher price level compared to other types of mango

The distinctive characteristics of the gedong gincu mango in terms of shape, taste and color make it attractive to foreign markets (Ariningsih et al., 2021). Gedong gincu mango has quite good export market potential. The government through the Ministry of Agriculture issued a Grati eks policy (Triple Export Movement) which will be carried out by agribusiness actors (Sa'diah & Tamami, 2020).

However, to meet increasingly stringent global market demands, farmers need to adopt off season cultivation technology, master efficient harvest techniques, and understand post-harvest handling methods and quality standards to maintain and increase product competitiveness in the export market.

Various activities arising from the harvest process to inappropriate distribution to warehouses of fruit commodities pose a risk of high levels of damage, so that this condition affects the quality of mango fruit (Amalia, Hairiyah, & Nuryati, 2018). The poor quality of the fruit makes it difficult for gedong gincu mango commodities to enter the market with export specifications. It is estimated that the impact of improper harvest and post-harvest handling causes a loss of potential yield of 30% (Waryat & Nurawan, 2022).

The main challenge faced in efforts to increase the production and quality of Gedong Gincu mangoes for export is the level of farmers' knowledge regarding modern cultivation practices. The use of off-season cultivation technology requires a deep understanding of climate change, water management and selecting varieties that are suitable for growing seasons outside the main season. Lack of knowledge about this technology can hamper farmer productivity and reduce the availability of Gedong Gincu mangoes on international markets throughout the year (Budirokhman, 2016).

Apart from that, farmers' understanding of proper harvesting techniques is very important to maintain fruit quality. Harvesting done in the wrong way can result in fruit damage and reduced quality (Waryat & Nurawan, 2022). Therefore, research is needed to evaluate farmers' level of knowledge about effective harvest techniques to maximize harvest yields and maintain fruit quality. The post-harvest handling process is a critical phase in the Gedong Gincu mango supply chain. Lack of knowledge about sorting, packaging and storage methods can cause a decrease in fruit quality and increase the risk of post-harvest losses (Ariningsih et al., 2021). Therefore, analyzing farmers' level of knowledge regarding post-harvest handling practices is an aspect that needs further research.

Finally, fruit quality is the main factor influencing competitiveness in export markets. International quality standards and destination market requirements must be well understood by farmers in order to ensure that Gedong Gincu mangoes meet the standards set by export receiving countries.

The results of research conducted by Azizah, Rasmikayati, & Saefudin, (2019) stated that the application of off season mango cultivation produces grades A and B ranging from 41 to 60%. Furthermore, Waryat & Nurawan, (2022) in their research stated that the application of appropriate harvesting techniques can minimize the level of losses by 30%. Apart from that, it is known that around 90.63% of farmers grow mangoes with the aim of selling them as whole fruit, so the application of harvesting techniques becomes increasingly important. The application of appropriate cultivation technology can also improve the quality of gedong gincu mango fruit, as research conducted by Budirokhman, (2016) states that the use of appropriate technology can increase the weight of gedong gincu mango fruit by more than 250g or 28% per mango tree. Farmers with a good level of knowledge of quality standards tend to use techniques that can increase their farming results.

This research aims to determine the level of knowledge of gedong gincu mango farmers in Sedong District, Cirebon Regency regarding off season cultivation, harvest techniques, post-harvest handling and the quality of gedong gincu mango fruit for the export market.

## RESEARCH METHOD

The research was conducted in Sedong District, Cirebon Regency. The research location was determined deliberately with the consideration that it is the production center for gedong gincu mangoes in Cirebon Regency with the highest annual production contribution. The research was conducted in January 2024. This research used a descriptive quantitative design with survey methods. The population size of this study was 117 gedong gincu mango farmers in Sedong District. For this large population, samples were determined using the following Slovin formula:

$$n = \frac{117}{1 + 117 (10\%)^2} = 54$$

The sampling technique used obtained a sample size of 54 farmers. Sample determination was carried out using a simple random sampling technique, namely determining samples in a population randomly and all members of the population have the same opportunity to become research samples (Suharsimi, 2013).

The studies in this research include off season cultivation, harvest techniques, post-harvest handling and the quality of gedong gincu mango fruit for the export market. The operational definition is carried out to facilitate and confirm the measurement of the variables, namely:

- 1) Off season cultivation is the practice of farming outside the main production season by utilizing certain technology or techniques to create environmental conditions that support plant growth outside the growing season. Farmers' knowledge of off season cultivation was measured using a Likert scale of 1 to 5.
- 2) Harvesting techniques are a series of procedures and methods applied to harvest mangoes efficiently and minimize the level of damage to the crop. Farmers' knowledge of this harvest technique was measured using a Likert scale of 1 to 5.
- 3) Post-harvest handling is a series of activities carried out after the harvest process aimed at maintaining the quality and freshness of the harvest and minimizing losses during the marketing process. Farmers' knowledge of post-harvest handling was measured using a Likert scale of 1 to 5.
- 4) Fruit quality is the quality standard that must be met by the fruit to be exported. The quality of this fruit ensures the sustainability of international trade and consumer satisfaction in export markets. Farmers' knowledge of the quality of gedong gincu mango fruit was measured using a scale of 1 to 5.

A Likert scale of 1 to 5 means: (1) very don't know; (2) don't know; (3) know enough; (4) know; and (5) very knowledgeable. Descriptive data analysis using the following formula:

$$\% = \frac{n}{N} \times 100\%$$

Information:

% : Percentage

n : Observation score  
 N : Expected Score (Suharsimi, 2013).

The results of data analysis are calculated based on the proportion of scores obtained (observations) compared to the expected scores and then produce percentages that can be interpreted in Table 1.

Table 1. Data Interpretation

Likert scale	Percentage	Category
5	81 – 100 %	Very knowledgeable
4	61 – 80%	Know
3	41 – 60%	Just knowing
2	21 – 40%	Don't Know
1	0 – 20%	So clueless

## RESULT AND DISCUSSION

### Characteristics of farmers

Farmer characteristics are certain attributes or traits possessed by farmers who cultivate gedong gincu mangoes. Farmer characteristics studied in this research include farmer age, farmer education and farmer experience. These three attributes can be used as a benchmark for the level of knowledge of gedong gincu mango farmers.

### Gedong gincu Mango Farmer Age

Age is a farmer's time period calculated from birth until this research was conducted (Chaerani, 2019). The age of farmers can be a factor in accepting innovations that support the sustainability of their farming (Purnamasari, 2019). In general, young farmers are more open to innovation compared to older farmers who tend to only rely on traditional experience. The ages of gedong gincu mango farmers in Sedong District are in Table 2.

**Table 2. Farmer Age**

Number	Age (Years)	People	Percentage (%)
1	34 – 45	18	33,33
2	46 – 56	24	44,44
3	57 – 67	12	22,22
Amount		54	100,00

Table 2 shows that the largest number of gedong gincu mango farmers in Sedong District are aged between 46 and 56 years, namely 44.44% and the smallest are farmers aged between 57 and 67 years, namely 22.22%. The majority of gedong gincu mango farmers in Sedong District are in the young and productive age category, so they can encourage the sustainability of farming. This relatively young farmer has good physical abilities and a good way of thinking.

### Farmer Education

Education is a level of the formal education system that reflects the level of expertise and knowledge achieved by an individual at a certain time. Education levels generally consist of several levels and each level covers a different time period and type of learning (Azhari, Anantanyu, & Rusdiyana, 2021). Farmers with a higher level of education tend to have a wiser attitude and are able to think critically about the information they receive. Education of gedong gincu mango farmers in Sedong District is in Table 3.

**Table 3. Farmer Education**

Number	Education	People	Percentage (%)
1	Elementary school	12	22,22
2	Junior high school	13	24,07
3	Senior high school	15	27,78
4	Bachelor	14	25,93
	Amount	54	100,00

Table 3 shows that the highest level of education for farmers in Sedong District is high school education with a percentage of 27.78% and the lowest level of education is elementary school with a percentage of 22.22%. This condition shows that the average gedong gincu mango farmer in Sedong District has experienced an adequate formal education process so that they can digest information well (Kansrini, Febrimeli, & Mulyani, 2020).

### **Farmer Experience**

Farming experience is the involvement of farmers in gedong gincu mango farming activities. This experience is calculated from the time the farmer first started farming independently until this research was conducted. Farmer experience can include the formation of various aspects such as management, finance, marketing, interaction and problem solving (Purnamasari, 2019). The combination of experience and innovation can realize farmers' goals of achieving higher efficiency (Yurisinthae & Suharyani, 2023). Characteristics of farmers based on their experience in Table 4.

**Table 4. Farmer Experience**

Number	Experience (Years)	People	Percentage (%)
1	5 – 11	19	35,19
2	12 – 17	21	38,89
3	18 – 23	14	25,93
	Amount	54	100,00

Table 4 shows that the experience of gedong gincu mango farmers in Sedong District is 12 to 17 years with a percentage of 38.89% and the smallest is 18 to 23 years with a percentage of 25.93%. This condition of experience shows that farmers on average have longer experience, so that farmers have good behavior in managing their gedong gincu mango farming which includes aspects of off season cultivation, harvest techniques, post-harvest management and standardization of fruit quality for export market share.

### **Data Analysis and Discussion**

Farmers' knowledge of off-season cultivation, harvesting techniques, post-harvest handling and quality standards can help to increase productivity and production quality, so as to shape the competitiveness of gedong gincu mangoes in the export market. Studying farmers' knowledge can be an initial benchmark for farmers' actions in carrying out their farming business. The results of the analysis of farmer knowledge data are in Table 5.

**Table 5. Farmer Knowledge**

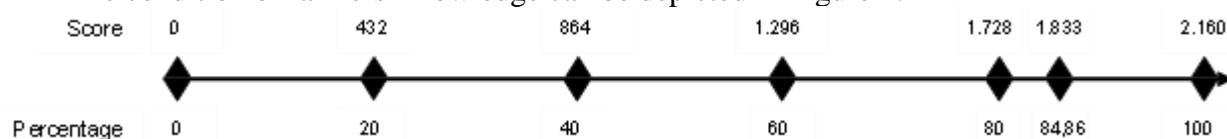
Number	Indicator	Response Frequency					Number of questions	Real score	Expected score	Percentage
		5	4	3	2	1				
1	Off season cultivation	167	156	85	45	29	8	1.833	2.160	84,86
2	Harvesting technique	118	104	98	14	15	6	1.343	1.620	82,90
3	Postharvest handling	158	148	91	36	45	8	1.772	2.160	82,04
4	Quality of fruit for export	148	126	109	57	38	8	1.723	2.160	79,77

Table 5 shows that the condition of farmers' knowledge regarding off season cultivation, harvest techniques and post-harvest handling is in the very knowledgeable category because the percentage obtained is in the range of 81-100%. In contrast to the condition of knowledge, the quality of fruit for export is in the knowledge category because it is in the range of 60-80%. The level of knowledge of farmers is classified as good because it is supported by the characteristics of farmers who are generally of productive age, adequate education and long experience in gedong gincu mango farming activities.

### Off season cultivation

Mango planting is carried out outside the main production season to maximize yields and answer market demand which continues throughout the year (Pedekawati, Karyani, & Sulistyowati, 2020). In an effort to increase productivity, farmers are adopting technology and crop protection to control climatic factors, ensuring optimal conditions for mango growth. Choosing the optimal watering method is also a focus, taking into account soil conditions and different growing seasons. Using fertilizer tailored to the needs of mango plants outside the main production season is an important strategy to support plant growth and health. With this holistic approach, farmers strive to create an efficient and sustainable agricultural environment for mango cultivation outside the main production season.

The condition of farmers' knowledge can be depicted in Figure 1.



**Figure 1. Farmers' knowledge of off season cultivation**

Figure 1 illustrates that farmers' knowledge of off season cultivation is in the very knowledgeable category. This condition is in accordance with research conducted by Wati, (2020) who stated that the level of knowledge in off-season mango cultivation is very high and farmers have been applying this technique for a long time. In addition, Azizah et al., (2019) also found the phenomenon that farmers' knowledge of implementing off-season cultivation was very high.

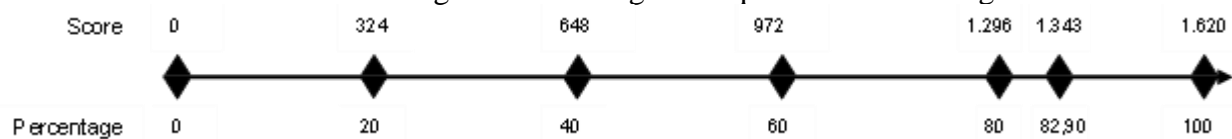
Farmers' knowledge regarding Gedong Gincu mango cultivation in the off season was obtained through the agricultural extension process that has been implemented. Through extension activities, farmers gain an in-depth understanding of various aspects related to gedong gincu mango cultivation outside the main production season. Extension includes selecting the right varieties, optimal land preparation, and the use of modern technology, including climate control and selecting watering methods that suit seasonal conditions. Information regarding fertilizer management and pest control is also emphasized in the

outreach to ensure healthy plant growth and optimal results. In addition, extension services provide insight into timely harvest techniques and effective post-harvest handling, as well as fruit quality standards required for export. With the knowledge gained from agricultural extension, farmers become more skilled in managing Gedong Gincu mango cultivation outside the main season, increasing productivity and achieving sustainability of their agricultural businesses (Awaliyah, 2018). Cultivating Gedong Gincu mangoes outside the main production season has challenges and advantages that farmers need to take into account. One of the main points of concern is the relatively high cost of cultivation in the off season (Kusumo et al., 2018). The process of climate control and the use of technology to create optimal conditions for mango growth can significantly increase production costs. However, farmers face market certainty which is a determining factor in the success of off-season cultivation. The high demand for gedong gincu mangoes provides an opportunity for farmers to gain better profits despite high cultivation costs (Waryat & Nurawan, 2022). Therefore, understanding cost dynamics and market certainty is key in planning and managing Gedong Gincu mango cultivation outside the main production season.

### **Harvesting Technique**

The application of harvesting techniques in gedong gincu mango cultivation is to achieve optimal harvest results and maintain fruit quality. One of the main goals is to determine the right harvest time based on fruit maturity indicators. By knowing the ideal moment, farmers can ensure that gedong gincu mango fruit is harvested at the optimal level of ripeness to achieve the taste, texture and aroma desired by consumers (Awaliyah, 2018). Implementing proper harvesting techniques also involves the use of efficient and safe equipment, such as ladders or modified harvesting sticks to reduce damage to fruit during the harvesting process.

The level of farmer knowledge on harvesting techniques is shown in Figure 2.



**Figure 2. Farmers' knowledge of harvest techniques**

Figure 2 illustrates the condition of farmers' knowledge of harvest techniques which is in the very knowledgeable category because it is in the percentage range of 81-100%. This condition is in line with research conducted by Kusumo et al., (2018) which states that farmers' knowledge of applying mango harvesting techniques is in the very high category. also supported by research by Ariningsih et al., (2021) which states that farmers' knowledge of harvesting techniques is classified as very high, but each farmer has a different perception of what they decide to do.

The importance of determining harvest time based on the appropriate level of fruit maturity is a major aspect in ensuring the quality of the harvest (Ariningsih et al., 2021). Understanding ripeness indicators such as fruit color, texture and aroma helps farmers determine the optimal moment for harvest, which in turn ensures the best taste and nutrition (Budirokhman, 2016). In addition, the use of appropriate and sterile harvesting equipment plays a crucial role in reducing the risk of damage to the fruit. Sustainability of harvesting techniques can also be achieved through selecting picking methods that not only pay attention to fruit safety, but also increase farmer work efficiency. By combining these three aspects, farmers can increase yields, minimize losses, and ensure that the fruit harvested reaches the desired quality standards.

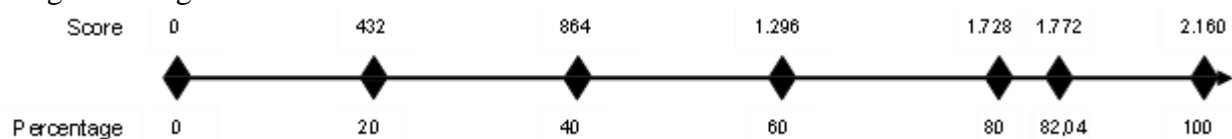
Harvesting techniques in gedong gincu mango cultivation are implemented by farmers who have a deep interest in increasing added value to their harvest (Kusumo et.al., 2018).

Farmers who are committed to achieving the best quality and maximizing the economic value of their mangoes will pay close attention to determining the right harvest time.

### **Postharvest handling**

The aim of post-harvest handling in gedong gincu mango cultivation is to ensure the continuity of fruit quality after the harvest process (Waryat & Nurawan, 2022). One of the main goals is to maintain the integrity of the fruit during sorting and sorting, paying special attention to fruit that meets certain quality standards. Selection and storage of fruit in optimal conditions is an important focus to slow the aging process and maintain sensory and nutritional qualities. Post-harvest handling also aims to minimize physical damage that can occur during the distribution and transportation process, so that the fruit that reaches the market remains fresh and attractive to consumers (Barokah et al., 2021)

The level of knowledge of farmers regarding post-harvest handling of gedong gincu mango is in Figure 3.



**Figure 3. Farmers' knowledge of post-harvest handling**

Figure 3 illustrates the level of knowledge of farmers in carrying out post-harvest gedong gincu mangoes, which is in the very knowledgeable category because it is in the percentage between 81-100%. This is in line with research conducted by Ariningsih et al., (2021) which states that farmers' knowledge of post-harvest handling is very high because farmers have access to appropriate marketing. Also supported by Marjaya & Pasaribu, (2019) who stated that farmers' knowledge of post-harvest applications is very high, indicated by farmers' habit of always carrying out post-harvest techniques together in order to minimize costs.

In order to ensure optimal quality of Gedong Gincu mango fruit, the post-harvest handling process involves several important steps. First, there is a step in separating and grouping fruit based on certain quality criteria. This process includes assessing the color, size and integrity of the fruit to ensure only high-quality fruit is selected for distribution. Furthermore, the use of appropriate and hygienic packaging materials is a major concern to maintain the cleanliness and quality of fruit during storage and transportation. Choosing the right storage method is a crucial step to maintain fruit freshness, by creating optimal conditions regarding temperature and humidity. In addition, in an effort to minimize shock and damage to fruit during travel, selecting appropriate means of transportation is also a focus. The use of vehicles equipped with safety systems and careful handling of the fruit is a strategic step to ensure that Gedong Gincu mangoes reach the consumer market in prime condition. By detailing these steps, farmers can maintain fruit quality and meet export standards, optimize product added value, and increase competitiveness in international markets (Sumantri, Marina, & Kurniati, 2021).

In the export context, the objectives of post-harvest handling also include the preparation of documents and packaging in accordance with international standards, thereby ensuring the ease and smoothness of the export process. By achieving these goals, farmers can ensure that the gedong gincu mangoes produced are not only of high quality at harvest, but also remain of optimal quality during the journey to consumers, supporting the success of their agricultural business (Sukandi & Landy, 2023).

### **Quality of fruit for export**

Quality indicates the conditions or attributes that determine the quality, sustainability and competitiveness of fruit and indicates the suitability of the fruit for consumption or acceptance



by the market. Standardizing the quality of gedong gincu mangoes for the export market aims to create products that meet international requirements and standards, so that they can compete effectively in the global market (Ariningsih et al., 2021). Quality standardization provides clear guidelines regarding the physical, sensory and nutritional characteristics expected from gedong gincu mango fruit. This includes determining optimal standards of size, color and level of ripeness for fruit to be exported (Budirokhman, 2016).

The condition of farmers' knowledge of fruit quality standards for export market share is depicted in Figure 4.



**Figure 4. Farmers' knowledge of fruit quality**

Figure 4 shows that farmers' knowledge of fruit quality standards for the export market is in the understanding category because it is in the percentage between 60-80%. These results are in accordance with research by Ariningsih et al., (2021) which states that farmers' knowledge of mango quality standards for the export market is relatively high among farmers who receive guidance from exporters because the standardization context of each export destination country has different standards. Also supported by research by Sulistyowati, Syamsiah, & Azisah, (2016) who also stated that farmers' knowledge of fruit quality standards for the export market is relatively high, which is felt by farmers who carry out the institutional partnership process.

Determining quality standards for Gedong Gincu mangoes is a very important first step in preparing them for the export market. This standard includes a series of physical, sensory and nutritional criteria that must be met for fruit to meet the expectations and requirements of the international market (Ariningsih et al., 2021). Along with this, the implementation of prevention and control measures is essential to ensure that Gedong Gincu mangoes are free from pests and diseases that can harm the quality and integrity of the fruit. These preventive measures involve sustainable farming practices and compliance with agricultural sanitation regulations. Implementation of certification procedures is a critical element in carrying out export activities. This process ensures that Gedong Gincu mangoes meet the health and safety standard requirements applicable in the export destination country. Certification also provides assurance to international consumers that the fruit they consume meets the quality standards set by the relevant institutions or authorities. Measuring parameters such as size, weight, sugar content and acidity is an important step in evaluating fruit quality. These data are needed to ensure the suitability of the Gedong Gincu mango with established international quality standards. By detailing and paying attention to each of these stages, Gedong Gincu mango farmers and producers can increase export market opportunities, provide assurance of product quality, and strengthen their position in international trade.

The standards also include provisions regarding fruit cleanliness and integrity, ensuring that fruit shipped to export markets is free from pests, disease or physical damage. Additionally, standardization involves selecting appropriate packaging materials that meet international sanitation requirements to keep fruit safe and clean during transit. By achieving high quality standards, the main goal is to build a positive reputation for the product, increase competitiveness in the global market, and open opportunities for access to wider international markets. Quality standardization also supports the sustainability of agricultural businesses by creating customer trust, ensuring export continuity, and providing a positive impact on the farmer's economy and the local fruit industry (Sukandi & Landy, 2023).

## CONCLUSION

Based on the results and discussion, it can be concluded in the following points Farmers' knowledge of off season cultivation is in the very knowledgeable category. Farmers' knowledge of harvesting techniques is in the very knowledgeable category. Farmers' knowledge of post-harvest handling is in the very knowledgeable category. Farmers' knowledge of fruit quality standards for the export market is in the very knowledgeable category.

## REFERENCES

- Amalia, R. R., Hairiyah, N., & Nuryati, N. (2018). Analisis kerusakan mekanis dan umur simpan pada rantai pasok buah naga di Kabupaten Tanah Laut. *Industria: Jurnal Teknologi Dan Manajemen Agroindustri*, 7(2), 107–115.
- Ariningsih, E., Saliem, H. P., Maulana, M., & Septanti, K. S. (2021). Kinerja Agribisnis Mangga Gedong Gincu dan Potensinya sebagai Produk Ekspor Pertanian Unggulan. *Forum Penelitian Agro Ekonomi*, 39(1), 49–71. Indonesian Center for Agricultural Socioeconomic and Policy Studies.
- Awaliyah, F. (2018). Keragaan agribisnis komoditas mangga gedong gincu di Kabupaten Cirebon. *Mahatani: Jurnal Agribisnis (Agribusiness and Agricultural Economics Journal)*, 1(2), 129–141.
- Azhari, N. M., Anantanyu, S., & Rusdiyana, E. (2021). Peran Pendidikan dalam Meningkatkan Minat Pemuda untuk Melanjutkan Usaha Tani di Daerah Konservasi DAS Solo Hulu. *Prosiding Seminar Nasional Pembangunan Dan Pendidikan Vokasi Pertanian*, 2(1), 33–44.
- Azizah, M. N., Rasmikayati, E., & Saefudin, B. R. (2019). Perilaku budidaya petani mangga dikaitkan dengan lembaga pemasarannya di Kecamatan Gregeg Kabupaten Cirebon. *Jurnal Ilmiah Mahasiswa Agroinfo Galuh*, 5(1), 987–998.
- Barokah, I., Sendja, T. P., & Andayani, S. A. (2021). Kinerja Bauran Pemasaran Para Pengumpul Dalam Meningkatkan Daya Saing Dan Omzet Penjualan Mangga Gedong Gincu The Collector's Marketing Mix Performance In Improving The Competitiveness And Turnover Of Gedong Gincu Mango Sales. *OrchidAgri*, 1(1), 34–45.
- Budirokhman, D. (2016). Peningkatan produktivitas dan kualitas buah mangga (*Mangifera indica* L) cv. gedong gincu melalui penerapan teknologi off season dan penyiraman melalui teknologi drip irrigation sebagai upaya meningkatkan ekspor buah nasional. *Research Report*, 187–194.
- Chaerani, D. S. (2019). Pengaruh Karakteristik Sosial Ekonomi Petani Terhadap Pendapatan Usahatani Jagung Manis anggota Gabungan Kelompok Tani Tunas Muda Kelurahan Kampung Jua Nan XX Kecamatan Lubuk Begalung Kota Padang. *Jurnal Embrio*, 11(02), 23–44.
- Kansrini, Y., Febrimeli, D., & Mulyani, P. W. (2020). Tingkat Adopsi Budidaya Yang Baik (Good Agriculture Practices) Tanaman Kopi Arabika Oleh Petani Di Kabupaten Tapanuli Selatan. *Paradigma Agribisnis*, 3(1), 36–49.
- Kusumo, R. A. B., Rasmikayati, E., & Mukti, G. W. (2018). Perilaku Petani dalam Usahatani Mangga di Kabupaten Cirebon. *Mimbar Agribisnis: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, 4(2), 197–209.
- Marjaya, I., & Pasaribu, F. (2019). Pengaruh kepemimpinan, motivasi, dan pelatihan terhadap kinerja pegawai. *Maneggio: Jurnal Ilmiah Magister Manajemen*, 2(1), 129–147.
- Pedekawati, C., Karyani, T., & Sulistyowati, L. (2020). Uji Beda Pendapatan Usahatani Mangga Gedong Gincu Pada Saat On Season dan Off Season. *Composite: Jurnal Ilmu Pertanian*, 2(02), 82–89.
- Purnamasari, W. O. D. (2019). Hubungan Karakteristik Inovasi Dengan Tingkat Adopsi Petani

- Terhadap Komponen Pengendalian Hama Terpadu (Pht) Padi Sawah Di Kelurahan Liabuku Kecamatan Bungi Kota Baubau. *Media Agribisnis*, 3(1), 1–12.
- Rasmikayati, E. (2018). Kajian Potensi Dan Kendala Dalam Proses Usahatani Dan Pemasaran Mangga Di Kabupaten Indramayu. *Sosiohumaniora*, 20(3), 215–221.
- Sa'diah, S. A., & Tamami, N. D. B. (2020). Proyeksi Ekspor Beras Nasional Melalui Gerakan Tiga Kali Lipat Ekspor (Gratieks) Pertanian Indonesia. *Jurnal Pamator: Jurnal Ilmiah Universitas Trunojoyo*, 13(2), 159–169.
- Sholiha, M., & Charina, A. (2018). Perilaku Petani Mangga Gedong Gincu dalam Menghadapi Masyarakat Ekonomi ASEAN (Mea) 2015 (Studi Kasus Gapoktan Sami Mulya, Kecamatan Sedong, Kabupaten Cirebon). *Jurnal Ilmiah Mahasiswa Agroinfo Galuh*, 4(3), 779–786.
- Suharsimi, A. (2013). *Prosedur Penelitian Suatu Pendekatan Praktik* (3rd ed.). Jakarta: Rineka cipta.
- Sukandi, P., & Landy, A. (2023). Pengembangan Potensi Buah Mangga Gedong Gincu Majalengka ke Pasar Internasional. *JIP-Jurnal Ilmiah Ilmu Pendidikan*, 6(4), 2318–2321.
- Sulistyowati, L., Syamsiah, N., & Azisah, S. N. (2016). Kajian rantai pasok mangga ke pasar ekspor dan kolaborasi diantara pelaku kemitraan (suatu kasus Kabupaten Cirebon). *Jurnal Agribisnis Terpadu*, 9(1).
- Sumantri, K., Marina, I., & Kurniati, E. (2021). Strategi Pemasaran Mangga Gedong Gincu Kabupaten Sumedang. *Agrivet: Jurnal Ilmu-Ilmu Pertanian Dan Peternakan (Journal of Agricultural Sciences and Veteriner)*, 9(2), 200–205.
- Supriatna, A. (2010). Analisis pemasaran mangga “gedong gincu”(Studi kasus di Kabupaten Cirebon, Jawa Barat). *Agrin*, 14(2).
- Waryat, W., & Nurawan, A. (2022). Keragaan Penanganan Pasca Panen Mangga di Kabupaten Cirebon. *Jurnal Ilmiah Respati*, 13(1), 64–74.
- Wati, D. A. R. (2020). Otomatisasi Penyiraman Tanaman Bawang Merah Dengan Metode Irigasi Kabut Berbasis ARDUINO dan IOT.
- Yurisinthae, E., & Suharyani, A. (2023). Analisis Efisiensi Pemasaran Kopi Lokal Di Desa Punggur Besar Kecamatan Sungai Kakap Kabupaten Kuburaya. *Jurnal Ekonomi Pertanian Dan Agribisnis*, 7(4), 1328–1340.

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