

Management of Cultivation Business and Utilization on Home Yards for Planting Kale Seeds and Red Shoots Plants

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Abstract

Plant cultivation business management is a set of human actions that involves the use of money and other resources to use biological natural resources and process them in order to produce goods that can meet needs. Making good use of the house's yard might have financial advantages. When horticulture crops are grown properly, infertile soil can nevertheless provide productive crops. North Sumatra Province's Suka Damai Village, Kuala District, Langkat Regency, and this Community Service were the locations of this activity. Improved cultivation business management and home yard use for planting green plants and kale seeds are the goals of this community service. 1) Educating participants on the proper techniques for planting kale and red shoots. 2) Help the village population learn the right and proper methods for growing kale and red shoots. 3) May boost individual or community income

Keywords: *Business Management, Crop Cultivation*

I. INTRODUCTION

The utilization of the yard for plant cultivation can be utilized as an example for cultivating vegetables as part of our community duty. Increasing revenue and profits for the local community is the aim. The potential for the growth of agribusiness may be increased by the partnership structure that has been formed in Suka Damai Village, Kuala District, Langkat Regency, North Sumatra Province. Plant culture is the development and use of biological natural resources by humans with the aid of capital or other resources to create a good that can satisfy human needs. [1] cites the following applications for plant cultivation:

1. Generate your own income
2. Significantly increase food production.
3. Helps those around us who need a way to make a living.
4. If you cultivate ornamental plants, you might introduce new types to develop business ornamental plant purchasing and selling enterprise.
5. Provide job prospects.
6. Developing self-potential in plant cultivation
7. Improve plant protection constantly while taking into account preservation of natural resources.

[2] made the argument that a variety of plant products may satisfy people's caloric needs. Vegetables must be consumed as a supplement to the body and not as a primary food source. In addition to critical vitamins, minerals, and nutrients, vegetables also offer a wide range of tastes, colors, and textures. Vegetable productivity must rise in order to keep up with rising vegetable demand. Kale is one of the vegetables that Indonesians eat the most. This plant is native to the tropics, particularly in Asia and Africa. Some of the nutrients in kale include protein, fat, carbs, calcium, phosphorus, iron, salt, potassium, vitamin A, vitamin B, and vitamin C, claims [3]. The leafy green vegetable kale is a commodity, according to [4], and it has a high nutritional content, particularly in the vitamins A, B, and C as well as in mineral substances like iron that are beneficial to health. Popular ornamental plants from Southeast Asia, including the Philippines, Peninsular Malaysia, Singapore, Sumatra, and Borneo, include red shoots. The medium-sized tree's dense canopy and scarlet branches make it a popular choice for planting as a hedge. Numerous local names for this species include Chinese Red Wood (Chinese), Wild Cinnamon, Red Lip, Australian Brush Cherry, and Kelat Oil.

Plants known as red shoots are distinguished by having both green and red leaves. From one leaf to the next, they intertwine closely. A shiny leaf surface and a smooth leaf texture with a leaf length range of 5 cm. The leaves will be red when they are young and still shoots; they can flourish in direct sunlight. Residents benefit when red shoots are planted in their surroundings because the parched and scorching climate is lessened, [5]. In our opinion, the combination of kale cultivation with red shoots can be done by using a makeshift yard. The popularity of ornamental plant sales is rising right now, demonstrating the growing public interest in these plants, which will undoubtedly have a favorable effect on the village community. According to [6], attractive plants can make the best use of few resources to generate the most profit. Additionally, decorative plants serve as a valuable source of revenue for the neighborhood. The freshness (comfort), attractiveness, and environmental health that ornamental plants offer are additional benefits. Ornamental plants' structure, color, and shape are all evaluated, as well as the appeal of their crowns. The positioning of the plant and the selection of the proper plant will communicate its beauty. Community service projects in Suka Damai Village, Kuala District, Langkat Regency, North Sumatra Province, have the following goals: 1) Disseminate information on how to practice planting kale and red shoots. 2) Help the locals learn the proper and good methods for growing kale and red shoots. 3) Increase community income

II. METHODS

From July 4 through July 20, 2022, this act of community service was performed. This activity is a component of a Real Work Lecture being done for Universitas Muslim Nusantara Al-Washliyah colleger in Suka Damai Village, Kuala District, Langkat Regency, North Sumatra Province.



Fig 1. Visit to Suka Damai Village, Kuala District, Langkat Regency, North Sumatra Province

The following activities are described in relation to the implementation of Cultivation Business Management and Village Office Land Utilization for Planting Kale Seeds and Green Shoots Red Plants:

1. Kale cultivation:
 - a. Land that has been previously cleansed of debris and weeds
 - b. Next, irrigate the soil so you may plant the seeds.
 - c. Create beds with a width of 1 to 15 meters.
 - d. Create a hole in the ground and plant two to four seeds in it.
 - e. Planting kale in close-proximity beds because it is a simple crop to grow
 - f. Then give the newly planted plants 2-3 waterings.
 - g. Then after a week, inspect the seeds, and fertilize with at least 5 ml in the following week.

Figures 2 and 3 show the Naming Kale Seeds and Green Shoots Red Plants Community Service Activities that are Performed on the Suka Damai Village Office Land, Kuala District, Langkat Regency, North Sumatra Province:



Fig 2. Practice of Kale Cultivation on Office Land in Suka Damai Village

2. Planting Red Tops:

Create 30 x 30 x 30 cm-sized holes in the plant area's soil by digging. Mix the manure and the soil you dug out in the hole. To plant, place the red shoot cuttings in the hole. To ensure the success of the plants, water them daily.



Fig 3. The Practice of Planting Red Shoots on the Property of the Suka Damai Village Office

III. RESULTS AND DISCUSSION

In kale, it is evident that there was a noticeable increase in leaf length from the first to the second week. However, there were variations in leaf length among the treatments, indicating that either the macro- and micronutrients in the soil were not dispersed uniformly or that certain plants lacked the nutrients necessary for their growth. Treatment 1.2 showed the quickest development, going from a length of 7 cm to 13 cm in just one week. With a length of 2.5 cm after the first week of treatment 2.1, the growth that was the slowest only increased to 15 cm. There is a noticeable increase in leaf width. The fastest progress was shown in treatment 1.3, when 1 cm expanded to 6 cm in just one week. While treatment 1.1 saw the slowest development, it only increased by 0.8 cm from the first week. The addition of leaves, which rises by an average of 2 strands per week from the first to the third week, can be observed as leaf blades.

The treatment 2.3 group experienced the fastest strand addition, increasing to 8 leaves by week 3. Both of them experienced the addition of leaves for additional treatments, which was an increase of 7 leaves. The red shoots on the third circle from the top that share the same initial conditions as the red shoots have the same color index. At the maximum intensity, the plant turned green after 14 days, but at the lowest level, the red shoots had not yet turned green and still had a hint of yellow. It is possible to practice using the back yard of the house to cultivate kale seeds and red shoots of green plants, and if successful, this would raise the household income in Suka Damai Village, Kuala District, Langkat Regency, North Sumatra Province.

IV. CONCLUSION

The student assistance activities for this Real Work Lecture are a component of the community service that benefits the people of Suka Damai Village, Kuala District, Langkat Regency, North Sumatra Province, by enhancing their knowledge. Additionally, information on the land use and cultivation practices used by the village office for planting Kale seeds and Green Shoots green plants can be obtained. The community learns how to grow kale, green plants like red shoots, and the techniques that they were previously unaware of. If done correctly, this can also increase the income of the community.

V. ACKNOWLEDGMENT

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REFERENCES

- [1] Agrotek.id. Pengertian Budidaya Tanaman menurut Para Ahli <https://agrotek.id/pengertian-budidaya-tanaman>. Accessed on 07 July 2022.
- [2] Edi S. Pengaruh Pemberian Pupuk Organik terhadap Pertumbuhan dan Hasil Tanaman Kangkung Darat (*Ipomea reptans* Poir). (The Effect of Organic Fertilizer on Growth and Yield of Kangkung (*Ipomea reptans* Poir). *Bioplantae*, *online-journal.unja.ac.id*, 3(1), 17-24, 2014.
- [3] Febriyono R., Susilowati Y. E., Suprpto A. Peningkatan Hasil Tanaman Kangkung Darat (*Ipomoea Reptans*, L.) melalui Perlakuan Jarak Tanam dan Jumlah Tanaman Per Lubang. *VIGOR: Jurnal Ilmu Pertanian Tropika dan Subtropika* 2(1), 22-27, 2017.
- [4] Asih E. W. Potensi Pengembangan Agribisnis Tanaman Kangkung Darat di Desa Maranatha Kecamatan Sigi Biromaru Kabupaten Sigi (The Potential for Agribusiness Development of Land Kangkung in Maranatha Village, Sigi Biromaru District, Sigi Regency). *Jurnal Kolaboratif Sains*, 5(6), 352-358, 2022.
- [5] Ramadhani M., Harahap S. A., Lubis R. H. H., Herdyana T., Hariati E., Malinda L., Ramadhan N. Penanaman Pohon Pucuk Merah Sebagai Penghijauan di Desa Ajibaho (Planting Red Trees as Greeting in Ajibaho Village). *Jurnal Pengabdian Masyarakat (JAPAMAS)*, 1(1), 48-58, 2022.
- [6] Analisis Optimasi Pendapatan Usaha Tanaman Hias Pucuk Merah (*Syzygium myrtifolium*) pada CV. Rara Garden Di Kota Palu (Analysis of Business Revenue Optimization of Red (*Syzygium myrtifolium*) on CV. Rara Gardenin Palu City. *Jurnal Pembangunan Agribisnis (Journal of Agribusiness Development)*, 1(1), 19-26, <https://doi.org/10.22487/jpa.v1i1.1263>, 2022.