

AGGRAND[®]

A COMPLETE LINE OF LIQUID
FERTILIZERS FOR LAWN,
GARDEN AND CROP CARE

Natural Series

- Natural Fertilizer
- Natural Liquid Bonemeal
- Natural Liquid Lime

Organic Series

- Natural Fertilizer 
- Natural Kelp and Sulfate of Potash



The Future of Natural Fertilizers Is Here Today...AGGRAND!

AGGRAND Natural Fertilizers are manufactured from renewable resources and a safe and effective alternative to high analysis chemical fertilizers. We strive to put the highest quality ingredients into our products. Experiments are conducted to validate the use of these ingredients, then we compare different fertilizer formulations and rates to compute the optimum fertility for each plant type. Finally, research is conducted to compare our fertilizer to those of our competitors. In this way we are confident that we are manufacturing one of the best, most effective liquid fertilizers in the industry.

Homeowners, lawn care specialists, farmers and commercial growers alike are recognizing the importance of environmental responsibility as they tend to their gardens, lawns and crops. They also want products that are safe to use and perform well. As a result, more and more homeowners, lawn care services, turf managers, and commercial growers are turning to AGGRAND Natural Products.

NATURAL SERIES

AGGRAND Natural Fertilizer 4-3-3



Certified by the USDA BioPreferred Program to contain 100 percent biobased materials, AGGRAND Natural Fertilizer 4-3-3 is the most highly formulated of the AGGRAND product line. It is ideal for all-around use on flowers, vegetables, fruits, lawns, shrubs, trees and field crops.

AGGRAND Natural Fertilizer provides nitrogen, phosphorus and potassium (N-P-K) in a 4-3-3 ratio. These essential nutrients promote vigorous growth, increased root development and improved disease and stress tolerance.

With AGGRAND Natural Fertilizer, nutrients are released more slowly so there is less chance of environmental impact. Adding natural ingredients to the soil increases microbial activity. Soil microbes fix the nutrients needed for plant growth and release them slowly as plants need them. On the other hand petrochemical fertilizers are often high in soluble salts that are detrimental to soil microbes and plants alike: They decrease microbial activity and plant nutrient uptake. Although these fertilizers are high analysis N-P-K, the plant-use efficiency can be very low.

AGGRAND Natural Fertilizer utilizes kelp concentrate from the icy waters of the North Atlantic Ocean. Kelp

accumulates high levels of plant growth hormones and nutrients. When used as a fertilizer, kelp makes plants more robust and healthy by enhancing their heat, drought and cold tolerance. It also supplies N-P-K, sulfur (S), magnesium (Mg), calcium (Ca), iron (Fe), copper (Cu), zinc (Zn), manganese (Mn), boron (B), sodium (Na), carbohydrates and numerous amino acids.

AGGRAND Natural Fertilizer also utilizes fish emulsion from Menhaden fish which were used by Native Americans for centuries to grow their crops. Menhaden comes from the word "munna whaleaug" which means "that which manures." Menhaden ocean fish feed on mineral rich plankton, which makes them full of essential nutrients. The fish component in AGGRAND Natural Fertilizer supplies N-P-K and 10 micronutrients, as well as a number of vitamins and amino acids.

Bloodmeal and sulfate of potash are combined with the fish to boost the nutrient levels in AGGRAND Natural Fertilizer. In addition to these ingredients, a number of other natural additives are included that condition the soil, reduce transplant shock and chelate the nutrients. Chelated nutrients are protected against leaching into the groundwater and are readily available for plant uptake.

AGGRAND Natural Liquid Lime

AGGRAND Natural Liquid Lime is an easy, effective alternative to bagged lime for use on permanent ground covers such as turf, pastures and hay fields. This product utilizes very fine lime in a liquid suspension, which is readily absorbed by the leaves and roots. AGGRAND Natural Liquid Lime should be used with AGGRAND Natural Fertilizer 4-3-3 to supply additional calcium to crops such as tomatoes, potatoes, cabbage, and lettuce that require greater amounts of this vital nutrient.

Calcium is the plant's servant. It regulates opening and closing of stomates, removes toxins from the tissue, contributes to the development of shoots and roots, and keeps out unwelcome invaders.

Many acidic soils do not contain enough calcium to support prolific plant growth. When soil pH is below 6.0, plants may show signs of calcium deficiency such as yellowing of leaves, retarded growth of roots and shoots, dieback of grow-

ing tips, and premature death of older leaves. AGGRAND Natural Liquid Lime applications are the easy way to correct a calcium deficiency without tilling in bagged lime.

Soil liming must not be ignored when planting a new lawn, pasture or hay field. Soil liming increases microbial activity and the proliferation of earthworms and beneficial insects. Soil health is an on-going process; the immediate goal, however, is producing green lawns, productive pastures and high yielding hay fields that need calcium to promote prolific plant growth.



AGGRAND Natural Liquid Bone Meal 0-12-0

AGGRAND Natural Liquid Bonemeal is an important part of any soil fertility and plant nutrition program. AGGRAND Natural Liquid Bonemeal contains readily available phosphorus. Phosphorus aids in plant establishment, production of prolific blooms and high yields of top quality fruits.

AGGRAND Natural Liquid Bonemeal is recommended for application during transplanting of vegetable and flower starts, and planting of bulbs and seeds. It enhances root development which produces faster growing, healthier plants. Application of phosphorus in AGGRAND Natural Liquid Bonemeal to carrots and potatoes promotes increased size and quality of the roots and tubers. Application to bulbs promotes increased number and size of flowers, and the bulbs can be split more frequently. Increased phosphorus availability during flowering and fruit development lengthens the flowering period and produces higher numbers of flowers and fruits.

AGGRAND Natural Liquid Bonemeal contains fast and slow release phosphorus. As a result, AGGRAND 0-12-0 applied as a starter fertilizer is readily available during early plant development,

and the rest becomes available throughout the growing season. Many bonemeal fertilizers are not ground as finely as AGGRAND 0-12-0 and are released over a period of years so the phosphorus can become locked up into an unavailable form in the soil. The fine grind of AGGRAND 0-12-0 allows it to dissolve in a shorter period of time. The fineness also facilitates deeper penetration into the soil profile so it can become available to a greater percentage of plant roots than coarser granular bonemeal products.

AGGRAND Natural Liquid Bonemeal also contains calcium which improves soil tilth, nutrient exchange capacity, and is useful in correcting calcium deficiencies of plants that require extra calcium such as tomatoes.



ORGANIC SERIES

AGGRAND Organic Series

AGGRAND Natural Fertilizer Organic Series is formulated from the ground up to meet the USDA National Organic Plan (NOP) requirements, and is designed as the alternative to AGGRAND Natural Fertilizer for use by USDA NOP certified growers. AGGRAND Fertilizer Organic Series carries the OMRI seal identifying it as OMRI Listed. It also is registered with the California Department of Agriculture Organic Input Materials program.

Like AGGRAND Natural Fertilizer, AGGRAND Fertilizer Organic Series provide nitrogen, phosphorus and potassium (NPK) in a 4-3-3 ratio, to promote vigorous growth, increased root development and improved disease and stress tolerance.



AGGRAND Fertilizer Organic Series features a balanced formulation with menhaden fish emulsion and kelp as the basis, and rock phosphate and sulfate of potash to further boost nutrient levels. Rock phosphate provides a natural source of phosphorus, calcium, manganese and iron; sulfate of potash increases potassium and sulfur levels.

AGGRAND fertilizer increases bacterial activity in soil, leading to stronger, healthier plants. Aerobic microorganisms such as bacteria, fungi and protozoa feed on carbon sources that causes a process known as mineralization. Mineralization produces plant-available nitrogen and phosphorus that helps plants grow and develop.

AGGRAND Natural Kelp and Sulfate of Potash 0-0-8

Listed by the Washington State Department of Agriculture (WSDA) for use in organic crop production, AGGRAND Natural Kelp and Sulfate of Potash is an important part of any soil fertility/plant nutrition program. It contains readily available Potash, a grade of 0-0-8 (N-P-K). Potassium (K) is considered the “universal helper” and is a major contributor to plant health because it regulates so many important processes in the plant. AGGRAND Natural Kelp and Sulfate of Potash also contains 2 percent sulfur (S). Sulfur, called the “fourth major nutrient,” has many important functions in plant growth and must be present in sufficient amounts in the soil and plant tissue to realize the benefits of nitrogen and potassium.

Sufficient sulfur promotes quality and yields of vegetables, tree fruits, small grains, legumes and forages. High protein and oil levels in seed and high protein and vitamin A production in forages and legumes are benefits of increasing sulfur fertility.

AGGRAND Natural Kelp and Sulfate of Potash utilizes kelp concentrate from the icy waters of the North Atlantic Ocean. Kelp from this source contains high levels of plant growth hormones, amino acids, micronutrients and potassium. When used as fertilizer, kelp makes plants more robust and healthy by enhancing their heat, drought and cold tolerance. In addition, kelp increases the plant growth rate and fruit production, size, and quality.

AGGRAND Natural Kelp and Sulfate of Potash contains minimally processed sulfate of potash from Great Salt Lake in Utah. Unlike other sources of potassium this source does not contain chloride (Cl) which can be damaging to soil life and plant roots. Potassium must be present in large quantities in plants because it is a component of the fluids which flood the plant tissue. Potassium-deficient plants are susceptible to insect attack, have weak stalks, and underdeveloped root systems. Sufficient potassium produces high quality vegetables and tree fruits. Dark green leaves, high nutritional quality, firm stalks, prolific root growth, greater plant vigor, improved nutrient uptake, higher yields, fewer blemishes increased disease and insect resistance, and increased fruit shelf-life are potential benefits of crops grown with AGGRAND Natural Kelp and Sulfate of Potash.

In addition to the many benefits provided by the kelp and sulfate of potash additional naturally occurring ingredients added to this fertilizer release nutrients from the soil, act as chelating agents, aid in foliar and root uptake and stimulate soil biological activity.



All AGGRAND Products provide unique features and outstanding benefits. AGGRAND products provide the highest performance, economy and environmental sensitivity on the market.

NATURAL SERIES

AGGRAND Natural Fertilizer 4-3-3

- Multi-purpose – produces excellent results on flowers, fruits, vegetables, lawns, trees and crops
- Effective as a foliar feed or soil application
- Promotes plant vigor which contributes to disease and stress resistance
- Convenient liquid concentrate
- USDA BioPreferred Product

AGGRAND Natural Liquid Lime

- Uses very fine calcitic limestone in suspension
- Effective as a foliar or soil root application
- Use on lawns, pastures, and hay fields to supply calcium on acidic soils
- Combine with AGGRAND Natural Fertilizer 4-3-3 to supply additional calcium
- Convenient liquid concentrate, no dusty mess

AGGRAND Natural Liquid Bonemeal 0-12-0

- Provides a readily available source of phosphorus and calcium
- Releases slowly over the growing season
- Perfect for all flowering bulbs and transplants
- Ideal for root and fruit crops
- Convenient liquid concentrate

ORGANIC SERIES

AGGRAND Fertilizer Organic Series 4-3-3

- Multi-purpose – produces excellent results on flowers, fruits, vegetables, lawns, trees and crops
- Effective as a foliar feed or soil application
- Promotes plant vigor that contributes to disease and stress resistance
- Convenient liquid concentrate
- OMRI Listed product

AGGRAND Natural Liquid Kelp and Sulfate of Potash 0-0-8

- Provides increased heat, cold and drought tolerance
- Decreases susceptibility to insect attack and infection by disease-causing organisms
- Aids in early plant growth and development
- Promotes early ripening, improves quality and extends shelf-life of fruits and vegetables
- Aids in seed formation
- Increases oil content of seed crops
- Effective as a foliar feed or soil application
- Convenient liquid concentrate
- WSDA Listed for use in organic crop production

