

AGGRAND[®]

Natural Organic Products
Lawn • Garden • Agriculture

Hay and Pasture

Mixed grass-legume production as it relates to permanent cultures on acid clay soils in the eastern U.S. and Pacific Northwest has special fertility requirements. These soils tend to contain high to excessive amounts of magnesium (Mg) and low to deficient amounts of calcium (Ca). The percentages of Mg and Ca must be adjusted to increase soil aeration allowing higher levels of biological activity to increase and sustain high productivity levels (the biology follows the chemistry).

In general, one ton of gypsum and one ton of high Ca lime applied per acre during field renovation increase aeration and improve drainage on clay soils for several years. After gypsum is tilled into the soil, irrigate or allow several inches of rain to fall to leach the Mg from the soil before applying lime. Some farmers are finding out that the soil chemistry stays in balance with very little change over longer periods (10 years or more) when AGGRAND fertilizers are used in conjunction with the balancing of soil chemistry.

Foliar applications:

- 1.) Mix 1-3 gals. AGGRAND 4-3-3 Natural Fertilizer, 1-2 gals. AGGRAND Natural Liquid Bonemeal, and 1-2 qts. AGGRAND 0-0-8 Natural Kelp and Sulfate of Potash with 50-75 gals. of water. Apply as a fine mist with enough solution to thoroughly cover leaves. Apply first application in spring when plants are 4-6" in height.

- 2.) Repeat application when crop begins to regrow (4-6" in height) after each cutting or grazing (on rotationally grazed pastures).
- 3.) Apply 2-3 applications per year.

Rates vary according to soil fertility, cropping history, and other inputs that are applied. Lower dilution rates are more effective than higher dilution rates. Two or three lighter applications may be more effective than one or two heavier applications. If other constraints allow only one trip over the field, then do not exceed a 3% dilution rate (3 gals. AGGRAND to 100 gals. of water).

The addition of a biodegradable surfactant increases uptake by promoting adhesion to the leaf surface. Apply AGGRAND in early morning or late evening. Do not apply before or after rainfall or irrigation. On standard field sprayers use turbo flood jet or flood jet nozzles when applying AGGRAND to reduce clogging and increase atomization.

To reduce susceptibility to attack of insects and disease causing organisms, apply 1-2 gals. of 4-3-3 or 1-2 qts. of 0-0-8/acre when signs of infestation begin to become apparent. When AGGRAND is added to the spray tank it reduces the pesticide needed to obtain effective control by 1/3 to 1/2. Some growers are finding that AGGRAND applications alone eliminate the need for pesticide applications when they are applied at the same times as pesticides.

Preplant soil applications:

Mix 3-6 gals. AGGRAND 4-3-3 with 20-30 gals. of water. Apply solution after seedbed preparation. Drag lightly after application.