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Microgreens

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ABSTRACT

The micro greens have only one central shoot and the same will cut in the collar region at the time of harvesting. They have completely grown cotyledon leaves with one pair of very small, immature true leaves. They are cut within two weeks days from the date of sowing. Red cabbage, Amaranthus and radish greens are raised as microgreen and these crops having maximum ranges of vitamins C, K and E respectively. They are rich in flavour and raised in diversified shapes, textures and colours of leaves.

INTRODUCTION

Micro greens are tender green plant which is utilized for aesthetic and fragrant ingredient in dishes prepared by high class hotels. It is tiny than "baby greens," and cut later than cotyledons *https://en.wikipedia.org/wiki/Sprouting*. Micro greens supplies wide variety of tastes, colours and textures. At present, these micro greens are used for enriching the values of salads, soups and sandwiches. The size of these greens ranges from 2.5 to 7.5 cm. The micro greens have only one central shoot and the same will cut in the collar region at the time

of harvesting. They have completely grown cotyledon leaves with one pair of very small, immature true leaves. They are cut within two weeks days from the date of sowing.

Several "backyard" growers are involved in the production of micro greens and it shows the easiness of cultivation. They sold their greens at retail outlets or directly to the hotels.

Low depth plastic container with drainage holes is suitable for raising micro greens and raised in a small scale.

DESCRIPTION

The main parts of micro greens are central shoot, cotyledonary leaves and one pair of very small, immature true leaves. The length of micro greens range between 2.5 and 4 cm. If the green exceeds this size, it is not considered as micro green.

NUTRITIVE USES

Red cabbage, amaranth, and radish green have higher levels of vitamins C, K and E respectively. The micro greens contains five times higher than vitamins and carotenoids compared to the greens cultivated under conventional system.

MICROGREENS AND SPROUTS

Sprouts are slightly or completely germinated seeds. These sprouts consist of cotyledon, root and shoot. But micro greens are cut with only shoots with leaves. They are rich in flavour and raised in diversified shapes, textures and colours of leaves. Micro greens are raised in peat moss or coco peat. They need natural sunlight with low relative humidity and good ventilation. They are raised with minimum density compared to sprout cultivation. The duration is generally 8 to 15 days for and few types require from 30 to 45 days. They may be harvested during the leaves are completely formed. These greens are cut with scissors at collar region of the plant without roots. Few growers sold the greens in the trays and they can harvested later. The micro greens in the trays should be used immediately after transfer from the growing environment. If it is not used immediately, the leaves begin to elongate and change in taste and colour.

The sprout seeds are dipped in water for eight hours. Higher amount of seed is kept inside of the enclosed containers. These seeds germinate quickly because of higher levels of humidity maintained in the closed structures. The seeds also sprouted in moist cloth bags which are frequently dipped in water. The sprouting happens in dark or dim light situations. These conditions favour the multiplication of harmful bacteria. The sprouts are ready to consume only

after soaking in water for few days and repeated washing in water. The micro greens grown under ideal conditions are not having the growth of harmful microbes.

POST HARVEST HANDLING

Micro greens have minimum shelf life. Most of the micro greens stored in containers are not provided with adequate balance of oxygen and carbon dioxide. This conditions should be avoided by using films, which will improve O_2 movement.

The LEDs provide narrow-band wavelengths of light which is highly suitable for production of micro greens. Broccoli micro greens grown in a controlled environment under LEDs using growing pads provide high yield and quality. Because, the blue light enhanced the synthesis of major phytochemical compounds influencing the nutritional value.

CONCLUSION

The micro greens supplies several vitamins which are very essential for good human health. So the production of leafy vegetables as microgreens will alleviate malnutrition of women and children.