

Compost Tea Recipes

Annuals and perennials need compost teas with different ratios of bacteria and fungi. Fruit trees grow best in fungal-dominated soils, while vegetables prefer bacterially dominated soils. Brewing and applying the correct compost tea will give the plants the conditions best suited to optimal growth and productivity.

Commercial growers rely on soil tests to brew teas specifically for their existing soil microflora and crops. For home growers, the following recipes, provided by Dr Elaine Ingham's Soil Foodweb Institute, are a useful starting point. Each recipe makes 20 litres of tea which will cover 0.4 ha or 1 ac. Smaller areas obviously need less.

General Purpose Tea:

(Balanced bacterial/fungal brew)

20 Litres water
80 mLs fish hydrolysate
40 mL liquid kelp
200 gm compost.

Add water to your vessel – bin. If using town water which will contain chlorine among other chemicals, turn on the pump and aerate to drive off the chlorine. Add the fish and kelp to the water. Place the compost in a 'tea' bag (can be purchased or made from gauze fabric). Brew for 24-30 hours with gentle bubbling.

Bacterial compost tea:

(Suitable for vegetables)

20 litres water
30 mLs fish hydrolysate
60 mLs liquid kelp
10 mLs backstrap molasses
200 gm compost

Make tea as per the method above.

Fungal compost tea

(Suitable for orchards & any perennial plants)

200 gm compost
10 mL fish hydrolysate mixed in 20 mL water.
20 litres water
80 mL fish hydrolysate
4- mL liquid kelp.

Three days before brewing, feed the compost by mixing 10 mLs of fish hydrolysate in 20 mL of water and sprinkle over the compost. Keep the compost in a cardboard box (the cardboard will absorb excess moisture and allow the compost to remain aerated). Keep in a warm environment (20 – 30C). After 2-3 days (depending on air temperatures), the compost will have cotton wool-like 'fur' growing over it – this is the fungal growth. Once the compost shows this 'fur' the compost is ready to brew. Use the method for the general purpose compost tea.

Important information when making teas.

Fish hydrolysate is made from whole fish, broken down by enzymes rather than heat. It contains fish oils that are good food for fungi. The more commonly available fish emulsion is less effective at growing fungi but will do as a substitute if the other is not available.

In hot weather reduce the foods and brewing time. With overnight temperatures above 20C, brewing will take place in approximately 18 hours so foods could be halved. Tea should be used within four hours of brewing before oxygen and microbe levels drop.

A quick alternative to brewed compost tea is a compost extract. The same equipment can be used, but only compost is brewed with no added food. This extract can be used after just 20 – 30 mins of brewing. It will be lower in microbial numbers but is still effective. Food for the microbes can be added just before it is sprayed onto the plants.

(Adapted from Soil Foodweb website and from Organic Gardener: March/April 2012 P 49.)

Sources of products used in making compost tea:

Products are not endorsed by AgpathP/L. These are simply examples of available products and suppliers.

Tea bag – 400 – 450 micron mesh - Agrisolutions (www.agrisolutions.com.au)

- Fish hydrolysate:

Examples:

SAMPI organically certified fish hydrolysate, Port Lincoln South Australia

www.sampi.com.au

Agrisolutions (www.agrisolutions.com.au)

- Fish emulsion (not as good for teas)

Examples: Nutri-tech. (www.nutri-tech.com.au);
Groundgrocer –Nutri Sea (www.groundgrocer.com.au);
Maxicrop Fish Emulsion (www.maxicrop.com.au);
Charlie Carp (www.charliecarp.com.au)
Agrisolutions (www.agrisolutions.com.au)

- Liquid kelp:

Examples: Seasol (www.seasol.com.ai);
Nutri-tech. (www.nutri-tech.com.au);
NATRAkelp (www.natrankelp.com);
Sea Change Liquid Kelp 20K (www.planthealthsolutions.com.au)
Agrisolutions (www.agrisolutions.com.au)