Agra-Rouse

A Plant Growth Regulator For Use on Field Crops, Fruits, Tree Nuts, Vegetables, Herbs and Spices, Forage Grasses and Non-Food Crops such as Ornamentals, Trees and Turf

ACTIVE INGREDIENTS:	
Cytokinin, as Kinetin	0.05%
Gibberellic Acid (GA ₃)	0.05%
Indole-3-Butyric Acid (IBA)	0.09%
OTHER INGREDIENTS:	<u>99.81%</u>
TOTAL:	100.00%

KEEP OUT OF REACH OF CHILDREN CAUTION

	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.		
	• Call a poison control center or doctor for treatment advice.		
If swallowed:	• Call a poison control center or doctor immediately for treatment advice.		
	• Have person sip a glass of water if able to swallow.		
	• Do not induce vomiting unless told to do so by a poison control center or		
	doctor.		
	• Do not give anything by mouth to an unconscious person.		
If on skin or	Take off contaminated clothing.		
clothing:	• Rinse skin immediately with plenty of water for 15-20 minutes.		
	• Call a poison control center or doctor for treatment advice.		
If inhaled:	Move person to fresh air.		
	• If person is not breathing, call 911 or an ambulance, then give artificial		
respiration, preferably by mouth-to-mouth, if possible.			
	• Call a poison control center or doctor for further treatment advice.		
HOT LINE 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 1-800-424-9300 for emergency medical treatment			
information.			

EPA Reg. No. 80518-2

EPA Est. Numbers: 80518-TX-001 056651-OH-007

Manufactured By: CytoTek Enterprises, Inc. 21715 Tinsley Trails Spring, TX 77388

Net Contents:

□ 1 Quart □ 1 gallon

□ 2.5 gallons

□ 250 Gallons

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Harmful if swallowed, absorbed through skin or inhaled. Avoid contact with eyes, skin or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants, shoes plus socks. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENVIRONMENTAL HAZARDS

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 washwater or rinsate. Treated seed exposed on soil surface may be hazardous to wildlife. Cover or collect seeds spilled during loading.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

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. Only protected handlers may be in the area during applications. For any requirements specific to your State or Tribe, consult the State or Tribal 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 greenhouses, and handlers of agricultural pesticides. It 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. Seed treatment on agricultural establishments in hopper-box, planted box, or other seed-treatment application at or immediately before planting is within the scope of WPS, while commercial treatment of seeds is not within the scope.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

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 plus socks

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 (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

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

GENERAL INFORMATION

Agra-Rouse is a blend of bio-stimulants containing synthetic and naturally occurring plant growth regulators and plant hormones. The blend of Cytokinin (as Kinetin), Gibberellic Acid, and Indole-3-Butyric Acid stimulates plant growth and development, enhances cell division, cell differentiation, cell enlargement, root growth, and nutrient utilization; these effects are expected to promote:

- Increased yields
- Increased fruit set
- Improved resistance to environmental stress
- Earlier maturity
- Improved crop quality

Use Agra-Rouse on the following food and non-food crops:

FIELD CROPS:

ALFALFA, CLOVER, CORN (Includes Field Corn and Popcorn), COTTON, LUPINE, PEANUTS, RICE, SORGHUM, MILO, SOYBEANS, SUGAR BEETS, WHEAT

FRUITS:

APPLES, AVOCADO, BANANAS, BLUEBERRIES, CANE FRUIT (Includes Blackberries, Currants, Gooseberries and Raspberries), CITRUS (Includes Grapefruit, Lemon, Lime, Oranges, Tangelos and Tangerines), GRAPES, PEARS, PLANTAINS, STONE FRUIT (Includes Apricots, Cherries, Nectarines, Peaches and Plums), STRAWBERRIES

TREE NUTS:

ALMONDS, CASHEWS, CHESTNUTS, COCONUTS, HAZELNUTS, MACADAMIA, PECANS, PISTACHIOS, WALNUTS

VEGETABLES:

ASPARAGUS, BEANS (Includes Blackeyed Peas, Broad Beans, Chickpeas, Cowpeas, Crowder Peas, Fava Beans, Garbanzo Beans, Kidney Beans, Lima Beans, Mung Beans, Navy Beans, Pinto Beans, Snap Beans, Southern Peas and Wax Beans), BROCCOLI, BRUSSELS SPROUTS, CABBAGE, CARROTS, CAULIFLOWER, CELERY, CORN (Sweet), CUCUMBER, EGGPLANT, GARLIC, GINSENG, LETTUCE, MELONS, OKRA, ONIONS, PEAS (Includes Lentils), PEPPERS, POTATOES, PUMPKINS, RADISHES, SHALLOTS, SPINACH, SQUASH, SWEET POTATOES, TOMATOES, YAMS

HERBS & SPICES:

BASIL, CHIVE, CILANTRO, CORIANDER, DILL, FENNEL, MARJORAM, NUTMEG, PARSLEY, PEPPER, ROSEMARY, SAFFRON, SAGE, SAVORY, SWEET BAY, TARRAGON

NON-FOOD CROPS:

ORNAMENTALS, TREES, TURF

GRASS FORAGE:

Includes all pasture and range grasses

APPLICATION INSTRUCTIONS

Seed Treatment:

For coating seeds prior to planting, apply Agra-Rouse at the rate of 1-4 fluid ounces per 100 pounds of seed or 1-4 fluid ounces of Agra-Rouse per acre of seed before planting. Do not use treated seed for food or feed purposes or process for oil. Treat only those seeds needed for immediate use, minimizing the interval between treatment and planting. Do not store excess treated seeds beyond planting time.

Nursery/Container Use:

Apply Agra-Rouse as a fine mist spray to container-grown plants at the rate of 2 fluid ounces per 10 gallons of water every 2 to 4 weeks. Mist leaves thoroughly but not to the point of excessive run off.

Rooting and Transplant Solution:

Dip cuttings in a solution of 2 fluid ounces Agra-Rouse per 5 gallons of water before rooting. For use as a rooting medium, set cuttings in a solution of 2 fluid ounces Agra-Rouse per 5 gallons of water. For Transplanting -- dip roots in a solution of 2 fluid ounces Agra-Rouse per 10 gallons of water solution.

Irrigation/Fertigation:

Apply Agra-Rouse to stimulate root growth through irrigation into the soil surrounding plant roots. See tables below for application rates and timing.

Foliar Spray:

Agra-Rouse is most effective when used as part of a regular foliar nutritional spray program and can be applied with any standard fertilizer or crop protection spray system. For best results, apply the foliar spray mixture as a fine mist, with low fluid velocity until the foliage is wet. Common surfactants can be used.

For large areas where aircraft or power driven sprayers are used to apply the spray, follow the specific crop use rates below. Apply with sufficient water to get thorough foliage coverage, 3 to 10 gallons of water per acre for aircraft sprayers and 10 to 50 gallons of water per acre for ground driven spray equipment.

The rates and dosages for foliar applications of Agra-Rouse may be adjusted depending on the climatic region, soil type and fertility. For best results, increase the frequency of application; additional applications can be made as required.

Compatibility Test for Tank Mix Components

CytoTek Enterprises, Inc. does not assume responsibility for unexpected results when tank mixing with Agra-Rouse. Conduct a jar test before tank mixing to ensure compatibility of Agra-Rouse with other pesticides, or fertilizers if the tank mix combination has not been used previously. In addition, apply the mixture to a small area or small number of plants prior to large-scale treatments to ensure the mixture does not result in phytotoxicity.

To test for compatibility, in a small jar, mix a small amount (0.5 to 1 quart) of spray, combining all tank mix ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. These indications usually appear within 5 to 15 minutes after mixing and include observations such as development of a precipitate or surface oil or thick (clabbered) texture. Do not use any spray solution that could clog spray nozzles. Follow the most

restrictive of all precautions and limitations on this label and labels of other pesticide products used in the tank mixture with Agra-Rouse.

CHEMIGATION

Apply this product only through drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, contact your State Extension Service specialists, equipment manufacturers, or other experts.

Do not connect any 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.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Chemigation Systems Connected to Public Water Systems

Public water 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.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) 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 flow 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 pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline must 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. Do not apply when wind speed favors drift beyond the area intended for treatment.

Drip (Trickle) Chemigation

- 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.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor 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.

When applying Agra-Rouse via chemigation, use a pesticide supply tank. Prepare a suspension of Agra-Rouse in a mix tank by filling the tank with $\frac{1}{2}$ to $\frac{3}{4}$ the desired amount of water. Start mechanical or hydraulic agitation and slowly add the directed amount of Agra-Rouse. Complete the mix by adding the remaining volume of water.

The spray mixture must be continuously agitated during application.

Apply Agra-Rouse continuously for the duration of the water application.

APPLICATION RATES AND TIMING

FOOD/FEED CROPS

VEGETABLES		
Сгор	Application Timing	Rate (fl. oz. Agra-Rouse)
Asparagus	 For newly established plants make 1 application to new flush or fern growth. For mature crops make 1 application to new fern growth after cuttings have stopped growing. 	
Beans Peas	1. Seed treat	1-4 per acre
Beans Peas	 First trifoliate First bloom Pod initiation 	4-8 per acre foliar or soil applied.
Carrots, Garlic, Onions, Radishes, Shallots	 At planting/transplanting 2-3 weeks after emergence At root enlargement 	4-8 per acre foliar or soil applied.
Broccoli, Brussels sprouts, Cabbage, Cauliflower	 At planting At 4-6 true leaf stage 10-14 days later At head initiation 	4-8 per acre foliar or soil applied.
Sweet corn, Popcorn	 At planting At 20-30 inch growth stage At tasseling 	4-8 per acre foliar or soil applied.
Celery	 At transplanting Every 10-14 days throughout the growing season 	4-8 per acre foliar or soil applied.

VEGETABLES		
Сгор	Application Timing	Rate (fl. oz. Agra-Rouse)
Cucumber,	1. At planting	4-8 per acre foliar or soil
Eggplant,	2. Pre-bloom	applied.
Melons,	3. Every 7-14 days until harvest	
Peppers,		
Pumpkins,		
Squash		
Lettuce,	1. At 4 leaf stage	4-8 per acre foliar or soil
Spinach	2. Every 7-14 days until harvest	applied.
Potatoes,	1. At planting	4-8 per acre foliar or soil
Yams	2. At hilling	applied.
	3. At tuber set	
	4. At bloom	
Tomatoes	1. At planting/transplant	4-8 per acre foliar or soil
	2. Pre-bloom	applied.
	3. Repeat every 7-14 days until harvest	
Ginseng	1. Apply monthly beginning at full leaf	4-8 per acre foliar or soil
	expansion and continue until frost.	applied.

FIELD CROPS		
Сгор	Application Timing	Rate (fl. oz. Agra-Rouse)
Alfalfa	1. Apply in early Spring and repeat after each cutting or heavy grazing.	4-8 per acre
Cotton	 At planting At pinhead square Every 7-14 days 	4-8 per acre foliar or soil applied.
Corn, field	 At planting At 20-30 inch growth stage At tasseling 	4-8 per acre foliar or soil applied.
Peanut	 At planting 3 weeks after emergence Repeat every 7-14 days until harvest 	4-8 per acre foliar or soil applied.
Rice	 At planting At pinnacle initiation 	4-8 per acre foliar or soil applied.
Soybeans	 At planting 1-2 applications during the growing season 	4-8 per acre
Sorghum	1. At planting	4-8 per acre
Wheat	 At planting Early Spring 	4-8 per acre foliar or soil applied.

FRUIT		
Crop	Application Timing	Rate (fl. oz. Agra-Rouse)
Apples	 At green growth Apply every 14 days after petal fall until harvest 	4-8 per acre
Bananas	 At sucker formation Every 14 days until harvest 	4-8 per acre
Grapes	 At start of Spring growth At berry set Every 14 days following berry set throughout the growing season 	4-8 per acre foliar or soil applied.
Grapefruit, Lemons, Oranges, Tangelos, Tangerines	 Pre-bloom With summer spray With Fall spray 	4-8 per acre
Blackberries, Currents, Gooseberries, Raspberries	 Pre-bloom Every 30 days through the growing season 	4-8 per acre foliar or soil applied.
Blueberries	 Pre-bloom Every 30 days through the growing season 	4-8 per acre foliar or soil applied.
Cherries	 Pre-bloom Apply every 14 days after petal fall until harvest 	4-8 per acre
Strawberries	 At emergence At first bloom 14 days throughout the growing season 	4-8 per acre foliar or soil applied.
Apricots, Nectarines, Peaches, Plums	 Pre-bloom Apply every 14 days after petal fall until harvest 	4-8 per acre
Pears	 At green growth Apply every 14 days after petal fall until harvest 	4-8 per acre

HERBS AND SPICES		
Crop	Application Timing	Rate (fl. oz. Agra-Rouse)
Basil,	1. Every 14 days after green up or	4-8 per acre foliar or soil
Chives,	emergence	applied.
Cilantro,		
Dill,		
Fennel,		
Marjoram,		
Nutmeg,		
Parsley,		
Pepper,		
Rosemary,		
Saffron,		
Sage,		
Savory,		
Sweet bay		
Tarragon		

TREE NUTS		
Crop	Application Timing	Rate (fl. oz. Agra-Rouse)
Almond,	1. Pre-bloom	4-8 per acre
Cashew,	2. Every 14 days following petal fall	
Chestnuts,	throughout the growing season	
Coconuts,		
Hazelnuts,		
Macadamia nuts,		
Pecans,		
Pistachio,		
Walnut		

GRASS FORAGE:

Agra-Rouse can be used on fescue and all pasture and range grasses and grasses grown for hay or silage that will be fed to or grazed by livestock. Apply at 4-8 fluid ounces Agra-Rouse per acre.

NON-FOOD CROPS

TURF:

Agra-Rouse can be used in turf grass seed production, sod production, parks, golf courses, athletic fields and home lawns at a rate of 4-8 fluid ounces per acre. For sod production, parks, golf courses, athletic fields and home lawns, begin Agra-Rouse applications at the initial growth stage and continue throughout the season at 2 to 4 week intervals. Additional applications can be made after periods of heavy traffic use or high stress. Spray newly applied sod to help new root growth and root penetration of soil. A late season spray will help improve resistance to winter kill and frost damage. For seed production, apply 4-8 fluid ounces Agra-Rouse per acre just prior to spear formation.

DECIDUOUS OR CONIFEROUS TREES AND SHRUBS:

Make the first Agra-Rouse application early in the season at the initiation of new growth, applying 4-8 fluid ounces per acre. Follow with two sprays of 4-8 fluid ounces Agra-Rouse per acre at 14 to 21 day intervals during the growing season. A late season spray will help improve resistance to winter kill and

frost damage, although it is not a substitute for standard winter protection. A late season application will help Christmas trees retain their dark green color after cutting.

FIELD ORNAMENTALS:

Start the season by applying 4-8 fluid ounces Agra-Rouse per acre at the early leaf stage. Continue with regular applications of 4-8 fluid ounces Agra-Rouse per acre every 2 weeks.

GREENHOUSE ORNAMENTALS:

Apply to soil at transplant or start by spraying the foliage to run off point within 10 days of transplant or emergence at the rate of 4-8 fluid ounces Agra-Rouse per 100 gallons of water. Continue with regular applications of 4-8 fluid ounces Agra-Rouse per acre every 2 weeks.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store Agra-Rouse in its original container in a cool, dry locked place out of the reach of children and out of direct sunlight.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¹/₄ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CONDITIONS OF SALE

Seller warrants this product consists of the ingredients specified and is reasonably fit for the purposes stated on this label when used in accordance with directions under normal use. No one other than an officer of CytoTek Enterprises, Inc. is authorized to make any warranty or guarantee of this product. Because the time, place, rate of application and environmental conditions of use are beyond the seller's control, to the extent permitted by law the seller's liability from handling, storage, and use of this product are limited to replacement of the product or a refund of the purchase price.

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