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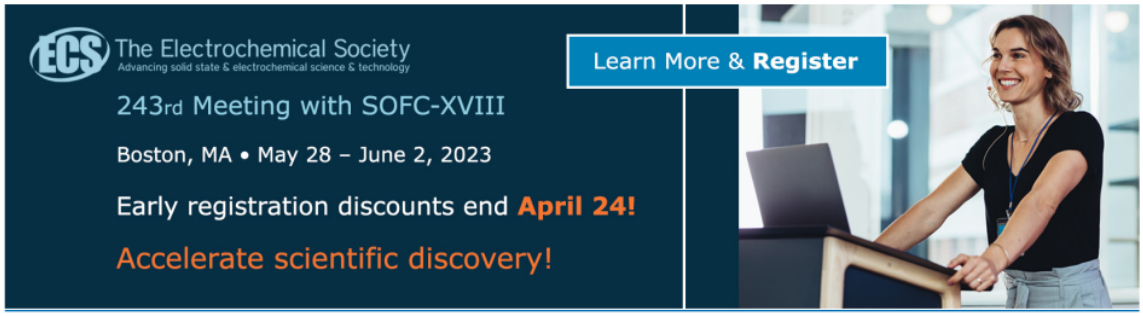

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Socio Characteristics of Citronella Farmers in Kedungrandu Village, Banyumas District

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Abstract. Citronella is one of the leading commodities that have competitiveness and high export demand. Citronella is one of the primary ingredients for making essential oils. However, there are not many studies on the individual characteristics of Citronella farmers from a socio-economic point of view. This study aims to understand and analyze the personal characteristics of Citronella farmers in terms of gender, age, last education, farmers' primary and secondary jobs, experience in farming and cultivation of Citronella, training attended by farmers, and the number of dependents of each farmer's family. The research method used a survey method with the Simple Random Sampling technique. The data analysis tool used is descriptive statistics analysis. The results showed that the majority of Citronella farmers are male, aged 41-60 years. Most citronella farmers are educated up to elementary school and have their primary job as farm laborers. Citronella farmers mostly have side jobs as farm laborers for other commodities and, on average, have more than 20 years of experience in farming. However, the majority of citronella farmers only have less than three years of experience cultivating citronella.

1. Introduction

Citronella is one type of plant used to make essential oils that have developed [1]. This commodity is a resource of foreign exchange for increasing state income through its exports to various countries. The results of the distillation of fragrant citronella leaves will produce an essential oil called Citronella Oil. In the international market, this fragrant citronella oil knows as "Citronella Oil of Java." Citronella Oil is used as various basic raw materials, including perfumes, aromatherapy oils, medicines, or cosmetics. Based on the five largest essential oil-importing countries from Indonesia, export value is constantly increasing. Theimportance of crucial oil exports to the United States in 2020 contributed to the most considerable export value of 126,677$ [2]. This potential is an excellent opportunity for Indonesia to increase the production of essential oil-producing commodities, one of which is citronella. One of the districts in Central Java that has a high potential to develop citronella oil is Banyumas Regency. Banyumas Regency is a potential area for the cultivation and development of citronella oil. In this district, there is an essential oil processing plant capable of exporting 3,000 tons per year. Generally, citronella in this place is grown on plantation lands, both on people's plantations and government property. One of the plantation lands planted with citronella plants is in KedungranduVillage, Patikraja District. The purpose of this study was to identify the socio-economic characteristics of citronella farmers in Kedungrandu. The features of farmers [3], as the primary control holder in farming, describe how their encouragement, characteristics, self-concept, values, knowledge, experience, and expertise in carrying out their farming.

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Aspects of citronella farmers in Kedungrandu expect to provide more precise information about the features of farmers from a social and economic perspective. Socio-economic characteristics of farmers predict to illustrate what kind of farmers who cultivate citronella in Kedungrandu expect to make a positive contribution to increasing the production of citronella.

2. Materials and Methods

The research was conducted in Banyumas Regency, precisely in Kedungrandu Village, Patikraja District. The study was conducted by the survey-explanatory method. The location was determined purposively, considering that the site is a citronella-producing village, a fostered village of the Faculty of Agriculture, JenderalSoedirman University. Respondents of this study were 40 farmers who cultivated citronella in Kedungrandu Village, Patikraja District, Banyumas Regency. Respondents chose intentionally, namely farmers who did citronella farming in 2020. The method for determining respondents was using the census method, meaning that all farmers are respondents in this study. It states that the total sample takes if the population is less than 100 people [4].

3. Results and Discussion

3.1. Characteristics of Respondents by Gender

This study shows that 28 male farmers (70%) of the total respondents, 40 people. This number is higher than the number of female farmers who only numbered 12 (30%). This is because many women work to take care of the household in Kedungrandu, so that not many carry out work as farmers.

3.2. Characteristics of Respondents by Age

Table 1. Characteristics of Respondents by Age

Age	Number	Percentage
<30	1	3%
31 - 40	7	18%
41 - 60	27	68%
60>	5	13%
Total	**40**	

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d on Table 1, farmers aged over 60 years amounted to 13%, while farmers aged between 41-60 years amounted to 68%. Based on the productive age according to BPS, which is 15-64 years, the farmers in Kedungrandu, on average, are still in productive age. However, from Table 1, it can be seen that the number of farmers aged under 40 years is much lower than other age categories. In contrast, younger farmers expect to contribute more in agriculture due to their adaptability to accept innovations.

3.3. Characteristics of Respondents Based On Education

Table 2. Characteristics of Respondents Based On Education

Education	Number	Percentage
NotCompleted Elementary School	5	13%
Elementary School	25	63%
Junior High School	5	13%
High School	4	10%
Bachelor Degree	1	3%
Total40		

Based on Table 2 farmers, 63% of citronella farmers in Kedungrandu completed their last education in elementary school. This level of education is in the low category level, where the

level of formal education will affect how farmers can accept innovation, technology that will impact the productivity of their farming business. Farmers who have a higher level of education will have a better ability to make decisions to increase their productivity. The level of education of farmers does not significantly affect the level of income [5]. However, it has a positive effect on the level of income of farmers. The level of education does not affect the production of agricultural commodities but has a positive effect on the results of its output [6]. The level of education does not significantly affect income or the level of farm production. However, education has a positive influence that can show how the level of adoption of technology and information can affect farmers in running and developing their farming.

3.4. Characteristics of Respondents by Main Occupation

Citronellafarmers in Kedungranduhave a variety of primary jobs. However, as many as 35% of Citronella farmers work as farm laborers. The second highest main occupation is farmers who work as construction workers as much as 23%, followed by farmers whose main occupation is scavengers at 15%. Judging from the percentages, we can see that 65% of Citronella farmers have other primary jobs outside of agriculture. Low-income levels encourage farmers to have other jobs to meet their daily needs.

3.5. Characteristics of Respondents based on Side Jobs

Table 3. Characteristics of Respondents based on Side Jobs

Side job	Number	Percentage
Farmer	16	40%
Breeder	2	5%
None	10	25%
Brick Business	2	5%
Scavengers	3	8%
Entrepreneur	1	3%
Farmer	6	15%
Total	**40**	

Just as the primary jobs of farmers are varied, so are the side jobs of the citronella farmers in Kedungrandu. Table 3 shows that 40% of citronella farmers have a side job as farm laborers, followed by 25% of farmers who do not have a side job other than farming Citronella and 15% of citronella farmers who also work as farmers in other farming commodities. Most farmers have side jobs due to the availability of much free time from the primary entity of their farming [7]. After calculating, 75% of citronella farmers have side jobs because of economic motivation. Farmers are still looking for other side income outside of citronella farming, which expects to help meet their family's needs. Farmers have side jobs to increase their income; especially their main commodity is not happening [8].

3.6. Characteristics of Respondents based on Farming Experience

Table 4. Characteristics of Respondents based on Farming Experience

Farming Experience	Number	Percentage
<5 years	7	18%
5 - 10 years	9	23%
11 - 20 years	5	13%
>20 years	19	48%
Total	**40**	

Table 4 explains that 48% of Citronella farmers in Kedungrandu already have more than 20 years of farming experience. This figure is the highest percentage of the length of experience in farming the citronella farmers. They are then followed by farmers who have experience farming between 5-10 years and 23% and 11-20 years as much as 13%. This shows that most farmers who currently grow citronella are very experienced farmers in the agricultural world.

Farming experience divides into three categories [9]. Namely, a new venture is less than ten years, moderate experience is between 10-20 years, and 20 years old experience. This long-standing experience expects to provide many lessons and more knowledge to farmers in increasing the productivity of citronella farming. Farming experience that has been going on for a long time can also provide more learning experiences for farmers to expect to know the problems and overcome and control risks in their farming.

3.7. Characteristics of Respondents based on Experience of Cultivating Citronella

This study shows that 95% of citronella farmers in Kedungrandu have less than three years of experience cultivating citronella. This brief experience shows that the selection of citronella as a planting commodity is relatively new for most farmers; this also indicates that most citronella farmers in productive age who are old can adapt to innovations and habits, namely planting other commodities outside of their usual farming activities. Citronella also means that it is a commodity that is easy to cultivate and has a high enough value in terms of social and economic terms to provide more motivation for farmers to produce it.

Conclusions

The socio-economic characteristics of individual citronella farmers in Kedungrandu Village, Patikraja District, Banyumas Regency are male, aged 41-60 years. Most citronella farmers are educated up to elementary school (SD) and have their primary job as farm laborers. Citronella farmers mostly have side jobs as farm laborers for other commodities and, on average, have more than 20 years of experience in farming. However, the majority of citronella farmers only have less than three years of experience cultivating citronella.

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