



2.2: Water Source Quality

Water quality is crucial when preparing compost teas. Chlorinated or heavily treated water may negatively impact microbial activity. Whenever possible, use dechlorinated water or, better yet, collected rainwater to maintain a thriving microbial population.

2.3: Aerating for Optimal Oxygenation

Oxygenation is key in promoting Aeration is a critical step in compost tea production, as it ensures the proper development and growth of aerobic microorganisms. Oxygenation of the tea stimulates beneficial aerobic bacteria, fungi, and protozoa while suppressing harmful anaerobic pathogens. To achieve this, a reliable air pump and appropriate diffuser should be utilized for consistent oxygenation.

Proper aeration ensures oxygen is supplied to the tea solution during the steeping process. Use an aquarium pump or compost tea brewer to create and maintain oxygen levels of 6-8 ppm.

2.4: Timing the Brewing Process: Brewing Time and Temperature

The duration of brewing and the temperature at which the compost tea is prepared influences microbial activity and population dynamics. Optimal brewing times and temperature ranges can vary depending on the desired microbial community and targeted plant outcomes. Generally, a brewing duration of 24 hours at temperatures between 20-25°C (68-77°F) promotes the growth of beneficial organisms while minimizing the proliferation of harmful pathogens. Beware of over-brewing, as this may lead to the proliferation of harmful microorganisms. If it starts to stink then you've gone too far and it needs to be thrown out. Once you're ready to use it, your tea needs to be used within four hours so that the active microorganisms won't start to die.

Section 3: Straining and Application Techniques

Once the compost tea brewing process is complete, it is crucial to strain out any sediment or large particles before application. This helps prevent clogging of sprayers and ensures an even distribution of microbes onto cannabis plants. Multiple filtration methods such as cheesecloth, fine mesh, or microbe screens can be employed for effective straining.

3.1 Application Rate and Timing

Applying compost teas to cannabis plants at the right time and in appropriate quantities maximizes their benefits. Factors like plant's growth stage, susceptibility to disease, and environmental conditions need to be considered. As a general guideline, applying compost teas during early morning hours or late afternoon, when leaf surfaces are dry and temperatures are moderate, is optimal.

3.2 Soil Drench Application:

One method of applying compost tea is through soil drenching. Dilute the brewed compost tea with water in a 1:4 ratio before applying it near the base of the cannabis plants. The highly beneficial microbial communities present in the tea will colonize the soil, benefiting root health and nutrient uptake.

3.3 Foliar Spray Application:

Compost tea can also be applied as a foliar spray, which provides direct access to the leaves. Dilute the compost tea in a 1:10 ratio with water and evenly spray the solution, focusing on the underside of the leaves. This application method enhances disease resistance and promotes vigorous plant growth.

Compost teas offer a natural and sustainable way to enrich your cannabis cultivation practices. They represent a powerful tool in the arsenal of cannabis cultivators, offering numerous benefits such as improved nutrient availability, disease suppression, and enhanced plant growth. By understanding the scientific foundations behind each step of compost tea production, growers can harness their full potential for sustainable and high-quality cannabis cultivation.

By harnessing the power of beneficial microorganisms and nutrients, compost teas have the potential to revolutionize your cannabis garden. Experiment, learn, and find the right compost tea blend that works best for your cultivation goals.

Basic Compost Tea Recipe for Boosting Plant Growth

All compost teas follow the same basic recipe.

Ingredients and Supplies

Non-chlorinated water (use rainwater, or allow tap water to sit for over 24 hours)

1-2 cups of inoculant (either worm castings or compost)

¼ – ½ cup of food source for bacteria or fungi

5 gallon bucket

Bacteria need simple sugars and proteins, and usually one of the easiest sources is unsulphured molasses. Fungi need more complex sugars, with common sources including fish hydrolysate (essentially ground up fish), kelp/seaweed, and humic acid.

Many people create a mixture of both molasses and fungi food to create a good balance of nourishment for both fungi and bacteria, and it may come down to what you have readily available.

If you want to avoid purchasing chemical products like humic acid, a great recipe includes:

Easy DIY Compost Tea Recipe

Non-chlorinated tap water (enough to fill a 5-gallon pail)

2 cups fully finished organic compost (it should smell nice!)

1 tablespoon unsulphured blackstrap molasses

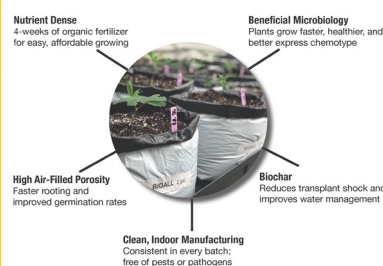
1 tablespoon liquid kelp fertilizer (or soak kelp meal in water)

1 teaspoon liquid fish fertilizer

BIOALL™

The Easy, Cost-Effective Way to Start Hemp

Organic, nutrient-dense, biologically-active soil designed for germination and transplants



“ We started over 1,000,000 seeds in BIOALL and achieved 90% germination. It was easy to work with, we saved time and money without needing to fertilize for the first 3-4 weeks. No fungus gnats, no disease, just healthy strong plants. —Larchwood Farms, New York

FREE TRIALS available.

bio365