

A wonderful



Christmas season

begins with

a healthy tree...

*A healthy tree begins
with USG!*

Grow Beautiful Christmas
Trees with USG Agricultural
Gypsum Products



USG Agricultural Gypsum:

- Provides necessary sulfur and calcium
- Won't alter soil pH
- Applies easily
- Economical
- Widely distributed

Why use gypsum for your Christmas trees?

As many as 40 million American families celebrate Christmas in their homes with a natural tree. They recognize that a memorable Christmas season begins with a beautiful, healthy Christmas tree, and a healthy tree provides weeks of family holiday enjoyment.

As a Christmas tree grower, the success of your business and satisfaction of your customers depend on the quality of your crop. An effective way to help ensure that your trees will be in top condition is to apply USG agricultural gypsum products.

Gypsum and Your Christmas Tree Crop

When soil is treated with USG agricultural gypsum, essential nutrients such as sulfur and calcium become readily available to the tree. Calcium is especially vital because it promotes robust cell walls and enhances needle retention.

While lime can be used to help make these minerals more abundant, it may also increase soil pH, which can reduce availability of other critical minerals such as boron, copper, iron, manganese and zinc. Because the optimum pH for conifers is much lower than for other tree crops, gypsum is often the better choice for treating soil already in the correct pH range.

USG agricultural gypsum is an economical source of sulfur and calcium that won't raise pH, applies easily and is widely distributed for easy availability.

Soil Testing and the Application of Gypsum

A soil test is the best way to determine pH and whether calcium levels are sufficient.

Optimum soil pH for Christmas trees varies by species:

Species	pH Range	Target pH
White Pine, Virginia Pine, Scotch Pine	5.0-5.5	5.2
Fraser Fir, Hemlock, Norway Spruce	5.3-5.8	5.5
Blue Spruce, Red Cedar	6.0-6.5	6.2

The amount of calcium needed to achieve optimum levels varies by soil type and current calcium content determined by soil test:

Soil Type	Low Calcium Level		Medium Calcium Level	
	Gypsum Rate (lbs/acre)	Gypsum Rate (oz/tree)	Gypsum Rate (lbs/acre)	Gypsum Rate (oz/tree)
Sandy	250	2.3	0	0
Loamy	500	4.6	250	2.3
Clay	750	6.9	500	4.6

For example, clay soil showing low calcium would require 750 pounds of calcium per acre, or approximately 6.9 ounces of calcium per tree. This can be achieved by applying 3,000 lbs. per acre of agricultural gypsum, which typically contains 25 percent calcium.



USG Has the Experience to Help You

United States Gypsum Company has been serving a wide variety of agricultural customers for more than 100 years. We offer several natural, high-purity agricultural gypsum products that can help you grow beautiful, healthy Christmas trees:

- BEN FRANKLIN® 420 Landplaster
- USG™ 500 Landplaster
- BEN FRANKLIN® Agricultural Gypsum
- BEN FRANKLIN® AQUA CAL™ Agricultural Gypsum
- USG Industrial Ground Gypsum

To learn more about how USG agricultural gypsum can help you grow healthier, more beautiful Christmas trees, contact your local crop production supplier or USG representative.

Product Information/Literature/Technical Service

800 487.4431

Website

www.gypsumsolutions.com

Email

industrial@usg.com

Fax

312 606.4519

Note

Products described here may not be available in all geographic markets. Consult your U.S. Gypsum Company sales office or representative for more information.

Trademarks

The following trademarks used herein are owned by United States Gypsum Company or a related company: AQUA CAL, BEN FRANKLIN, USG.

Notice

We shall not be liable for incidental or consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instruction or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

Safety First!

Follow good safety and industrial hygiene practices during handling and installation of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.



Manufactured by
United States Gypsum Company
Industrial Division
125 South Franklin Street
Chicago, IL 60606

IG1575/2-03
© 2003, United States
Gypsum Company
Printed in U.S.A.