

# GROWERS *Program*

## GROWERS MINERAL SOLUTIONS

## THE GROWERS PROGRAM

### *And Soil Calcium*

#### Benefits of Higher Calcium Levels in Soil:

- Helps correct soil acidity
- Helps improve soil structure
- Helps neutralize the harmful or toxic effects of excess soluble salts of magnesium, sodium, and potassium
- Helps provide proper conditions for beneficial soil bacteria and earthworm growth
- Helps regulate nutrient absorption into the plants
- When planting seedlings or young trees, finely ground high calcium limestone, at the rate of four or five pounds per tree, may be placed directly into the slit with the seedlings or in the hole below the young tree.

It is best to broadcast fine, high calcium lime, working it into the soil before planting the trees, but it can also be bulk spread around either young or established trees. Water should move the limestone - calcium - into the root zone and the soil profile.



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*Our Research is Your Profit*

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[www.growersmineral.com](http://www.growersmineral.com)

Your local Growers Representative is:

## SEEDLING GROWTH

The purity of raw materials in Growers Mineral Solutions (GMS) and its nutrient balance is well suited for fertilizing seeds and young plants. Tree seeds and seedlings should be given a mixture of 2 oz. GMS to one gallon of water every two weeks during May, June, and July. This is to help produce more flushes and young tree growth, but is to be discontinued by August so seedlings have time to harden off for the winter.



## TRANSPLANTING

New trees are to be set with a transplanting solution of 1 gallon of GMS diluted in 100 gallons of water. Eight ounces of this mixture should be applied directly to the roots when set in the soil. The roots will be needing air, so the soil should be pulled around them without packing, especially when wet, to get the proper response from GMS transplanting solutions.

# & CHRISTMAS TREES



Since 1955 GMS's goal has been to help farmers increase profits, by lowering overall costs while raising more and higher quality crops. This happens by creating a superior rooting media, and, at stress periods in plants' lives, stimulating them with smaller, more efficient amounts of balanced nutrition by way of Growers Mineral Solutions and the Growers Soil Program.

*Growers*  
MINERAL SOLUTIONS  
SINCE 1955

# Foliar Feeding

## WITH GMS

### GROWERS Program

The three main elements of The Growers Program for evergreens, and most all other crops are:

**CALCIUM** - Soil Calcium levels need to adequate -80% to 85% of Base Saturation as shown on the soil test.

**GMS** - Use Growers Mineral Solutions at planting, during maximum growth, and reproduction. GMS was originally developed for this use in hydronic production where the plant's total mineral nutrition must be provide.

**RESULTS** - Yield check to verify profitability.

### MANAGEMENT TOOL

The unique feature of the Growers Program and the use of Growers Mineral Solutions is that they can be used as very effective management tools. During unfavorable weather periods (too wet or dry, hot or cold), Growers can provide extra nutrition for plant vitality or survival. Under favorable conditions GMS can help maximize crop yields and quality and take advantage of varying market situations.

Christmas trees and all other evergreens should be fed with GMS at their maximum stress periods, seed germination and transplanting of seedlings. They should also be foliar fed in the spring and fall to encourage and stimulate good growth and color. This is the basic approach, but, depending on the management style of the producer, various others are and can be used also.

Foliar spray Christmas trees with two gallons per acre of Growers Mineral Solutions, once in the spring and once in the fall. Producers tell us, "...the four gallons per season helps the trees hold their vigor, and, as far as color goes, it definitely makes the trees greener for the retail sale."



Some of the tree growers apply a third two-gallon spray in early June to further help the trees maintain their vitality during the following dry summer months. This third spray also helps the trees hold their color, and many times it is said to eliminate problem cases of a yellow tint often appearing just before the trees are to be marketed. Some growers maintain "Growers takes the place of tree painting - less expensively."

Yellowing in the trees is generally caused by nutrient deficiencies and can usually be corrected by one or more of the minerals found in Growers Mineral Solutions. Growers may not, however, correct all symptoms that appear to be nutrient deficiencies because they may

actually be the result of poor drainage, poor soil chemical properties, or poor soil physical properties. Before expecting the best returns from each plant food dollar invested, the soil should be adequately supplied with available calcium because limestone can correct soil drainage and chemical and physical

property problems. Use limestone sources that are high in calcium and low in magnesium content. So the usual recommendation is for four gallons per acre for the season, but six gallons per acre per season could be necessary, more beneficial, or both. An alternate program is to spray one gallon per acre of GMS once each in April, May, June, September, and October.

Foliar sprays should be applied in the early morning, late afternoon and evening, or on foggy, damp, or overcast days. Plants will not absorb minerals through foliage during the heat of the day or in bright sunlight.

Foliar sprays are generally applied by ground equipment utilizing boom sprayers, mist blowers, and highboy sprayers, however, some applications are made by helicopters and spray planes.

