UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

February 13, 2020

FB Sciences, Inc.
c/o Stephanie Evans
Consultant
Spring Regulatory Sciences
6620 Cypresswood Dr., Suite 250
Spring, TX 77379

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Acceptable Changes to Alternate Brand Name, Precautionary Statements, Agricultural Use Requirements, and Directions for Use
Product Name: Arcus
EPA Registration Number: 84846-5
Application Date: 12/04/2019
OPP Decision Number: 558123

Dear Ms. Evans:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

The alternate brand name FBS Defense ST has been added to the registration, and our records have been updated accordingly. This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or

misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Anna O'Neil by phone at (703) 347-8274 or via email at oneil.anna@epa.gov.

Sincerely,

Andrew Bryceland, Team Leader
Biochemical Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

Enclosure

[ ] [Denotes alternate text]
{ } {Denotes notes to reviewer}
{Front Panel}

ACCEPTED
02/13/2020
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 84846-5

Arcus™ Master Label

[Alternate Brand Name: FBS Defense ST]

Complex Polymeric Polyhydroxy Acids
Plant Growth Regulator

A liquid product for field or greenhouse use on vegetables, fruits, nuts, vine crops, field crops, ornamentals, and turf to stimulate plant growth, enhance yields

ACTIVE INGREDIENT:	
Complex Polymeric Polyhydroxy Acids……	0.90%
OTHER INGREDIENTS ..……....	99.10%
TOTAL……...100.00%	

Net Contents: One Gallon/ 3.78 liters (8.45 lbs/3.84kg)

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Reg. No. 84846-5 EPA Est. No. 84846-xx-xxx

[See [Back Panel] [Side Panel] [Other Panel] for additional Precautionary Statements]

{End Front Panel}

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes.
HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Product Safety Hotline 1-866-359-5667 day or night, for emergency medical treatment information.	

Precautionary Statements

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Do not get in eyes or on skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Wear appropriate personal protective equipment (PPE).

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Shoes and socks.
- Waterproof gloves.
- Protective eyewear.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATONS

Users should:

- Remove clothing immediately if pesticide gets inside.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes and socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated area until sprays have dried.

Read the entire label before using Arcus. Consult your State Agricultural Experimental Station or Extension Service Specialist for additional information on rates of use, application, and any additional requirements or restrictions.

APPLICATION INSTRUCTIONS

Arcus is a broad spectrum biopesticide to improve germination and seedling development, stimulate root and shoot growth, increase chlorophyll content, improve plant ability to withstand stress, increase yields when used alone or in mixtures with nutrients and other pesticide products on field crops, vegetables, fruits, nuts, vine crops, turf, and ornamentals.

For all crops, refer to the Foliar Application, Soil Application, and Seed Treatment Application Use Rates for Outdoor and Greenhouse Crops sections of this label for specific application use rate and timing information.

COMPATIBILITY:

Arcus is compatible with most commonly used agricultural pesticides. If compatibility is in question, use the compatibility jar test before mixing a whole tank. Dilute Arcus to its use rate, and then with stirring, add the other components in the appropriate amounts. If precipitation, gelation, or sedimentation occurs, do not use the combination of pesticides. Because of the wide variety of possible combinations that can be encountered, observe all precautions and limitations on the label of all products used in mixtures.

SPRINKLER IRRIGATON SYSTEM APPLICATION

Apply this product only through drip, microjet, lateral move, end tow, side (wheel) roll, hand move, solid set, and center pivot irrigation systems. Do not apply this product through any other type of irrigation system. Use standard tank agitation when mixing Arcus alone or with other pesticides. Fill the tank halfway with water, begin agitation, add Arcus and other tank mix pesticides or fertilizers, and fill with water.

Preparation of Injection Equipment: Remove pesticide, scale residues, and other foreign matter from the chemical tank and entire injection system. Flush with clean water.

Set the sprinkler system to deliver 0.1 to 0.3 inches of water per acre. Start the sprinkler system and uniformly inject the solution of Arcus into the irrigation water line. Inject the Arcus solution with a positive displacement pump into the main line before a right angle turn to ensure adequate mixing. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Crop injury or lack of effectiveness in the crop can result from non-uniform distribution of treated water. A person with knowledge of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut down and make necessary adjustments should the need arise. The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

When applying Arcus using microjet and drip irrigation systems, avoid further irrigation after the treatment has been completed for 24 to 48 hours.

When applying Arcus using solid set, hand move, and center pivot irrigation systems, avoid further irrigation of the treated area until the foliage is dry to prevent washing the product from the crop.

When applying Arcus using a continuously moving system, such as lateral move or side (wheel) roll system, inject this product-water mixture continuously, applying the labeled rate per acre for that crop.

When applying Arcus through stationary or non-continuous moving systems, inject the product-water mixture in the last 15-30 minutes of each set, allowing sufficient time for all the required pesticide to be applied by all the sprinkler heads and applying the labeled rate per acre for that crop.

Apply Arcus continuously for the duration of the water application.

General Information and Instructions for Irrigation Systems: Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

Public system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Irrigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), backflow preventer, or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. For drip (trickle) irrigation: The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

FOLIAR APPLICATION USE RATES FOR

OUTDOOR AND GREENHOUSE CROPS

For all crops, use rates range from 1.2 to 2.4 ounces per acre. Arcus may be applied directly to the foliage of actively growing plants at a minimum rate of 1.2 ounces per acre in a minimum spray volume of 5 gallons per acre. Arcus may be applied with all nutrient products and pesticides but provides best results when applied with nutrients. Foliar applications may begin when plants reach or surpass the 4- leaf stage of development. For best results, apply Arcus before leaf hardening. Repeat applications no sooner than every 7 days. Arcus is effective for use in programs where repeated applications throughout the growing season are necessary. If not applied on a routine schedule, apply Arcus alone or in combination with appropriate fertilizers and pesticides. Refer to the Foliar application directions hereafter for specific use rate and timing information.

Specific Use Restrictions and Precautions: Do not make foliar applications when conditions favor drift from target area or wind speed is greater than 10 mph. Spray equipment must be cleaned thoroughly before and after applications.

MIXING INSTRUCTIONS:

For foliar applications, be sure the sprayer is clean and not contaminated with other materials prior to use. When using an agitated spray tank, fill tank 1/2 to 3/4 full with clean water and start agitation. Be certain that the agitation system is working properly. With the agitator running, add the required amount of Arcus to the tank. If tank mixing with other materials, add them to the tank and continue agitation. Continue filling tank with the remainder of the water. Agitate until mixed thoroughly and avoid excessive foaming. Mix as needed; do not store diluted material overnight.

FOR CEREAL GRAINS, VEGETABLE CROPS, AND OTHER AGRONOMIC CROPS: apply a minimum rate of 1.2 ounces of Arcus in a minimum of 5 gallons finished spray per acre when applied as a foliar spray.

Specific Use Restrictions: Do not apply more than 2.4 ounces per acre per application. Do not apply more than 7.2 ounces per acre per season. Do not make post-harvest applications. PHI: 0 days.

Cereal Grains, including: Barley, Buckwheat, Corn (sweet and field), Millet, Oats, Popcorn, Rice, Rye, Sorghum, Triticale, Wheat, Wild rice Cucurbit and Fruiting Vegetables, including: Cucumber, Eggplant, Gherkin, Muskmelon, Okra, Pepper, Pumpkin, Squash, Tomato, Watermelon, Leafy Vegetables, including:

Arugula, Cardoon Celery, Chinese Celery, Chervil, Cilantro, Endive, Fennel, Lettuce, Orach, Parsley, Purslane, Radicchio, Rhubarb, Spinach, Swiss Chard

Brassica (Cole) Leafy Vegetables including:
Broccoli, Broccoli Raab, Brussel Sprouts, Cabbage, Chinese Cabbage (Boc Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Collards, Kale, Kohlrabi, Mustard Greens, Mustard Spinach

Legume Vegetables, including:
Beans, Broad bean, Chickpea, Lentil, Peas, Soybean

Root, Tuber, and Bulb Vegetables, including:
Beet (garden and sugar), Carrot, Cassava, Celeriac, Chayote, Chervil, Chicory, Garlic, Ginger, Ginseng, Horseradish, Leek, Onion, Parsley root, Potato, Radish, Rutabaga, Salsify, Shallot, Sweet potato, Turnip, Yam

Other Agronomic Crops, including:
Artichoke, Asparagus, Coffee, Cotton, Grass grown for seed, Hops, Hemp, Jojoba, Papaya, Pistachio, Sesame, Sunflower, Tea, Mint, Spearmint

FOR FRUIT, NUT, BERRY, AND VINE CROPS: apply a minimum rate of 1.2 ounces of Arcus in a minimum of 25 gallons finished spray per acre when applied as a foliar spray.

Specific Use Restrictions: Do not apply more than 2.4 ounces per acre per application. PHI: 0 days. Do not apply more than 7.2 ounces per acre per season.

Berries and Vine Crops, including:
Blackberry, Blueberry, Cranberry, Elderberry, Gooseberry, Grape, Huckleberry, Loganberry, Raspberry, Strawberry

Citrus, including:
Grapefruit, Lemon, Lime, Mandarin, Orange, Pummelo, Tangerine

Nut Crop, including:
Almond, Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory, Macadamia, Pecan, Pistachio, Walnut

Pome Fruit, including:
Apple, Crabapple, Loquat, Mayhaw, Pear, Quince

Stone Fruit, including:
Apricot, Cherry, Nectarine, Peach, Plum, Prune, Plumcot

FOR ORNAMENTAL CROPS (including broadleaf shrubs and trees, flowering plants and bulbs, and foliage plants): apply a minimum rate of 1.2 ounces of Arcus in a minimum of 25 gallons finished spray per acre when applied as a foliar spray.

Specific Use Restrictions: Do not apply more than 2.4 ounces per acre per application. Do not apply more than 7.2 ounces per acre per season.

IMPORTANT NOTE: Plant sensitivities to Arcus have been found to be acceptable for plants listed on this label; however, it is impossible to know sensitivities under all conditions and phytotoxicity may occur. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for sensitivity to Arcus. Neither the manufacturer nor seller endorses use upon species not listed on the label, nor has it been determined that Arcus can be safely used on ornamental or nursery plants not listed on this label. The user must determine if Arcus can be used safely prior to commercial use. In a small area, apply the listed rates to the plants in question (i.e., foliage, fruit, etc.) and observe for 7-10 days for symptoms of phytotoxicity prior to commercial use. Do not apply foliar sprays to open blooms of Geranium, Marigold, Pansy, and Petunia.

Broadleaf Shrubs and Trees:
Andromeda, Ash, Aspen, Azalea, Buckeye, Camellia, Cherry Laurel, Crabapple, Dogwood , Eucalyptus, Euonymus, Firethorn, Flowering almond, Flowering cherry, Flowering peach, Flowering plum, Flowering quince, Hawthorn, Holly, Laurel, Lilac, Magnolia, Maple, Oak, Poplar, Privet, Red-tip, Rhododendron .Sequoia, Spirea, Sycamore, Viburnum, Walnut

Flowering Plants and Bulbs:
African violet, Begonia, Carnation, Chrysanthemum, Crocus, Daffodil, Daisy, Geranium*, Gladiolus, Hollyhock, Hydrangea, Iris, Lily, Marigold*, Narcissus, Pansy*, Petunia*, Phlox, Rose, Statice, Zinnia
*NOTE: Do not apply foliar sprays of Arcus to open blooms of these species.

Foliage plants:
Aglaonema, Artenesia, Boston fern, Dracaena, Dumbcane, Fatsia, Ficus, Leatherleaf fern, Lipstick plant, Ming aralias, Oyster plant, Pachysandra, Palm, Parlor palm, Peperomia, Philodendron, Prayer plant, Ruffle fern, Syngonium, Zebra plant

SOIL APPLICATION USE RATES FOR

OUTDOOR AND GREENHOUSE CROPS

For plant growth regulator (PGR) purposes on all crops, use rates range from 1.0 to 2.4 ounces per acre. Refer to the Soil application directions hereafter for use rate and timing information. Applications can begin prior to planting for soil applications and continue up to harvest. Repeat applications no sooner than every 7 days. Arcus is effective for use in programs where repeated applications throughout the growing season are necessary. If not applied on a routine schedule, apply Arcus alone or in combination with appropriate fertilizers and pesticides. Arcus works best when soil applications (including irrigation) are made with

fertilizer or nutrient products and can be applied with liquid or granular formulations. Rates will depend upon the formulation and placement of the product. Rates are as follows:

1. Impregnated on granules - apply Arcus at a rate of 1.6 to 2.4 ounces per acre.
2. Formulated with liquid fertilizer - apply Arcus at 1.0 to 1.6 ounces per acre when applied in furrow at planting. For banded, broadcast, side dress, or top dress applications, apply at 1.6 to 2.4 ounces per acre.
3. For all applications through an irrigation system, apply at 1.6 ounces per acre.

MIXING INSTRUCTIONS:

For granular applications, Arcus is applied to provide uniform coverage of all granules. In cases where the amount of fertilizer per acre is less than 100 pounds, Arcus should be applied to a small amount of fertilizer to ensure that it will not cause the fertilizer to cake.

FOR CEREAL GRAINS, VEGETABLE CROPS, AND OTHER AGRONOMIC CROPS: a rate of 1.0 to 2.4 ounces per acre is recommended, depending upon the application method, product placement, and timing.

Specific Use Restrictions: Do not apply more than 2.4 ounces per acre per application. Do not apply more than 7.2 ounces per acre per season. Do not make post-harvest applications. PHI: 0 days.

Cereal Grains, including:
Barley, Buckwheat, Corn (sweet and field), Millet, Oats, Popcorn, Rice, Rye, Sorghum, Triticale, Wheat, Wild rice

Cucurbit and Fruiting Vegetables, including:
Cucumber, Eggplant, Gherkin, Muskmelon, Okra, Pepper, Pumpkin, Squash, Tomato, Watermelon,

Leafy Vegetables, including:
Arugula, Cardoon Celery, Chinese Celery, Chervil, Cilantro, Endive, Fennel, Lettuce, Orach, Parsley, Purslane, Radicchio, Rhubarb, Spinach, Swiss Chard

Brassica (Cole) Leafy Vegetables including:
Broccoli, Broccoli Raab, Brussel Sprouts, Cabbage, Chinese Cabbage (Boc Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Collards, Kale, Kohlrabi, Mustard Greens, Mustard Spinach

Legume Vegetables, including:
Beans, Broad bean, Chickpea, Lentil, Peas, Soybean

Root, Tuber, and Bulb Vegetables, including:

Beet (garden and sugar), Carrot, Cassava, Celeriac, Chayote, Chervil, Chicory, Garlic, Ginger, Ginseng, Horseradish, Leek, Onion, Parsley root, Potato, Radish, Rutabaga, Salsify, Shallot, Sweet potato, Turnip, Yam

Other Agronomic Crops, including:
Artichoke, Asparagus, Coffee, Cotton, Grass grown for seed, Hops, Hemp, Jojoba, Papaya, Pistachio, Sesame, Sunflower, Tea, Mint, Spearmint

FOR FRUIT, NUT, BERRY, AND VINE CROPS: a rate of 1.0 to 2.4 ounces per acre is recommended, depending upon the application method, product placement and timing.

Specific Use Restrictions: Do not apply more than 2.4 ounces per acre per application. PHI: 0 days. Do not apply more than 7.2 ounces per acre per season.

Berries and Vine Crops, including:
Blackberry, Blueberry, Cranberry, Elderberry, Gooseberry, Grape, Huckleberry, Loganberry, Raspberry, Strawberry

Citrus, including:
Grapefruit, Lemon, Lime, Mandarin, Orange, Pummelo, Tangerine

Nut Crop, including:
Almond, Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory, Macadamia, Pecan, Pistachio, Walnut

Pome Fruit, including:
Apple, Crabapple, Loquat, Mayhaw, Pear, Quince

Stone Fruit, including:
Apricot, Cherry, Nectarine, Peach, Plum, Prune, Plumcot

FOR ORNAMENTAL CROPS (including broadleaf shrubs and trees, flowering plants and bulbs, and foliage plants): a rate of 1.0 to 2.4 ounces per acre is recommended, depending upon the application method, product placement, and timing.

Specific Use Restrictions: Do not apply more than 2.4 ounces per acre per application. Do not apply more than 4.8 ounces per acre per season.

IMPORTANT NOTE: Plant sensitivities to Arcus have been found to be acceptable for plants listed on this label; however, it is impossible to know sensitivities under all conditions and phytotoxicity may occur. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for sensitivity to Arcus. Neither the manufacturer nor seller endorses use upon species not listed on the label, nor has it been determined that Arcus can be safely used on ornamental or nursery plants not listed on this label. The user must determine if Arcus can be used safely prior to commercial use. In a small

area, apply the listed rates to the plants in question (i.e., foliage, fruit, etc.) and observe for 7-10 days for symptoms of phytotoxicity prior to commercial use. Do not apply foliar sprays to open blooms of Geranium, Marigold, Pansy, and Petunia.

Broadleaf Shrubs and Trees:
Andromeda, Ash, Aspen, Azalea, Buckeye, Camellia, Cherry Laurel, Crabapple, Dogwood , Eucalyptus, Euonymus, Firethorn, Flowering almond, Flowering cherry, Flowering peach, Flowering plum, Flowering quince, Hawthorn, Holly, Laurel, Lilac, Magnolia, Maple, Oak, Poplar, Privet, Red-tip, Rhododendron .Sequoia, Spirea, Sycamore, Viburnum, Walnut

Flowering Plants and Bulbs:
African violet, Begonia, Carnation, Chrysanthemum, Crocus, Daffodil, Daisy, Geranium*, Gladiolus, Hollyhock, Hydrangea, Iris, Lily, Marigold*, Narcissus, Pansy*, Petunia*, Phlox, Rose, Statice, Zinnia
*NOTE: Do not apply foliar sprays of Arcus to open blooms of these species.

Foliage plants:
Aglaonema, Artenesia, Boston fern, Dracaena, Dumbcane, Fatsia, Ficus, Leatherleaf fern, Lipstick plant, Ming aralias, Oyster plant, Pachysandra, Palm, Parlor palm, Peperomia, Philodendron, Prayer plant, Ruffle fern, Syngonium, Zebra plant

SEED TREATMENT APPLICATION INSTRUCTIONS

Arcus is a water-based liquid formulation designed for easy use as a seed treatment and should not form sediment during normal storage. It may be applied using commercial seed treatment equipment or through the use of hopper-box, planter-box, slurry-box, or other seed treatment equipment at or immediately before planting. Equipment should be calibrated to provide a good mixing of seed and treatment products and provide even distribution and coverage of the seed. Uniform application to seed will give optimum performance. The seed should be sound, well-conditioned, and free from dust and chaff.

Arcus can be pre-diluted with clean water, and other seed amendments can also be mixed with it as required, and the total volume of slurry adjusted according to the application equipment and seed type. Apply gentle agitation during mixing and use, and do not store the diluted product overnight.

SEED TREATMENT APPLICATON RATES

For plant growth regulator (PGR) purposes, apply Arcus uniformly to the seed at rates of 0.2 to 0.8 fl. oz/100 lb. of seed (13-52 ml/100 kg seed). Rate of use will depend on seed type, seed size, and use of mixtures.

USE RESTRICTIONS AND PRECAUTIONS

- Store treated seed in cool dry conditions
- Any treated seed that is stored until the following season must be re-tested for germination and vigor prior to sowing

Compatibility: Arcus is compatible with most commonly used seed amendment products, and it is advisable not to tank-mix Arcus with any other product unless adequate physical compatibility and phytotoxicity (germination) tests have been conducted and proven to be satisfactory. Consult your supplier or advisor for further information.

SEED TAG LABELING

The Federal Seed Act requires that bags containing seed treated with ARCUS shall be labeled with the following information:

- This seed has been treated with ARCUS, which contains 0.9% Complex Polymeric Polyhydroxy Acids
- Do not use for food, feed, or oil purposes

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal:

Storage: Keep pesticide in original container. Keep container tightly closed when not in use. Store product above 40 °F. Do not store in aluminum, fiberglass, copper, brass, zinc, or galvanized containers. Protect from excessive heat. Store in a cool dry place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Equipment cleaning: clean lines and reservoirs of seed treatment equipment by flushing thoroughly with water. Rinse water may be used for dilution of ARCUS Plant Growth Regulator Seed Treatment as above.

Container Disposal: Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. For containers less than five gallons, triple rinse as follows: Empty remaining contents into application equipment or mix tank and drain for 10 seconds after flow begins to drip. Fill container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. For containers greater than five gallons, triple rinse as follows: Empty remaining contents into application equipment or mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand container on its end and tip back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix tank or store rinsate for later use or disposal. Repeat the procedure two more times. Then, offer for recycling or reconditioning, or

puncture and or dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

LIMITED WARRANTY AND DISCLAIMER

The directions for use of this product are believed to be adequate and must be followed carefully. The use of this product is beyond the control of the manufacturer, and, therefore, to the extent consistent with applicable law, no warranty, representation, or guarantee of any kind, expressed or implied, is made as to the effects of such use or any results obtained if not used in accordance with printed directions and established safe practice or if unusual or extraordinary weather conditions occur. To the extent consistent with applicable law, the buyer's exclusive remedy and manufacturer's or seller's exclusive liability in tort or otherwise, shall be limited, at the manufacturer's option, to replacement of, or the repayment of the purchase price for, the quantity of product with respect to which damages are claimed.

PATENT http://www.FBSciencesPatents.com and other patents pending.

FBSciences, Inc.
153 N. Main Street Ste. 100
Collierville, TN 38017-2691
United States
901-221-1200

Batch Code/Lot Number_____

Revised 1.27.2020