

INSTRUCTIONS FOR APPLICATION OF GLACIER GOLD COMPOST

Each Bag (1/2 Cubic Ft.) Covers Approximately	
Depth	Area (Sq. Ft.)
1/2"	28
1"	14
2"	7
4"	3.5

1 Cubic Yard Covers Approximately	
Depth	Area (Sq. Ft.)
1/2"	648
1"	324
2"	162
4"	81

The Recommended Amounts of GLACIER GOLD ORGANIC COMPOST are based on Soil Type: for Sandy Soil use 3 - 4 ", for Heavy Clay use 3" and for Sandy Loam use 2" of Glacier Gold.

VEGETABLE GARDENS:

Initial Spring Preparation: Spread the recommended amount of Glacier Gold evenly over the surface and till into root zone. Smooth surface, plant seeds or plants, and top dress with 1" of Glacier Gold.

During the Summer: To discourage weeds and increase moisture retention, top dress with 1" of Glacier Gold.

Initial Fall Preparation: Spread the recommended amount of Glacier Gold evenly over the surface and leave untouched until spring.

INDIVIDUAL BEDS:

Till the recommended amount of Glacier Gold into soil and top dress with an additional 1" of Glacier Gold.

TREES AND SHRUBS:

To encourage deep rooting, dig 12" deeper than the actual rootball. Mix 1 part Glacier Gold with 1 part existing soil to fill the first 2" of the hole, then add an additional 1-2" of soil. Place rootball in the hole; surround and cover it firmly with a mixture of 1 part Glacier Gold and 2 parts soil. After watering and settling, top dress with an additional 2" of Glacier Gold.

NEW LAWNS:

Spread 1-2" of Glacier Gold over area, lightly till into soil before seeding.

ESTABLISHED LAWNS:

Cut grass to medium height, spread 1/4-1/2" of Glacier Gold over the area, irrigate and rake lightly to prevent coagulation.

LAWNS UNDER EVERGREENS:

Seed lawn directly into 1" of Glacier Gold spread under evergreen trees. Apply 1/2" of Glacier Gold annually to counteract the acidity of the fallen evergreen needles.

FLOWERS & BERRIES:

Top dress with 2-3" of Glacier Gold in the spring or early summer.

POTTED PLANTS:

Top dress with 1" of Glacier gold initially and/or when replanting.

BULBS & TUBERS:

Apply a handful of Glacier Gold when planting each bulb or set and top dress with an additional 1-2".

ROSES:

Mix 1 part Glacier Gold with 1 part existing soil when planting. Irrigate and top dress with an additional 1-2".

Glacier Gold compost is licensed by the Montana Department of Health and Environmental Sciences and the Montana Department of Agriculture and meets all Federal EPA #503 regulations.

GRANULATED SULFUR

Whitney Farms Granulated Sulfur is an acid producing mineral which is used to help lower the pH of alkaline soils. At the same time it provides essential sulfur to garden plants. Granulated sulfur can be used to ensure the ideal conditions for acid loving plants like rhododendrons, azaleas, camelias, evergreens and blueberries.

Preparing Large Areas

Proper soil preparation is essential to growing beautiful gardens. When preparing large areas like perennial or annual flower borders, be sure to thoroughly incorporate 1-2 inches of Whitney Farms Planting Mix or compost and the recommended amount of fertilizer. Mix to a depth of 6-8 inches.

Feeding Established Plants

Feed existing plants by spreading the fertilizer in a band around the plant beneath the outer leaves. Lightly work into the soil surface. Avoid damaging roots close to the surface. Water thoroughly after feeding. Mulch with a 1/2" to 1" layer of compost.

Application Rates:

for general garden use and for use when planting new lawns, sulfur is best applied one to two weeks before planting and fertilizing. Ideally before applying sulfur determine the soil pH using a test kit. Follow the recommendations below to determine the amount required:

Amount of Sulfur Required to lower a given pH to 6.5 for different soil types		
Amount in lbs./100 ft. sq/.		
If pH	Sandy Soil	Clay Soil
8.5	3.5 - 4.5	4.5 - 6.0
8.0	2.5 - 3.5	3.5 - 5.0
7.5	1.0 - 1.5	2.0 - 2.5

For regular upkeep of soil pH on an established lawn, no more than a maximum of 0.5 lbs./100 sq. ft. should be used. If more is required, applications should be made a few months apart.

After application thoroughly till into the soil and water the area well.

Sulfur is indispensable for plant and animal growth. It is an essential ingredient in many amino acids and it is an important constituent of proteins and certain vitamins. It is necessary for nodule formation on legume roots, and for seed production in all plants.

KNOW YOUR PLANT FOOD ELEMENTS

PRIMARY PLANT FOOD ELEMENTS

Element	Symbol	Function in Plant	Deficiency Symptoms	Excess Symptoms	Sources
Nitrogen	N	Gives dark green color to plant. Increases growth of leaf and stem. Influences crispness and quality of leaf crops. Stimulates rapid early growth	Light green to yellow leaves. Stunted growth.	Dark green Excessive growth Retarded maturity Loss of buds or fruit.	Urea Ammonia Nitrates
Phosphorus	P	Stimulates early formation and growth of roots. Gives plants a rapid and vigorous start. Is important in formation of seed. Gives hardness to fall-seeded grasses and grains.	Red or purple leaves. Cell division retardation.	Possible tie-up of other essential elements.	Superphosphate Rock Phosphate
Potash	K	Increases vigor of plants and resistance to disease. Stimulates production of strong, stiff stalks. Promotes production of sugar, starches, oils. Increases plumpness of grains and seed. Improves quality of crop yield.	Reduced vigor. Susceptibility to diseases, Thin skin and small fruit.	Coarse, poor-colored fruit. Reduced absorption of Mg and Ca.	Muriate or Sulphate of Potash.

SECONDARY PLANT FOOD ELEMENTS

Calcium	Ca	Part of cell walls. Part of enzymes.	Stops growing point of plants.	Reduces the intake of K and Mg.	Lime Basic Slag Gypsum
Magnesium	Mg	Aids photosynthesis Key element in chlorophyll.	Loss of yield Chlorosis of old leaves.	Reduced absorption of Ca and K.	Magnesium Sulphate (Epsom Salts) Dolomite is 1/3 Mg.
Sulfur	S	Helps to build proteins.	Looks like nitrogen deficiency.	Sulfur burn from too low pH.	Sulfur Superphosphate

MINOR OR MICRO ELEMENTS

Boron	B	Affects: -absorption of other elements. -germination of pollen tube.	Small leaves. Heart rot and corkiness. Multiple buds.	Leaves turn yellowish red.	Borax
Copper	Cu	Enzyme activator.	Multiple budding. Gum pockets.	Prevents uptake of iron. Causes stunting of roots.	Copper Sulphate Chelated copper
Iron	Fe	Enzyme catalyst. Hemoglobin in legumes.	Yellowing of leaves, the veins remaining green.	None Known.	Iron Sulphate (Copperas) Chelated iron
Manganese	Mn	In enzyme system	Mottled chlorosis of the leaves. Stunted growth.	Small dead areas in the leaves with yellow borders around them	Manganese Sulphate (Tecomangam)
Molybdenum	Mo	Helps in the utilization of N.	Symptoms in plants vary greatly.	Poisonous to livestock.	Sodium Molybdate
Zinc	Zn	Aids in cell division, in enzymes and auxins.	Small, thin, yellow leaves. Low yields.	None known	Zinc Sulphate.

ELEMENTS FROM AIR AND WATER

Carbon	C	Keystone of all organic substances	None known.	None known.	Air (Carbon Dioxide)
Oxygen	O	Respiration	White areas of leaf veins High nitrates	None known	Air and water
Hydrogen	H	Necessary in all plant functions	Wilting	Drowning	Water