



**ECO-TEA Product Information Package Prepared For:  
ALL TURF  
Ontario and Quebec Sales Staff**



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**ECO-TEA Product Details:**

ECO-TEA is an engineered compost tea made with an advanced microbial food formula consisting of an organic blend of humic, fulvic and long-chain amino acids, Atlantic kelp extract, simple and complex carbohydrates and enzymes. Further, it injects a multitude of plant growth promoting rhizomicrobes into plant root zones. The biological community thriving within ECO-TEA will improve soil structure, root function/biomass, uptake of N-P-K, micronutrients and a many plant growth hormones and stress proteins.

ECO-TEA contains a variety of other beneficial microbes (derived from plant-based controlled microbial compost), which help decay organic matter during the growing season, continuously generating food sources for plants, preventing black layering and homogenizing the soil horizons (i.e. decreasing thatch development)

ECO-TEA is specially brewed to create a balanced ecosystem within the soil. It's unique combination of night-crawler castings/compost, humic acid, bio-stimulants and micronutrients provide a vast array of benefits. Humic acid chelates macronutrients and fulvic acid chelates micronutrients - effectively tying them up in the soil in plant available forms. Atlantic kelp provides food sources for important fungi, while improving the function of many plant hormones (both directly and indirectly). Formulating recipes based on various ingredient combinations and ratios - , ECO-TEA can be built to contain a microbial community dominated by plant beneficial bacteria or fungi. We can also provide a balanced formulation for general purposes.

The plant beneficial biology within ECO-TEA will help to decrease pathogen stress from various bacteria, fungi and some insects. This means plants' focus less on producing energy expensive shock proteins, which can regulate growth rates and increase yields/quality.

Some of the benefits of regular ECO-TEA applications include:

- Increase in root function and biomass.
- Increase in availability of natural phosphates and iron.

- Inoculates plant roots with millions of plant beneficial microbes with just a couple of milliliters.
- Increase in plant vigor and chlorophyll production.
- Improves stress tolerance (transplant, drought, cold, physical and pathogens).

### **How Can ECO-TEA Reduce Nutrient and Pesticide Usage?**

The biological community within ECO-TEA contains numerous protozoa and nematodes, which prey upon pathogenic organisms effectively controlling the populations. This activity helps to release nutrients locked up in food sources they consume ( $\text{NH}_4^+$ ,  $\text{NO}_3^-$ , phosphates,  $\text{Ca}^{2+}$  and many micronutrients). ECO-TEA also contains various bacteria and fungi that out-compete pathogens for habitat and release antifungal/bacterial compounds that directly inhibit pathogen growth and development (e.g. Streptomycin).

For golf courses on a tight budget ECO-TEA will help reduce operating costs by prolonging nutrient availability within the soil increasing the effectiveness of the regular fertilizer.

## ECO-TEA Nutrient and Biological Contents:

Table 1 – Macro and Micro Nutrient Content of ECO-TEA  
(values expressed as percent of total and micrograms per liter).

<b>Nutrient</b>	<b>N</b>	<b>P</b>	<b>K</b>	<b>Ca</b>	<b>Mg</b>	<b>Fe</b>	<b>Cu</b>	<b>Mn</b>
Total %	>1	>1	>1	>1	>1	>1	>1	>1
mg/L	10.4	34.7	245	120	26.3	44.9	0.099	1.88

Table 2 - Breakdown of Biology Contained Within 1 ml of High Quality  
Aerobic Compost Tea (Guidelines created by Soil FoodWeb Inc.)

<b>Class of Organism</b>	<b>Amount of Active Organisms</b>	<b>Total Amount of Organisms</b>	<b>Total Number of Species</b>
Bacteria:	10 - 150 or more $\mu\text{g}$	150 $\mu\text{g}$ to 300 or more $\mu\text{g}$	15,000 - 25,000 or more
Fungi:	2 - 10 $\mu\text{g}$ or more	5 - 20 or more $\mu\text{g}$	5,000 - 8,000 or more
Protozoa:	2,000 or more	2,000 or more	50 or more
Nematodes:	2-10 beneficial	2-10 beneficial	3 or more
Other:	100 or more	100 or more	10 or more

## Equipment Requirements:

ECO-TEA is filtered with a 40 mesh, meaning it will pass cleanly through any diaphragm or centrifugal pump. The boom mesh size should be no less than 40 or clogging will occur frequently during application. We always recommend taking out the inline filter and spraying with a **06 or 08 nozzle head (or larger)**.

## Application Rates and Coverage:

Table 3 – ECO-TEA Application Rates for Turf:

<b>Volume of ECO-TEA</b>	<b>Full Strength Coverage (ft<sup>2</sup>)</b>	<b>1:1 (ECO-TEA: De-chlorinated Water) Coverage (ft<sup>2</sup>)</b>	<b>1:3 (ECO-TEA: De-chlorinated Water) Coverage (ft<sup>2</sup>)</b>	<b>1:5 (ECO-TEA: De-chlorinated Water) Coverage (ft<sup>2</sup>)</b>
1 Gallon	1000	2000	<b>3000</b>	5000
10 Gallons	10000	20000	<b>30000</b>	50000
25 Gallons	25000	50000	<b>75000</b>	100000
50 Gallons	50000	100000	<b>135000-160000</b>	225000

## Some Affiliates and Clients:

- 1) Western Canada Turfgrass Association
- 2) Canadian Golf Superintendents Association
- 3) Southern Alberta Turfgrass Association
- 4) Manitoba Golf Superintendents Association
- 5) Government of Canada – Parks Canada
- 6) Olds College School of Innovation – Jim Ross
- 7) Canadian Composting Council
- 8) Corix Water Products
- 9) Red River College
- 10) Northridge Farms
- 11) Arborwood Tree Service
- 12) Shady Lane Tree Service
- 13) Scatliff-Miller-Murray Landscape Architects
- 14) Sungro Horticulture
- 15) JR Simplot
- 16) NSERC – National Science Engineering Research Council

17) Capilano Golf Course, Quilchena Golf Course, Inkinip Golf Course, Golf BC, City of Vancouver Golf Courses, City of Richmond, City of Burnaby Golf Courses, City of Calgary Golf Courses, Carmony Golf Course, Glendale Golf Course, Oslerbrook Golf Course and many more.

### **Frequently Asked Questions:**

#### **1. What is Eco-Tea?**

- Eco-Tea is a specially blended engineered compost tea – It is comprised of a blended mixture of high-grade composts and worm castings (inoculum).
- In order to create a highly active and beneficial product – microbial foods must be placed into the mixture to activate and feed the beneficial microbes.
- Foods consist of an array of products ranging from kelp to humic/fulvic/long-chain amino acids.
- The main role of Eco-Tea is to inoculate soil and plant surfaces with massive populations of beneficial bacteria, fungi and protozoa, which bring a natural balance back to the soil.

#### **2. Why Eco-Tea?**

- Eco-Tea is a specially designed type of aerated compost tea where high-grade composts and worm castings are blended and brewed for a 24-hour period in a specialized “brewing unit”. The end product is a microbial fluid that contains billions of plant-beneficial aerobic microbes. These aerobic microbes play many important roles in the soil system. They help hold and cycle nutrients within the root zone and also help to decrease disease pressure both on the plant surface and in the soil.
- Eco-Tea is a high tech and designed to help reduce the need for chemical pesticides and fertilizers. Although, it does not fully replace these products.
- The microorganisms found within the compost and worm castings may have the capabilities to degrade salt compounds and pesticides (amongst other pollutants) in soil.

### **3. What is the shelf life of the product? Can it be stored?**

- Eco-Tea has a very short shelf life – it will last 6-12 hours without air before it begins to sour.
- Eco-Tea is alive – just like a fish tank – without dissolved oxygen the fish will die. The same is true for Eco-Tea.
- We have manufactured a series of aerated holding and brewing units to help our customers easily negotiate these issues.
- Our Eco-Tea will stay good for 5-7 days if stored in an aerated holding unit. This allows clients a week to apply the product. We have found that this is enough of a window for customers to apply it on their schedules.

### **4. What is involved in brewing our own Eco-Tea?**

- Brewing your own Eco-Tea is a very simple process – we have created a system that takes out many of the problems associated with manufacturing this product.
- Brewing units are not cheap, but will pay for themselves within one or two growing seasons. These savings stem from reduced inputs from both a product and labor standpoint.
- Aerated compost tea in regular fertility programs have been shown to reduce irrigation time by up to 40% and chemical fertilizers by 50% while still creating the healthiest most productive plants.

### **5. Are there different types of Eco-Tea for different applications?**

- Yes, there are a few different types of Eco-Tea. These products are different in both the ratios of parent ingredients, microbial foods and catalysts:
  - a. Bacterial Compost Tea – for regular turf (lawn care applications)
  - b. Golf Course Compost Tea – for golf course greens, sports fields and other high stress turf.
  - c. Fungal Compost Tea – For orchards, vineyards and trees in general.
  - d. Balanced Compost Tea – For vegetable and flower gardens.
  - e. Foliar Compost Tea – For foliar applications on valuable crop plants.

### **What results will we see in the short term? Long term?**

- Most of our customers have noticed in the short improved plant health, vigorous root growth, improved pest resistance, improved stress tolerance (drought, cold and compaction), stimulates lateral branching.
- In the long term continual Eco-Tea applications will help increase soil structure and function from an ecological standpoint. This creates healthier more robust plant growing systems, reduced disease and insect pressure, improved crop yields and satisfied consumers.

### **6. What equipment is required to apply the compost tea?**

- Eco-Tea is filtered with a 40 mesh, meaning it will pass cleanly through any diaphragm or centrifugal pump. The boom mesh size should be no less than 40 or clogging will occur frequently during application.

### **7. What are the application rates?**

- Depending on the application there are various applications rates of Eco-Tea:
  - Golf courses and sports fields – 50 gallons of Eco-Tea diluted at 1 part Eco-Tea to 3 parts water (de-chlorinated) will cover 150000 sq.ft (appx. 18 greens).
  - High value agricultural crops – 5-6.5 gallons per acre applied as foliar with an agricultural-spray unit.
  - Residential Lawns – 1 gallon per 1000 sq.ft. of turf. Applied with tuck-mount spray unit – UNDILUTED.
  - Gardens – 1 gallon of Eco-Tea per 300 sq.ft. of garden area. Apply as a drench or foliar.
  - Trees and Shrubs – Apply as a drench to the base of the plant in spring and fall. Apply as a foliar spray throughout growing season. Apply to at least 70% of the leaf surface every 10 days.
  - Transplants – Apply as a drench at the time of transplant.



**8. Can the compost tea be tanked mixed with any chemicals or other organic products?**

- Yes, Eco-Tea can be mixed with some surfactants and natural fertilizers.
- Eco-Tea can be tank mixed with CIVITAS at 30% of the recommended manufacture's rate.

**9. What is the nutrient breakdown of the compost tea?**

- Eco-Tea has a nutrient component of 0-0-0

**10. Why is Eco-Tea better than everyone else's?**

- Eco-Tea is the best compost tea product on the market because we use a blend of proprietary high-grade composts and worm castings, nutrient blends and catalysts.
- We manufacture all of the composts and worm castings used in creating Eco-Tea.
- Our processes have been tested and improved on for over fifteen years – there are no other compost tea manufacturers that have gone to the lengths that we have to ensure product quality. We continue to research, innovate and exploit new technologies in our manufacturing processes.
- We have also partnered up with National Research Council of Canada, Olds College and industry partners in order to test improvements to our product line.
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**11. How often do we apply Eco-Tea?**

- a. Turf – For golf courses, sports fields and lawns apply Eco-Tea every 21 days throughout the growing season.
- b. Tree Care – Apply Eco-Tea every 21 days throughout the growth cycle. Soil drench in the spring and fall around the base of the tree.