

The life stages of cannabis plants

The life stages of cannabis plants

In this tutorial, we will explore the life stages of cannabis plants, from germination to flowering. By understanding the cannabis growth cycle, you will be able to navigate through each phase with confidence and ensure the successful cultivation of your cannabis plants. We will also delve into the different types of cannabis strains, cultivation methods, growing mediums, and techniques to help you excel in cannabis cultivation.

1. Germination stage

The first stage in the life cycle of cannabis plants is germination. Germination refers to the process in which a seed sprouts and begins to grow into a seedling. To germinate cannabis seeds, you will need to provide the following conditions:

- Moisture: Cannabis seeds require a moist environment to trigger germination. This can be achieved by placing the seeds between two damp paper towels or by using specialized seedling trays.
- Warmth: Germination occurs best when the seeds are kept at a temperature of around 70-85°F (21-29°C). A warm environment helps to speed up the germination process.
- Darkness: Cannabis seeds need darkness to germinate. Ensure that the germination setup is completely dark or cover it with a dark cloth or towel.

During the germination stage, the cannabis seeds will sprout and develop a taproot. This is an important milestone as it indicates successful germination and the beginning of the seedling stage.

2. Seedling stage

Once the cannabis seeds have germinated and developed a taproot, they enter the seedling stage. This is the phase where the plants establish themselves and start growing their first set of true leaves.

During this stage, it is crucial to provide the seedlings with the following conditions:

- Light: Seedlings require bright but indirect light to grow. You can use fluorescent lights or grow lights to provide the necessary light intensity and spectrum. Aim for 18-24 hours of light per day during the seedling stage.
- Proper watering: Seedlings have delicate roots, so it's important to water them with care. Avoid overwatering, as it can lead to root rot. Instead, water the seedlings when the top inch of the growing medium feels dry.

- Nutrients: At this stage, it is not necessary to provide additional nutrients as the seeds carry enough nutrients to support the seedlings' initial growth. Wait until the seedlings have developed a few sets of true leaves before introducing nutrients.

3. Vegetative growth stage

After the seedling stage, the cannabis plants enter the vegetative growth stage, characterized by rapid growth and the development of branches and leaves. This is the longest stage in the cannabis growth cycle and typically lasts for several weeks or months, depending on the strain and growing conditions.

During the vegetative growth stage, it is crucial to provide the following conditions:

- Light: Cannabis plants require a lot of light during the vegetative growth stage. If growing indoors, provide them with 18-24 hours of light per day using high-quality grow lights. If growing outdoors, make sure the plants receive at least 12 hours of direct sunlight.

- Nutrients: As the plants grow larger, they require additional nutrients. Use a balanced fertilizer formula that provides nitrogen, phosphorus, and potassium (NPK) in the appropriate ratios. Follow the manufacturer's instructions and adjust the nutrient levels based on the plant's response.

- Watering: Cannabis plants in the vegetative growth stage require regular watering. Monitor the moisture level of the growing medium and water when it feels dry about an inch below the surface.

During the vegetative growth stage, you can also start training and pruning the plants to shape them and promote better light penetration.

4. Flowering stage

The flowering stage is the most critical phase for cannabis cultivators, as it is when the plants develop buds. The length of the flowering stage varies depending on the strain, with some plants flowering for as little as 6 weeks and others for up to 16 weeks.

To ensure successful flowering, provide the following conditions:

- Light cycle: Cannabis plants require a change in light cycle to trigger flowering. If growing indoors, switch to a 12/12 light cycle, meaning 12 hours of light followed by 12 hours of uninterrupted darkness. Outdoors, flowering is typically triggered by the natural decrease in daylight hours as the seasons change.

- Nutrients: During the flowering stage, cannabis plants require a different nutrient ratio with less nitrogen and more phosphorus and potassium. Use a bloom-specific fertilizer to provide the necessary nutrients.

- Temperature and humidity: Maintaining optimal temperature and humidity levels during the flowering stage is crucial. Keep temperatures around 70-85°F (21-29°C) during the day and

slightly cooler at night. Aim for humidity levels between 40-50% to prevent issues like mold or bud rot.

Throughout the flowering stage, monitor the plants closely for any signs of nutrient deficiencies, pests, or diseases. Harvest the buds when they reach their desired level of maturity and follow proper drying and curing practices to maximize their quality.

In conclusion, understanding the life stages of cannabis plants is essential for successful cultivation. By knowing the cannabis growth cycle, recognizing different strains, choosing appropriate cultivation methods and growing mediums, and employing proper cultivation techniques, you will be equipped to excel in cannabis cultivation, produce high-quality plants, and optimize yields.