

# Agra-Rouse™

*A Plant Growth Regulator For Use As a Soil Application 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 <sub>3</sub> ).....	0.05%
Indole-3-Butyric Acid (IBA).....	0.09%

**OTHER INGREDIENTS:.....99.81%**

**TOTAL:.....100.00%**

## **KEEP OUT OF REACH OF CHILDREN CAUTION**

**See booklet for First Aid and additional Precautionary Statements**

Precaucion al usuario: Si no lee ingles,

no use este producto hasta que la etiqueta haya sido explicada ampliamente.

### Warranty and Disclaimer

1. Seller warrants that this product consists of the ingredients specified and is reasonably fit for the purpose stated on this label when used in accordance with directions under normal conditions of use. No one, other than the officer of Seller, is authorized to make any warranty, guarantee or direction concerning this product.
2. To the extent permitted by applicable law, the seller's liability for handling, storage and use of this product contrary to label instructions shall be limited to replacement of product or refund of purchaser price.

### **Distributed and Guaranteed by:**

LidoChem, Inc.  
20 Village Court  
Hazlet, NJ 07730

### **Product of CytoTek Enterprises, Inc.**

25414 Sugar Valley Lane Spring, TX 77373

Manufactured and Packaged for LidoChem, Inc.

EPA Reg. No. 80518-2

EPA Est. Numbers: 80518-TX-001,

056651-OH-007

**Net Weight:** XX lb. (X kg.)

**Net Volume:** 2.5 gallon (9.46 L)

### FIRST AID

<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>

### 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.

### 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.

**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.

### **Drip (Trickle) Chemigation**

- 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**

<b>VEGETABLES</b>		
<b>Crop</b>	<b>Application Timing</b>	<b>Rate (fl. oz. Agra-Rouse)</b>
Asparagus	<ol style="list-style-type: none"> <li>For newly established plants make 1 application to new flush or fern growth.</li> <li>For mature crops make 1 application to new fern growth after cuttings have stopped growing.</li> </ol>	4-8 per acre soil applied
Beans Peas	<ol style="list-style-type: none"> <li>Seed treat</li> </ol>	1-4 per acre soil applied
Beans Peas	<ol style="list-style-type: none"> <li>First trifoliolate</li> <li>First bloom</li> <li>Pod initiation</li> </ol>	4-8 per acre soil applied
Carrots, Garlic, Onions, Radishes, Shallots	<ol style="list-style-type: none"> <li>At planting/transplanting</li> <li>2-3 weeks after emergence</li> <li>At root enlargement</li> </ol>	4-8 per acre soil applied
Broccoli, Brussels sprouts, Cabbage, Cauliflower	<ol style="list-style-type: none"> <li>At planting</li> <li>At 4-6 true leaf stage</li> <li>10-14 days later</li> <li>At head initiation</li> </ol>	4-8 per acre soil applied
Sweet corn, Popcorn	<ol style="list-style-type: none"> <li>At planting</li> <li>At 20-30 inch growth stage</li> <li>At tasseling</li> </ol>	4-8 per acre soil applied
Celery	<ol style="list-style-type: none"> <li>At transplanting</li> <li>Every 10-14 days throughout the growing season</li> </ol>	4-8 per acre soil applied

<b>VEGETABLES</b>		
<b>Crop</b>	<b>Application Timing</b>	<b>Rate (fl. oz. Agra-Rouse)</b>
Cucumber, Eggplant, Melons, Peppers, Pumpkins, Squash	<ol style="list-style-type: none"> <li>At planting</li> <li>Pre-bloom</li> <li>Every 7-14 days until harvest</li> </ol>	4-8 per acre soil applied
Lettuce, Spinach	<ol style="list-style-type: none"> <li>At 4 leaf stage</li> <li>Every 7-14 days until harvest</li> </ol>	4-8 per acre soil applied
Potatoes, Yams	<ol style="list-style-type: none"> <li>At planting</li> <li>At hilling</li> <li>At tuber set</li> <li>At bloom</li> </ol>	4-8 per acre soil applied
Tomatoes	<ol style="list-style-type: none"> <li>At planting/transplant</li> <li>Pre-bloom</li> <li>Repeat every 7-14 days until harvest</li> </ol>	4-8 per acre soil applied
Ginseng	<ol style="list-style-type: none"> <li>Apply monthly beginning at full leaf expansion and continue until frost.</li> </ol>	4-8 per acre soil applied

<b>FIELD CROPS</b>		
<b>Crop</b>	<b>Application Timing</b>	<b>Rate (fl. oz. Agra-Rouse)</b>
Alfalfa	<ol style="list-style-type: none"> <li>Apply in early Spring and repeat after each cutting or heavy grazing.</li> </ol>	4-8 per acre soil applied
Cotton	<ol style="list-style-type: none"> <li>At planting</li> <li>At pinhead square</li> <li>Every 7-14 days</li> </ol>	4-8 per acre soil applied

FIELD CROPS		
Crop	Application Timing	Rate (fl. oz. Agra-Rouse)
Corn, field	<ol style="list-style-type: none"> <li>At planting</li> <li>At 20-30 inch growth stage</li> <li>At tasseling</li> </ol>	4-8 per acre soil applied
Peanut	<ol style="list-style-type: none"> <li>At planting</li> <li>3 weeks after emergence</li> <li>Repeat every 7-14 days until harvest</li> </ol>	4-8 per acre soil applied
Rice	<ol style="list-style-type: none"> <li>At planting</li> <li>At pinnacle initiation</li> </ol>	4-8 per acre soil applied
Soybeans	<ol style="list-style-type: none"> <li>At planting</li> <li>1-2 applications during the growing season</li> </ol>	4-8 per acre soil applied
Sorghum	<ol style="list-style-type: none"> <li>At planting</li> </ol>	4-8 per acre soil applied
Wheat	<ol style="list-style-type: none"> <li>At planting</li> <li>Early Spring</li> </ol>	4-8 per acre soil applied

FRUIT		
Crop	Application Timing	Rate (fl. oz. Agra-Rouse)
Apples	<ol style="list-style-type: none"> <li>At green growth</li> <li>Apply every 14 days after petal fall until harvest</li> </ol>	4-8 per acre soil applied
Bananas	<ol style="list-style-type: none"> <li>At sucker formation</li> <li>Every 14 days until harvest</li> </ol>	4-8 per acre soil applied
Grapes	<ol style="list-style-type: none"> <li>At start of Spring growth</li> <li>At berry set</li> <li>Every 14 days following berry set throughout the growing season</li> </ol>	4-8 per acre soil applied

FRUIT		
Crop	Application Timing	Rate (fl. oz. Agra-Rouse)
Grapefruit, Lemons, Oranges, Tangelos, Tangerines	<ol style="list-style-type: none"> <li>Pre-bloom</li> <li>With summer spray</li> <li>With Fall spray</li> </ol>	4-8 per acre soil applied
Blackberries, Currents, Gooseberries, Raspberries	<ol style="list-style-type: none"> <li>Pre-bloom</li> <li>Every 30 days through the growing season</li> </ol>	4-8 per acre soil applied
Blueberries	<ol style="list-style-type: none"> <li>Pre-bloom</li> <li>Every 30 days through the growing season</li> </ol>	4-8 per acre soil applied
Cherries	<ol style="list-style-type: none"> <li>Pre-bloom</li> <li>Apply every 14 days after petal fall until harvest</li> </ol>	4-8 per acre soil applied
Strawberries	<ol style="list-style-type: none"> <li>At emergence</li> <li>At first bloom</li> <li>14 days throughout the growing season</li> </ol>	4-8 per acre soil applied
Apricots, Nectarines, Peaches, Plums	<ol style="list-style-type: none"> <li>Pre-bloom</li> <li>Apply every 14 days after petal fall until harvest</li> </ol>	4-8 per acre soil applied
Pears	<ol style="list-style-type: none"> <li>At green growth</li> <li>Apply every 14 days after petal fall until harvest</li> </ol>	4-8 per acre soil applied

## HERBS AND SPICES

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

### 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  $\frac{1}{4}$  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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