

Winterfalls Ranch

Winterfalls Llama Ranch is the manufacturer of Peruvian Gold Organic fertilizers and soil amendments. Located at approximately 3000 ft elevation in the Sierra Nevada Mountains, the llamas roam a 14-acre ranch, which consists of a variety of terrain, with many pines, oak, and madrone trees that provide exercise, shade, and shelter. These llamas are the producers of Peruvian Gold Organic Llama Manure and horticultural products that are derived from composted llama manure.

At Winterfalls Ranch, we compost the llama manure to produce stable all-natural organic fertilizers and soil amendments. Llama manure is an excellent source for amendments, fertilizers/nutrients, and growing media for vegetable gardens, potted plants, vineyards, etc. There is no odor from the dried manure beans, and soaked in water to make a tea, the manure makes one of the best compost teas around.

The ranch is maintained for the comfort and safety of the animals. The llamas have plenty of room in each pasture for the herd to roam, run or just get away from the others (and us when it's time to put on a halter). Even the chickens are free-range and roam the 14 acres among the llamas. The chickens are on the ranch to keep the insect pest population under control. They are not raised for meat (we do, however, eat and share the eggs).

From the chickens, picking through compost for bugs to llamas producing our raw product, every resident on Winterfalls Ranch is important to the function and sustainability of the company as the next. We carry that philosophy into our Peruvian Gold products. Every company, person, and animal involved with Peruvian Gold, from our customers to our testers, is equally important to the success of Winterfalls.

Head Start

Peruvian Gold's Head Start is a first-use liquid fertilizer for all plant seeds, seedlings, and transplants. Derived from Winterfalls' composted llama manure, hand-harvested Norwegian kelp extract (*Ascophyllum nodosum*), and artesian well water, Head Start Improves seed germination and increases root development. Head Start provides the nutrients needed to promote vigorous growth and nutrient healthier growing media for your seedlings, transplants, and young plants.

Head Start produces a healthier, more productive plant even in times of stress, including drought, salinity, and temperature. Head Start improves your plants' ability to resist and better recover from stresses. This enhanced stress resistance and recovery has been demonstrated in a wide range of gardens and plants. When a plant is treated with Head Start before stress occurs, the plant is better able to tolerate that physiological or environmental challenge.

Trees or vines treated following harvest show enhanced recovery from the stress of harvest. The plants are better prepared for dormancy and build reserves a strong next season. Plants treated with Head Start are better able to make the most efficient use of water and nutrients, giving you optimum output.

Plant hormones promote and influence the growth, development, and differentiation of cells and tissues. Being able to understand and promote specific plant hormones at the right times can mean a healthier, more productive garden. Head Start can elicit natural cytokinin and auxin production in plants resulting in better growth with more buds, healthier, greener leaves, and increased tolerance to environmental stresses.

Head Start provides better root development for your seeds, seedlings, clones, and transplants. Head Start provides the nutrients needed for vigorous root and plant growth. Plants are more productive and resistant to environmental stresses such as heat, cold, drought, harvesting, and pests. Head Start improves cytokinin-like activity vital to plant health and garden yields. It stimulates cell growth and division, shoot initiation, bud formation, leaf expansion, and chlorophyll synthesis.

Head Start added to your grow program improves cytokinin-like activity vital to plant health and garden yields, including stimulating cell growth and division, shoot initiation and bud formation, leaf expansion, and chlorophyll synthesis. The results are higher yields of fruits, flowers, and vegetables from your plants. It provides the nutrients needed to promote vigorous growth and a nutrient-healthy growing media

FROM THE BOTTOM UP

Develop to give your plants better root development and environmental stress resistance

- Total-Nitrogen (N) 0.07%
- Phosphorus (P205) 0.1034%
- Potash (K2O) 0.4650%

Designed to promote vigorous root development and plant growth. Helps develop a nutrient-healthier growing media. For seedlings, transplants, seeds, and young plants. Produces healthy, productive plants even during times of stress. Increases root and plant development. Helps plant to manage nutrient uptake more efficiently

KEY BENEFITS

- Provides the nutrients needed to promote vigorous root growth
- Builds nutrient healthier media for vigorous root, stem, and leaf growth
- Increases nutrient uptake from the soil or growing medium into the plant
- 48 to 72 hours root growth vs. 4-6 days on clones
- 95-100% nub and root growth on plant cuttings in hydroponic systems
- Larger root growth on clones, seedlings, cuttings, and transplants

Bloom Rush

Peruvian Gold's Bloom Rush is a liquid fertilizer developed to provide additional phosphorus during the flowering / budding stage. Provides the nutrients needed to promote vigorous blooming / fruiting. Derived from Winterfalls' composted llama manure, fossilized seabird guano, and artesian well water Bloom Rush naturally provides readily available nitrogen, phosphorus, and potash needed to support the plants growth through bloom.

Bloom Rush is important for the energy systems. It stimulates early growth, root formation, promotes seed formation, and is important in photosynthesis. Phosphorus is involved in the formation of all oils, sugars, starches, etc. It also encourages blooming and root growth. A plant deficient in phosphorus grows slow, has stunting, and purplish color on foliage.

Plants treated with Bloom Rush grow more vigorously and mature earlier than plants not treated with Bloom Rush. Bloom Rush supports the plant energy transfer, nutrient transport and photosynthesis. Due to the accelerated flowering growing systems using CO2 may require addition nitrogen to support accelerated growth during bloom.

Plants and trees treated with Bloom Rush begin producing flowers 48 – 72 hours after application. Combining the fossilized seabird guano with our Liquid Copal produces a great phosphorus fertilizer. When amending soils, it is not necessary to dig down to the roots of the plant or tree, Soil drenching is adequate. Bloom Rush will not clog hydroponic systems, and requires agitation while distributing.

Phosphorus is one of the 17 nutrients necessary for optimum plant growth, seed production, and photosynthesis. Phosphorus enters the plant through root hairs, root tips, and the outermost layers of root cells. Plants that have a deficiency of phosphorus experience, Slow growth, stunting, and purplish color on foliage or dark blue/green color, (due to inadequate carbohydrate utilization); dying leaf tips; marginal *interveinal chlorosis; delayed maturity, poor fruit and/or seed development. It is most common in areas of high rainfall, especially in acidic, clay, and hardpan soils.

Bloom Rush provides your plants with readily available phosphorus to assist in plant energy reactions, early growth development, photosynthesis, and the formation of all oils, sugars, and starches. Derived from Winterfalls' composted llama manure, fossilized seabird guano, and artesian well water Bloom Rush naturally provides readily available nitrogen, additional phosphorus, and potash needed to support the plant's growth through bloom. Used as directed Bloom Rush is safe for all your growing media, from the vegetable garden outside to the greenhouse hydroponic system.

FOR THE LADIES YOU LOVE

Develop to provide additional phosphorus during the flowering / budding stage

- Total-Nitrogen (N) 0.07%
- Phosphorus (P205) 0.0739%

- Potash (K₂O) 0.2109%

Phosphorus is an important plant macronutrient, about 0.2% of a plant's dry weight. It is a component of key molecules such as nucleic acids, phospholipids, and ATP, and consequently, plants cannot grow without a reliable supply of this nutrient. Phosphorus is also involved in controlling key enzyme reactions and in the regulation of metabolic pathways (Theodorou and Plaxton, 1993).

KEY BENEFITS

- Provides the nutrients needed to promote vigorous blooming/fruiting
- Micronized fossilized seabird guano is safe for hydroponic and continuous liquid feed systems
- Plants in the vegetative stage bloom or bud within 48 to 72 hours after the initial application of Bloom Rush
- Increased fruit and flower yields with more essential oils and aroma
- Rapid distribution of phosphorus to the plants
- Annuals lasted 40% longer than flowers produced without Bloom Rush

Liquid Copal

Peruvian Gold's Liquid Copal is an all-purpose liquid fertilizer derived from llama manure for all plants and growing media from the lawn and garden to indoor house plants and hydroponic systems. A liquid fertilizer developed for the gardeners and growers that want to use a single formula fertilizer from seed to harvest and/or weekly plant nutritional maintenance. Liquid Copal provides the nutrients needed to promote vigorous growth and nutrient healthier growing media for all your plants from the lawn and garden to indoor house plants.

Liquid Copal is an excellent source of macronutrients, nitrogen (N), phosphorus (P), and potassium (K). Providing the nutrients needed to promote vigorous growth and nutrient healthy growing media for all your plants from the lawn and garden to indoor house plants. Derived from composted llama manure the naturally provides readily available nitrogen, phosphate, and potash.

Nitrogen is Important in photosynthesis, metabolism, protoplasm reactions. It is important for many growth and development processes. Nitrogen is a necessary part of all proteins, enzymes, and metabolic processes involved in the synthesis and transfer of energy. A nitrogen deficiency will cause a plant to grow slower, cause stunting, (dwarfing and loss of vigor), and turn a yellow-green color that is more pronounced in older tissue, (bottom of plant).

Phosphorus is important for the energy systems. It stimulates early growth, root formation, promotes seed formation, and is important in photosynthesis. Phosphorus is involved in the formation of all oils, sugars, starches, etc. It also encourages blooming and root growth. A plant deficient in phosphorus grows slow, has stunting, and purplish color on foliage.

Potassium affects membrane permeability and relationships; Stomata opening/closing internal water relations, cell division, starch, and protein synthesis. It increases quality and size of fruits and vegetables. Potassium also increases a plants' disease resistance. A plant deficient in potassium shows signs of slow growth, leaf tip and marginal burn, necrosis, (starts on more mature leaves), weak stalks, small fruits, and shriveled seeds.

Liquid Copal is our general use formula from our line of liquid fertilizers derived from composted llama manure. From your lawn to your hydroponic system Liquid Copal is an excellent source of readily available macronutrients, which provide the nutrients needed to promote vigorous plant growth and a nutrient healthy growing media.

AN ANCIENT FERTILIZER

Developed as an all-purpose fertilizer to give your plants the nutrients needed to promote vigorous growth and a nutrient healthier growing media

- Total-Nitrogen (N) 0.07%
- Phosphorus (P205) 0.0067%
- Potash (K2O) 0.2258%

Designed to promote vigorous plant development and plant growth. Helps develop a nutrient healthier growing media. For all plants and growing media from rose garden to hydroponic systems. Produces healthy, productive plants even during times of stress. Increases nutrient healthy growing media.

KEY BENEFITS

- Naturally provides nitrogen, phosphate, and potash
- Builds nutrient healthier media for vigorous root, stem and leaf growth
- Increases nutrient uptake from the soil or growing medium into the plant
- Can be used during the complete growing cycle or season
- Will not burn your plants when used as directed
- Double to triple the fruit, flower, vegetable and foliage yields

Micro Builder

Peruvian Gold's Micro Builder was developed to give your plants the macro, secondary and micronutrients they need during the vegetative stage. Our organic blend of Winterfalls' composted llama manure, earthworm castings, and Norwegian kelp produce a formula that provides complete nutrients needed to promote vigorous growth and nutrient healthier growing media for all your fruit, flower, and vegetable plants.

Micronutrient deficiency in plants adversely affects plant growth and development. Carbohydrates are not metabolized correctly; root metabolism and protein utilization are impacted; photosynthesis and respiration are inhibited; nitrogen utilization is inhibited; and

chlorophyll synthesis is impacted, just to name a few of the problems a micronutrient deficiency can cause in plants. Micro Builder can correct and/or prevent micronutrient deficiencies.

Plants and vegetables nurtured by Peruvian Gold's liquid organic micronutrients, "Micro Builder" grow nutrient healthier and are more resistant to pest and diseases. The fruits and vegetables have more flavor, nutrition, and tests have shown a longer shelf life. Flowers have more oils, aroma, and are more resistant to sunburn. A macro, secondary, and micronutrient fertilizer for the foliage stage in one product for your hydroponic, foliage application, soil and other planting mediums.

Combining the same legendary llama manure extract, Liquid Copal, with worm castings and Norwegian Kelp we believe that we have produced one of the best organic micronutrient fertilizers for hydroponic systems, foliar applications, soil, and plants. Micro Builder provides nutrients that are immediately available and enough NPK, (0.03 – 0.0135 – 0.2639), to provide your plants complete support thru the growing cycle or vegetative stage.

Independent tests show double to triple the foliage and double to triple the fruit, flower, and vegetable yields with plants growing in a mixture of 25%/75% Peruvian Gold Llama Manure/potting soil and watered weekly with Micro Builder. Gardens that already had great growing media/soil fertilized weekly with Micro Builder outgrew and out produced ones that were not fertilized with Micro Builder.

With a great lineup of readily available macro, secondary, and micronutrients our liquid micronutrient fertilizer Micro Builder can be used to correct or prevent micronutrient deficiencies. It promotes vigorous growth and nutrient healthier growing media for all plants and growing media from hydroponic to indoor house plants. Used as a foliar spray positive results are seen within 24 hrs.

NUTRIENT LINE UP

Develop to give your plants the macro, secondary, and micronutrients they need during the vegetative stage

- Total-Nitrogen (N) 0.03%
- Phosphorus (P) 0.0031%
- Phosphorus (P₂O₅) 0.0135%
- Potassium (K) 0.129%
- Potash (K₂O) 0.2639%
- Magnesium (Mg) 0.049%
- Boron (B) 0.00022%
- Iron (Fe) 0.00036%
- Manganese (Mn) 0.00012%
- Sulfur (S) 0.0139%
- Zinc (Zn) 0.000027%
- Molybdenum (Mo) 0.000003%

- Calcium (Ca) 0.01348%
- Sodium (Na) 0.0090%
- Copper (Cu) 0.00001%
- Chlorine (Cl) 0.02726%

KEY BENEFITS

- Corrects and prevents micronutrient deficiencies
- Plants are greener within 24 – 48 hours
- Provides the nutrients needed to promote vigorous growth
- Readily available macro, secondary and micronutrient for your plants
- Promote nutrient healthier growing media for stronger, vigorous plants
- Excellent for adding much needed micronutrients to citrus trees in the spring