

Proceedings of IYSW, (2020), vol. 9, pp 63-68.

Journal homepage: <http://journals.sdu.edu.kz/index.php/iysw>



**International
Young Scholars'
Workshop**

Microgreens: The Revolutionary Greens

Vineetha Antony

Assistant professor, Assumption College, Kerala

Abstract

Microgreens are vegetable greens and herbs that are harvested right after the first set of a plant's true leaves appear. Many Plants such as broccoli, mustard,etc can be grown as microgreens – consumed right after the first two leaves sprout. However, one needs to be very careful when selecting the plants they choose to cultivate as microgreens.The recent study is conducted with the aim to pinpoint the growth of microgreens .Many of the existing studies proved that the greens are richer in micronutrients.As it is known that the micronutrient malnutrition is a common cause to many of the diseases the knowledge on these types of microgreens are needed as well.

Keywords: Microgreens,Cultivate,Micronutrient.

Microgreens: The Revolutionary Greens

The term microgreens are not common .But the quest for its flavor and texture had started very before in San Francisco. They came to identify its role in flavoring dishes and very soon the microgreens conquered the scenes there. But then the importance or the functionality of microgreens are not known to all parts of the world until now. So the coming sections deals more on the microgreens and its growth patterns.

Objectives

The main objectives of the study are as follows:

- To identify the growth of microgreens
- To analyze the tools required for the growth of microgreens
- To calculate the cost required for the growth of microgreens

Methodology

The methodology pertaining to the study is as follows:

Selection of sample: The sample selected was the microgreen seeds. The seeds were not available in local seed shops, therefore it was been purchased through online platform.

Selection of Tools: The tools which was used for the study was scissors, rectangular trays ,coco peat as the growing medium, water sprayer.

Selection of Area: This included the selection of area for the growth of the microgreens. The suitable place for the growth of the microgreens was indoor.

Findings of the study

The major findings of the study were as follows:

- The Micro versions of the basil,coriander, chard, beetroot and red garnet amaranth were originally used to enhance the flavor of the dishes and as a garnish.

- Microgreens, are also known as “vegetable confetti”, are grown in a similar way that to the regular vegetables and other plants. But they are harvested when the plant is no taller than 5cm, which takes about 1-3 weeks from when the seeds are sown.
- The growth were analyzed and was noted as follows: a)At first the trays are cleaned with normal water (maintain ph) ,then the trays are then filled with the cocopeat and watered .This is then the perfect bed for laying the microgreen seeds intended to cultivate .b)After the sowing of the microgreen seeds ,It is watered using water sprayer so that excessive moisture content can be removed diligently .c)Right after the watering the particular tray is then covered with aluminum foil for two-three days .d)After three days it is seen that small shoots appear from the seeds sown .e)After the close investigation see that any of the seeds are crowded ,replace the crowded seeds into another rectangular trays so that there is ample space for the growth of the greens ,continue spraying water.d)After two-three weeks the greens are ready to harvest .
- The tools used for the cultivation of the microgreens were rectangular trays,Cocopeat,Sprayer for the growth of the microgreens and scissors for harvesting leaves. (these scissors were been rubbed with anti microbial lotion after each harvest to prevent microbial contamination)
- The cost was calculated for the growth of the microgreens and are depicted in the following table :

Table I

Materials used	Quantity	Cost
Trays	6	Rs30 ×6
Sprayer	1	Rs70
Coco peat	5Kg	Rs150
Coriander seeds	500seeds/packet	Rs300
Celery seeds	300 seeds/packet	Rs110
Arugula seeds	500 seeds/packet	Rs250
Red cabbage seeds	200 seeds/packet	Rs60
Radish seeds	500seeds/packet	Rs130
Amaranths seeds	5000seeds/packet	Rs100

From the above table, the total expenditure for buying 6 trays was Rs180 and that of a sprayer was Rs70. The trays and sprayer can be used multiple times unless any damage occurs. The price of microgreen seeds was depending on the number of seeds in the packet. A packet of 500 seeds of coriander cost Rs300 and that of arugula and radish cost Rs250 and 130 respectively. A packet of 300 seeds of celery and 200 seeds of red cabbage cost Rs110 and 60 respectively and a packet of 5000 seeds of amaranths cost Rs100. The cost of 5Kg of coco peat was Rs150. The total expenditure for cultivating microgreens of the selected varieties was Rs1350.

Summary

It was concluded that the microgreens are much better option to replace the normal greens .It is very easy and convenient to grow and cultivate the greens .The greens can be grown inside the home .No reported insect attack was there during the growth of the greens. (Xiao, Z. ,2013).

References

Xiao, Z. (2013). Nutrition, sensory, quality and safety evaluation of a new specialty produce: microgreens (Doctoral dissertation).