

# LALRISE START<sup>G</sup>

For Agricultural Use  
For Turf and Ornamental Use  
Improves plant nutrient availability and growth

**READ ALL DIRECTIONS BEFORE USING THIS PRODUCT**

## MINIMUM GUARANTEED ANALYSIS

### ACTIVE INGREDIENT:

#### Total Microorganisms

*Bacillus velezensis strain NCIMB 30322*..... 1 x 10<sup>8</sup> CFU/g

## HOW IT WORKS

LALRISE<sup>®</sup> START G is a granule containing a plant growth-promoting microorganism (PGPM) that increases plant establishment through improved root vigour and nutrient availability. This bacterial PGPM solubilizes phosphorous from organic and inorganic reservoirs, which promotes growth in young plants and increases germination homogeneity, plant height, root mass growth, winter hardiness, flowering, and/or yield in mature plants. The granule provides pore spaces that physically support the cells of the bacterium, compounding its nutrient-solubilizing and plant-growth benefits, while simultaneously improving soil water-holding capacity.

## APPLICATION DIRECTIONS

**Indoor and Outdoor Trees, Shrub Seedlings, and Nursery Crops, including but not limited to:** Deciduous Trees (Maple, Oak, etc.), Coniferous Trees (Juniper, Pine, Spruce, etc.), Forest Trees, Fruit Trees, Ornamentals, Shrubs, Urban Trees, Vine Crops, and Woody Ornamentals

**Greenhouse and Outdoor Flowers, Bedding Plants, Green Roofs, Turf, Ornamentals, including but not limited to:** Achillea, African violet, Ageratum, Allium, Alyssum, Amaryllis, Anemone, Anthurium, Aster, Azalea, Begonia, Calceolaria, Campanula, Carnation, Centaurea, Cerastium, Chrysanthemum, Cineraria, Coleus, Cyclamen, Daffodil, Dahlia, Daisy, Daylily, Delphinium, Dianthus, Dieffenbachia, Freesia, Fuchsia, Gaillardia, Gazania, Geranium, Gerbera, Gladiolus, Gloxinia, Gypsophila, Hedera, Hyacinth, Impatiens, Iris, Kalanchoe, Lilac, Liatris, Lily, Lobelia, Marigolds, Matthiola, Monarda, Nigella, Ornamental Citrus, Pansy, Pelargonium, Petunia, Phlox, Poinsettia, Poppy, Primrose, Rhododendron, Rose, Rudbeckia, Salvia, Sedum, Senecio, Sinningia, Statice, Sweet Pea, Turf grasses, Tulip, Verbena, Vinca, Zinnia

### Agricultural crops:

- **Berries and Small Fruits, including but not limited to:** Blackberry, Blueberry, Cranberry, Currant, Elderberry, Grape (table and wine), Gooseberry, Huckleberry, Kiwi Fruit, Loganberry, Raspberry, Strawberry
- **Cereals, including but not limited to:** Barley, Buckwheat, Canary Seed, Corn (silage and grain), Durum Wheat, Millet, Oats, Quinoa, Rye, Sorghum, Spelt, Triticale, Wheat
- **Cucurbit Crops, including but not limited to:** Cucumber, Cantaloupe, Melon, Gourd, Pumpkin, Squash
- **Fruiting Vegetables, including but not limited to:** Eggplant, Pepper, Okra, Tomatillo, Tomato
- **Herbs, Spices, and Mints, including but not limited to:** Aniseed, Basil, Caraway, Chives, Dill, Fennel, Lavender, Marjoram, Mint, Oregano, Parsley, Rosemary, Sage, Savory, Thyme, Watercress
- **Leafy Vegetables, Cole Crops, and other Vegetables, including but not limited to:**  
LEAFY VEGETABLES: Arugula, Bok Choy, Celery, Endive, Fennel, Lettuce, Napa Cabbage, Parsley, Radicchio, Rhubarb, Spinach, Swiss Chard  
COLE CROPS: Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Kale, Kohlrabi, Mustard  
OTHER: Asparagus
- **Legumes (fresh and dry pulses), including but not limited to:** Alfalfa, Bean, Chickpea, Lentil, Lupin, Pea, Soybean
- **Oilseeds, including but not limited to:** Borage, Canola, Crambe, Evening Primrose, Flax, Gold of Pleasure, Linseed, Meadowfoam, Safflower, Sesame, Sunflower

- **Pome Fruit, including but not limited to:** Apple, Pear, Quince
- **Stone Fruit, including but not limited to:** Apricot, Cherry, Nectarine, Peach, Plum, Prune
- **Tree Nuts, including but not limited to:** Almond, Beech, Brazil Nut, Butternut, Cashew, Chestnut, Coconut, Filberts, Hickory, Macadamia, Pecan, Pistachio, Walnut
- **Tuber, Root and Bulb Crops, including but not limited to:** Artichoke, Beet (garden and sugar), Carrot, Cassava, Celeriac, Chervil, Chive, Chicory, Dasheen, Garlic, Ginger, Ginseng, Horseradish, Jerusalem Artichoke, Leek, Onion, Parsnip, Potato, Radish, Rutabaga, Salsify, Shallot, Sweet Potato, Turmeric, Turnip, Yam
- **Misc. crops, including but not limited to:** Avocado, Banana, Cannabis, Coffee, Globe Artichoke, Hops, Hemp, Mushroom, Papaya, Plantain, Tea, Tobacco

## APPLICATION METHODS:

For best results, apply product under moist conditions (after rain or irrigation) to soil or growth media, in the morning or late afternoon. Do not apply under high-temperature conditions. Optimal application temperature is between 10 °C and 30 °C (50 °F and 86 °F). The granule can be applied to sterilized soil, but must only be applied after sterilization or fumigation. Do not apply to immature compost or compost that is still self-heating.

## APPLICATION TIMING

**For Agricultural uses:** Evenly apply LALRISE START G to growing media or soil surfaces manually or using devices, such as drop or broadcast spreaders, according to the surface application rates described. Apply using granular applicator to deposit granules in furrow, just behind the furrow opener.

## AGRICULTURAL APPLICATION RATES

Row Spacing		Application Rate			Area Treated per 12.2 kg (27 lb) Bag	
cm	in	kg/ha	lb/ac	kg/ac	ha	ac
15.2	6	5.0	4.4	2.0	2.5	6.1
17.8	7	4.3	3.8	1.7	2.9	7.1
20.3	8	3.7	3.3	1.5	3.3	8.2
22.9	9	3.3	3	1.4	3.6	9.0
25.4	10	3.0	2.7	1.2	4.0	10.0
30.5	12	2.5	2.2	1.0	5.0	12.3
38.1	15	2.0	1.8	0.8	6.1	15.0
55.9	22	1.4	1.2	0.5	9.1	22.5
76.2	30	1.0	0.9	0.4	12.1	30.0

## Greenhouse Planting Mix and Soil Amendment:

Thoroughly incorporate into growing media during mix preparation or pot filling, or into soils at planting bed preparation according to growing media mix rates in the table below.

**For Trees, Shrubs and Bushes, and Woody Ornamentals in outdoor soils or containers:** Applications should be made at time of planting in moist soils. As a soil amendment at planting, mix product well with soil substrate to assure product is in contact with fibrous roots. Top-dressing of trees, shrubs, and bushes in the field, landscape or containers may be applied 1–3 times, every 1–3 years after initial application at planting, depending upon crop requirements. Use ¼ to ½ initial application rate for top-dressing applications. Apply mulch and water following planting and/or top-dressing for best results.

**For Turf, Green Roofs, Shade Houses, and Planting Beds in outdoor soils:** Apply at planting or in the spring during root flush whenever possible, and ideally after watering. Reapply every 2–4 weeks, as needed, throughout the growing season. For planting beds and shade houses, product should be top-dressed by hand or with a fertilizer or seed spreader, followed by raking or tilling to incorporate into upper portions of the soil. Turf should ideally be aerated before application and irrigated after application.

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## GREENHOUSE, NURSERY, LANDSCAPE AND TURF APPLICATION RATES

Container size		At time of planting			
		Weight		Volume	
Metric	Imperial	Metric	Imperial	Metric	Imperial
< 4 L pot	< 1 gallon pot	20–30 g	0.7–1.0 oz	50–75 cc	3.5–5 tbsp
4–20 L pot	1–5 gallon pot	40–200 g	1.5–7 oz	100–500 cc	0.5–2.25 cups
25–55 L pot	7–15 gallon pot	250–500 g	9–17.5 oz	620–1,240 cc	2.5–5.25 ¼ cups
75–115 L pot	20–30 gallon pot	800 g–1 kg	28–35 oz	1,980–2,470 cc	1.8–2.2 qt dry
Landscape, orchard, nursery trees (40–50 mm/1.6–2" caliper)		500 g–1 kg	18–35 oz	1,235–2,470 cc	1.1–2.2 qt dry
Landscape, orchard, nursery trees (50–60 mm/2–2.4" caliper)		1–1.5 kg	35–53 oz	2,470–3,705 cc	2.2–3.3 qt dry
Landscape, orchard, nursery trees (>60 mm/2.4" caliper)		1.5–2 kg	53–70.5 oz	3,705–4,940 cc	3.3–4.5 qt dry
Turf		10–100 kg/ha	10–100 lb/acre	25–225 L/ha	10.4–96 qt dry/acre
Growing media and soil incorporation (potting mix, root zone mix, divot mix, planting soil, etc.)		2.4–4.8 kg/m <sup>3</sup>	4–8 lb/yd <sup>3</sup>	6–12 L/m <sup>3</sup>	4.8–9.6 qt dry/yd <sup>3</sup>
Green roofs		2–3.5 kg/m <sup>3</sup>	2–3.5 oz/ft <sup>3</sup>	5–9 L/m <sup>3</sup>	0.5–1 cup/ft <sup>3</sup>

### PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. The active ingredient in LALRISE<sup>®</sup> START G is naturally occurring *Bacillus velezensis* strain NCIMB 30322 cells. Persons allergic to bacteria and immune-deficient individuals should avoid using this product. Avoid exposure through inhalation, or to open wounds and eyes. Standard protective clothing and equipment including gloves, safety goggles and a respirator are recommended during handling and storage. Use this product in well-ventilated areas.

In case of contact with skin or eyes, immediately flush exposed areas with a continuous gentle stream of clean water. In case of inhalation, remove person to fresh air. In case of ingestion, do not induce vomiting but rinse mouth with water. Seek medical attention if discomfort or irritation develops. Medical treatment should be based on the judgment of the physician in response to reaction of the patient.

### STORAGE AND HANDLING RECOMMENDATIONS

Store in dry place at room temperature. Shelf life in unopened package is 2 years from production date, stored at room temperature and protected from humidity. Once opened, protect from moisture. Dispose of all waste (contents and container) in accordance with local, state, and federal regulations.

### LIMITED WARRANTY

Danstar Ferment AG/LALLEMAND PLANT CARE ("Danstar") warrants only that this product conforms to the product description on this label and is reasonably fit for the purposes set forth in the Directions for Use when used in accordance with them. However, ineffectiveness or other unintended consequences may result because of such factors as the use, storage or handling of the product contrary to the label instructions, all of which are beyond the control of Danstar. To the extent consistent with applicable law, Danstar shall not be liable for indirect or consequential damages resulting from the use, storage or handling of this product. DANSTAR MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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Net Contents may vary due to changes in moisture content during storage.

**Registration Number :** 2022756S *Fertilizers Act*

**Lot No.:** see printing on the bag

**Production Date:** see printing on the bag

#### Guaranteed by:

Danstar Ferment AG /  
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