

## LIQUID FULVIC ACID

### TURF & ORNAMENTAL USE

#### What is FulvaGrow™ T&O?

**FulvaGrow T&O** is an OMRI listed, liquid fulvic acid derived exclusively from the fresh water Leonardite deposits found in western Texas. Leonardite consists of the remains of plants and animals that lived millions of years ago, and is considered by many to be the best source of humic substances (humic acid and fulvic acid).

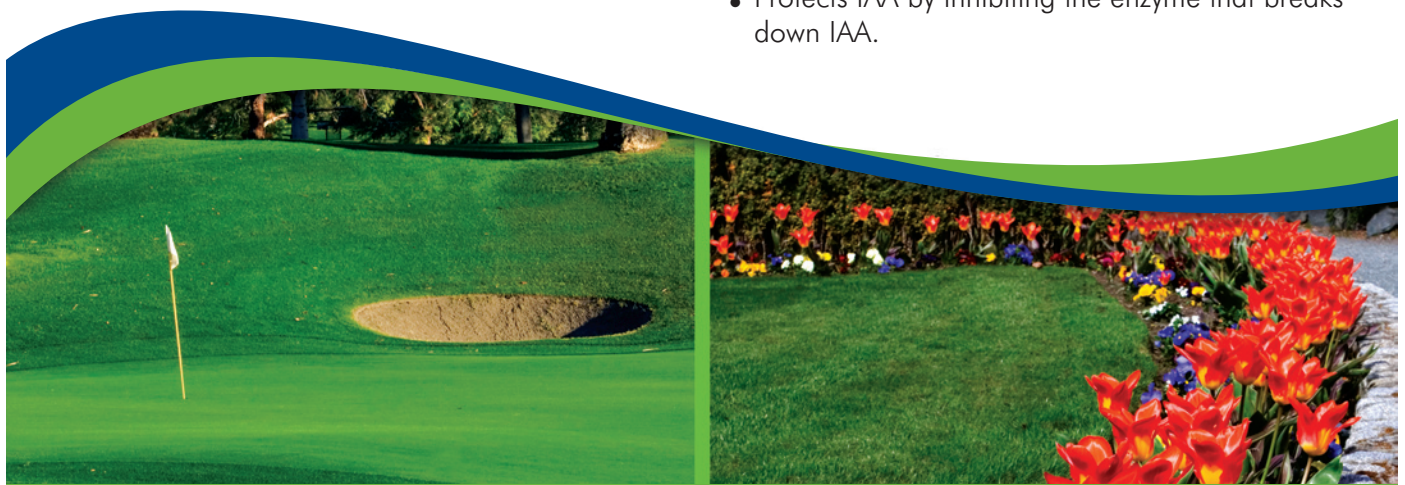
Humic substances range from clear yellow to dark brown or black complexes of carbon-containing compounds. Humic substances are mainly composed of carbon, oxygen, hydrogen, nitrogen, and sulphur plus 60 – 70 micronutrients, and other organic compounds. Humic substances are highly biologically active and influence many chemical reactions. Fulvic substances are typically lighter in color.

**FulvaGrow T&O** has a low molecular weight making it ideal for use as a foliar spray with and without NPK or micronutrients. **FulvaGrow T&O** delivers numerous

benefits to the plant, soil and microorganisms.

#### **FulvaGrow T&O:**

- Contains twice the oxygen content of humic acid.
- Is more chemically reactive than humic acid.
- Has more than twice the exchange capacity of humic acid.
- Because of its low molecular weight it readily enters plant roots, stems and leaves.
- Carries trace minerals from the surface of plant tissue into plant tissue.
- Transports metabolic substances directly to metabolic sites.
- Forms metal chelates.
- Enhances root initiation and increases root growth.
- Increases carbohydrate production which in turn feeds microorganisms in the rhizosphere.
- Increases germination rates.
- Increases permeability of cell membranes.
- Increases chlorophyll development within the leaves (better than HA).
- Increases production of ATP.
- Protects IAA by inhibiting the enzyme that breaks down IAA.



## Active Ingredients:

Fulvic Acids . . . . .	5.0%
Other Ingredients . . . . .	95.0%
TOTAL . . . . .	100.00%

## General Information:

Products like **FulvaGrow T&O** that contain fulvic acids may increase the uptake of micronutrients.

**FulvaGrow T&O** can be applied to all crops including vegetables, row and field crops, feed crops, trees, nut trees, fruit trees and vine crops.

**FulvaGrow T&O** can be applied with all transplant solutions, dips and all watering solutions. It can be applied to all soil types and pH ranges at a rate up to 2.5 gallons per acre.

**FulvaGrow T&O** should be used with all foliar sprays. Be sure not to over-apply fertilizers and micronutrients because **FulvaGrow T&O** will enhance their uptake. It is suggested to use the lower labeled rates of each component of any tank mix containing **FulvaGrow T&O**.

**FulvaGrow T&O** can be mixed with most liquid fertilizers. **FulvaGrow T&O** can also be mixed with most pesticides including non-selective contact herbicides, systemic insecticides, fungicides and defoliant.

**DO NOT USE WITH PRE-EMERGENCE OR SELECTIVE HERBICIDES.**

## GENERAL RECOMMENDATIONS

**Foliar Applications** to ornamentals, garden landscaping, lawns and golf course greens, tees and fairways: **FulvaGrow T&O** may be applied at up to 8 quarts per acre per application. **FulvaGrow T&O** is recommended for application with all nutrient and pesticide sprays.

### Greens, Tees and other Golf Course Applications:

- Application with other nutrients: Apply 1 quart per 25 gallons of spray volume.
- Application alone (without other nutrients): Apply before, during or after stress periods at 1.5 to 3 ounces per 1,000 ft<sup>2</sup>.

**Transplanting or Cutting Applications:** Mix 1 quart per 10 gallons of solution.

### Trees, Shrubs, Woody Ornamentals and Bedding Plant Applications:

- Application with other nutrients: Apply 1 quart per 25 gallons of spray volume.
- Application alone (without other nutrients): Apply before, during or after stress periods at 1.5 to 3 ounces per 1,000 ft<sup>2</sup>.

**Turf and Ornamental Applications:** Broadcast spray or inject into irrigation at 4 - 6 ounces per 1,000 ft<sup>2</sup> 1 to 3 times during the season. Mix with deep root injections at 1 gallon per 10 gallons of injection solution.

**Application with Herbicides or Defoliant:** Apply 1 to 2 quarts of **FulvaGrow T&O** per acre. It can only be mixed with non-selective herbicides. **DO NOT MIX WITH PRE-EMERGENCE OR SELECTIVE HERBICIDES.**

**Soil Applications:** Apply **FulvaGrow T&O** at 0.5 to 3.0 gallons per acre. **FulvaGrow T&O** can be injected via fertigation at a rate of 1 - 2 gallons per acre up to 6 times per season. In irrigation water, use 0.5 - 1.0 gallons with 10 - 20 gallons of fertilizer.

## COMPATIBILITY

**FulvaGrow T&O** is compatible with most common foliar pesticides, defoliant and nutrients; however, **user assumes full responsibility** to ensure compatibility when tank mixing with other products. It is recommended to always perform a jar test with the components of a tank mix in the same proportions as they will be used. If unfamiliar with **FulvaGrow T&O's** use, check with a LidoChem, Inc. representative.

### CAUTION: KEEP OUT OF REACH OF CHILDREN

Harmful if swallowed. Avoid breathing spray mist. May cause irritation of nose, throat, or skin. Avoid contact with eyes, skin, and clothing.

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