7690 -41	8-8-2006		
SWINDOW HERE AR DECIDENCE	U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460	EPA Reg. Number: 67690-41	Date of Issuance:
L	NOTICE OF PESTICIDE: <u>x</u> Registration <u>C</u> Reregistration (under FIFRA, as amended)	Term of Issuance: <u>C</u> Name of Pesticide Pro A-Rest Seed T	
ePro Corporat 1550 N. Merid Carmel, IN 460	ian Street, Suite 180	tion must be submitted to	and accented by the
Fungicide and Rodentic o protect health and the with the Act. The acception ight to exclusive use of	<ul> <li>s conditionally registered in accordance with FIFF</li> <li>Submit and/or cite all data required for registration 3(c)(5) when the Agency requires all response to the accordance of the formation and the formation and the formation formation and the formation formation and the formation and</li></ul>	ommendation of this proc or cancel the registration of is Act is not to be constru- RA sec. 3(c)(7)(A tion of your prod ogistrants of simi	fuct by the Agency. In order of a pesticide in accordance ued as giving the registrant a A) provided that fuct under FIFRA lar products to
2.	Before releasing the product for shipment revis read, "EPA Reg. No. 67690-41" to your label b shipment.	-	
3.	Submit a GLP storage and stability study (830.6 study (830.6320) by February 29, 2008.	5317) and corros	sion characteristics
ignature of Approving Tony Kish Product Manage Sungicide Brand	er, Team 22	Date:	8 2006
Registration Div	vision (7505P)		

# A-REST\* Seed Treatment Plant Growth Regulator Seed Treatment

## For use only by commercial seed producers For height control in container-grown ornamental plants including, foliage plants and bedding plants

# +, Active Ingredient:

V	ancymidol: a-cyclopropyl-a-(p-methoxyphenyl)-5-				
	pyrimidinemethanol	99.6%			
	Inert Ingredients				
	TOTAL				
	Contains 98 gm of active ingredient per liter.				

#### Keep Out of Reach of Children CAUTION/PRECAUCION Si usted no entiende la etiqueta, busque a alguien paraque se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

## PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

**CAUTION:** Harmful if swallowed or inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing dust. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Refer to inside label booklet for additional precautionary information including Personal Protective Equipment (PPE) and User Safety Recommendations, Agricultural Use Requirements and Directions for Use including Storage and Disposal.

Notice: Read the entire label before using. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer," "Inherent Risks of Use" and "Limitation of Remedies" inside label booklet

EPA Reg. No. 67690-FPL 042505

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Plant Growth Regulator

Net Contents: \_\_\_\_ Pounds

ACCEPTED with COMMENTS In EPA Letter Dated

EPA Est. No.

AUG 8 2006

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#### KEEP OUT OF REACH OF CHILDREN CAUTION

## PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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······································	First Aid
IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice.
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> </ul>
	Do not give anything to an unconscious person.
IF INHALED	Move person to fresh air.
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> </ul>
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product cont	ainer or label with you when calling a poison control center or doctor, or going for treatment
In case of emergency	endangering health or the environment involving this product, call INFOTRAC at 1-800-535-5053.

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

- . Long-sleeved shirt and long pants
  - Shoes plus socks

Additional Personal Protective Equipment (PPE) is needed for use in California due to differences in federal and state law. Users in California must also wear:

- Coveralis
- Chemical resistant gloves made of any waterproof material

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

# USER SAFETY RECOMMENDATIONS

Users should:

- . Wash hands before eating, drinking, chewing gum, using tobacco or using the tollet.
- · Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

## 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 washwaters or rinsate.

## **Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

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 application. 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 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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 0 hours.

PPE required for early entry to treated areas 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-resistance gloves made of any waterproof material -Shoes plus socks

## **General Information**

A-REST Seed Treament plant growth regulator is for use as a seed treatment on ornamental plants only to be sown in containers in greenhouses. Do not apply A-REST Seed Treatment to plant seeds of any plant that may be used as food or feed. Use of A-REST Seed Treatment treated seed effectively reduces internode elongation, resulting in a more desirable compact plant. Growth regulation effects produced by A-REST Seed Treatment seed treatment are the result of inhibition of gibberellin biosynthesis. When used as directed, A-REST Seed Treatment produces no phytotoxic effects.

## FACTORS AFFECTING PLANT RESPONSE TO A-REST Seed Treatment

There are many factors that can affect a plant's response to seed treatment with A-REST Seed Treatment. They include proper application, environmental conditions, plant/container size and cultural practices after sowing treated seed. These factors can affect the amount of A-REST Seed Treatment that is required to be applied to seed for the desired plant height.

Seed treatment with A-REST Seed Treatment can replace one or more subsequent applications of plant growth regulators.

**CULTURAL PRACTICES** may affect the plant's response to seed treatment by A-REST Seed Treatment. Plants which are grown at close spacing or in small pots and using high water and fertility levels may not respond to seed treatment by A-REST Seed Treatment and/or require more subsequent applications of plant growth regulators or higher application rates.

**DIFFERENT SEED LOTS, VARIETIES OR CULTIVARS** within a given plant species may require a higher or lower rate of A-REST Seed Treatment. Seed lots within the same variety will vary in their response to treatment by A-REST Seed Treatment. Seed lots, which are naturally more vigorous and/or varieties that are taller and more vigorous generally require a higher treatment rate of A-REST Seed Treatment than do the naturally short, less vigorous varieties. Persons applying A-Rest to seeds should test various application rates on a given seed lot before applying to large quantities of seed.

**TEMPERATURE** can be the overriding factor in determining the response to seed treatment by A-REST Seed Treatment. Stem elongation increases with increased temperatures. Growers in warm climates will need to use more subsequent applications of plant growth regulators and/or higher rates compared to those in cooler climates. The number and rates of subsequent applications may also vary depending on the time of year, with higher rates and/or more applications needed during warmer months.

## MIXING INSTRUCTIONS

Be sure the seed treating equipment is clean and not contaminated with any material. A-REST Seed Treatment can be added to solutions used for priming seed, or to liquid or powder components used to coat or pellet ornamental plant seeds

## Stock Solution Preparation and Use

Prepare an A-REST Stock Solution using a standard laboratory fume hood with workers wearing protective hand and eyewear. Dissolve A-REST Technical in a minimum volume of ethanol and then dilute it with water to prepare a stock solution of 264 ppm. This A-REST Stock Solution is used for all subsequent applications.

## Priming Applications

A-REST Stock Solution (264 ppm) should be diluted with aqueous osmotic solutions to a maximum concentration of 100 ppm. This solution is then used to wet filter paper at an appropriate volume to apply according to application rates in Table 1, on which seeds are placed. Seeds on filter paper should be placed in controlled environments for various periods of time. Remove treated/primed seed from the filter paper and then rinse and dry.

## Coating Applications

For seed coating, A-REST Stock solution (264 ppm) is diluted with aqueous binder solutions and suspended fillers to a maximum concentration of 100 ppm. This suspension is applied at an appropriate volume to apply according to application rates in Table 1 to ornamental plant seeds in either a side-vented pan or fluidized bed. In both cases, the heated air used to dry the seed during the coating process should pass through a dust collection system.

## Pelleting Applications

For seed pelleting, A-REST Stock solution (264 ppm) is diluted with aqueous binder solutions to a maximum concentration of 100 ppm and sprayed on seed at an appropriate volume to apply according to application rates in Table 1 during the pelleting process in a rotating pan. Workers should use protective eyewear and dust masks. A vacuum system should be used throughout the process with an inlet positioned in the pan opening to capture stray dust and atomized spray. Air collected with the vacuum system should then pass through a dust collection system.

## **APPLICATION TECHNIQUES**

Plants absorb A-REST Seed Treatment directly through seed coats, germinating seed, or through roots. Optimal treatment techniques may vary from species to species.

# PRIMING APPLICATIONS

A-REST Seed Treatment can be introduced to ornamental plant seed by absorption during priming. When applying during seed priming, the following should be noted:

- Use of high application rates may adversely affect germination.
- Priming solutions may be disposed of on site or at an approved waste disposal facility.

# COATING OR PELLETING APPLICATIONS

A-REST Seed Treatment can be introduced to ornamental plant seed by adhering to seed in a coat or pellet. Once sown, A-REST Seed Treatment is absorbed by the germinating seedling and/or roots. When applying during coating or pelleting, the following should be noted:

- Use of high application rates may adversely affect germination.
- · A-REST Seed Treatment may be added to either powder or liquid components of coatings or pellets.
- Remaining components containing A-REST Seed Treatment may be disposed of on site or at an approved waste disposal facility.

# DETERMINING OPTIMUM RATES

The amount of A-REST Seed Treatment required for an optimum growth response will vary among growers and will depend upon several factors: the final desired height, length of control desired, pot size, stage of growth, method of application, season, varietal, and seed lot response. Species-specific cultural practices such as watering, potting media, fertilization and temperature and light conditions will also affect the growth response to a given dosage. Therefore, persons applying A-Rest to seeds should establish specific application rates based on small-scale

treatments under actual use conditions and keep records as to plant species and variety sensitivity before A-REST Seed Treatment is applied to a large quantity of seeds. The rates recommended on this label are rate ranges and should be used only as a guideline. For plant species listed on the label, the user should run initial trials using the lowest recommended rates. For plant species not specifically listed on the label, the user should run initial trials on a small quantity of seed using the guideline rates in Table 1. The maximum rate, which may be applied to any crop is 100 mg active ingredient per 1000 seeds.

# Table 1: GENERAL GUIDELINES RATES BY ORNAMENTAL PLANT TYPE

Piant Type	Mg Active Ingredient per 1000 Seeds
Ornamental Bedding Plants*	0.05-0.6**
Ornamental Millet*	0.5-5.0**

\*\*Application rate per 1000 seeds will vary with seed species, type, and size.

\*includes Ornamental Plants, such as:

ABUTILON	CLEOME	HIERACIUM	PLECTRANTHUS
ACAENA	COBAEA	HYPERICUM	PLUMBAGO
ACANTHUS	COLEUS	HYPOESTES	POLEMONIUM
ACHILLEA	CORDYLINE	IBERIS	POLYGONUM
ACONITUM	COREOPSIS	IMPATIENS	PORTULACA
ACROCLINIUM	CORONILLA	INCARVILLEA	POTENTILLA
AGAPANTHUS	COSMOS	INULA	PRIMULA
AGASTACHE	CRAMBE	IRESINE	PRUNELLA
AGERATUM	CRAPE MYRTLE	ISOTOMA	PULSATILLA
AGROSTEMMA	CRASPEDIA	JACARANDA	PUNICA
AJUGA	CROSSANDRA	JASIONE	PYRETHRUM
ALCEA	CRUCIANELLA	KALANCHOE	RADERMACHERA
ALCHEMILLA	CUPHEA	KNAUTIA	RANUNCULUS
ALSTROEMERIA	CYCLAMEN	KNIPHOFIA	RATIBIDA
ALTERNANTHERA	CYMBALARIA	KOCHIA	RESEDA
ALYSSUM	DAHLBERG DAISY	KOHLRABI	RHEUM
AMARANTHUS	DAHLIA	LAMARCKIA	RHODANTHE
AMBROSINIA	DANDELION	LARKSPUR	RHODOCHITON
AMMI	DATURA	LATHYRUS	RICINUS
AMMOBIUM	DELPHINIUM	LAURENTIA	RODGERSIA
ANACYCLUS	DIANTHUS	LAVANDULA	ROSA
ANAGALLIS	DIASCIA	LAVATERA	RUDBECKIA
ANAPHALIS	DICENTRA	LAYIA	SAGINA
ANCHUSA	DICHONDRA	LEONTOPODIUM	SALPIGLOSSIS
ANEMONE	DIDISCUS	LEPIDIUM	SALVIA
ANGELONIA	DIGITALIS	LEUCANTHEMUM	SANTOLINA
ANTENNARIA	DIMORPHOTHECA	LEWISIA	SANVITALIA
ANTHEMIS	DOLICHOS	LIATRIS	SAPONARIA
ANTIRRHINUM	DORONICUM	LIGULARIA	SAXIFRAGA
AQUILEGIA	DRABA	LILY	SCABIOSA
ARABIS	DRACAENA	LINARIA	SCHEFFLERA
ARALIA	ECCREMOCARPUS	LINUM	SCHIZANTHUS
ARCTOTIS	ECHEVERIA	LISIANTHUS	SCORZONERA
ARENARIA	ECHINACEA	LOBELIA	SCUTELLARIA
ARMERIA	ECHINOPS	LONAS	SEDUM
ARNICA	EMILIA	LUNARIA	SEMPERVIVUM
ARTEMISIA	EREMURUS	LUPIN	SETARIA
ARUNCUS	ERIGERON	LYCHNIS	SIDALCEA
ASARINA	ERINUS	LYSIMACHIA	SILENE
ASCLEPIAS	ERODIUM	LYTHRUM	SISYRINCHIUM
		5 of 7	

**ASPHODELINE** ERYNGIUM MALVA ASTER ERYSIMUM MARIGOLD ASTILBE **ESCHSCHOLZIA** MATRICARIA ASTRANTIA **EUCALYPTUS** MATTHIOLA ATRIPLEX **EUPATORIUM MECONOPSIS** AUBRIETA **EUPHORBIA** MELAMPODIUM BALSAM EXACUM MESEMBRYANTHEMUM BAPTISIA **FELICIA** MIMOSA BEGONIA FLOWERING CABBAGE MIMULUS BELAMCANDA FLOWERING KALE **MINA** BELLIS FREESIA **MIRABILIS** BERGENIA **FUCHSIA** MOLUCCELLA BIDENS GAILLARDIA MONARDA BRACHYCOME GALIUM MONSTERA BROOM GAURA **MYOSOTIS** BROWALLIA GAZANIA NASTURTIUM BUPHTALMUM GENTIANA NEMESIA BUPLEURUM GERANIUM NICANDRA CALANDRINIA GERBERA **NIEREMBERGIA CALCEOLARIA GESNERIA** NIGELLA CALENDULA GEUM NOLANA CALLA **GLOXINIA OENOTHERA** CAMPANULA GODETIA **ORNAMENTAL GRASSES** CANNA **GOMPHRENA** ORNAMENTAL NICOTIANA CARDIOSPERMUM GREVILLEA OSTEOSPERMUM CARLINA **GUNNERA** OXYPETALUM CARNATION **GYPSOPHILA** PANSY CARTHAMUS HELENIUM PAPAVER CATANANCHE HELIANTHEMUM PASSIFLORA **CELOSIA** HELIANTHUS PENSTEMON CENTAUREA HELICHRYSUM PENTAS CENTRANTHUS HELIOPSIS PERILLA CERASTIUM HELIOTROPE PETUNIA CERINTHE HELIPTERUM PHILODENDRON CHAENORRHINUM HELLEBORUS PHLOX PHOENIX CHEIRANTHUS HEMEROCALLIS CHRYSANTHEMUM HERNIARIA PHYSALIS CINERARIA HESPERIS **PHYSOSTEGIA** CIRSIUM PIMPRENELLE HEUCHERA **CLARKIA** HIBISCUS PLATYCODON

SOLIDAGO **SPILANTHES** STACHYS STATICE STOCK **STOKESIA STRAWFLOWER STRELITZIA STREPTOCARPUS** SUNFLOWER SWEET PEA SWEET WILLIAM SWISS CHARD TAGETES TALINUM **TELOXYS TETRAGONIA** TEUCRIUM THALICTRUM THUNBERGIA THYMOPHYLLA TIARELLA TITHONIA TORENIA TRACHELIUM TROLLIUS TUNICA VALERIANELLA VERBASCUM VERBENA VERONICA VINCA VIOLA WAHLENBERGIA WALLFLOWER XERANTHEMUM YUCCA ZINNIA

**SNAPDRAGON** 

#### USE AND RATE RECOMMENDATIONS BY ORNAMENTAL CROP

A-REST Seed Treatment is effective in controlling the height of most ornamental crops. The use and rate recommendations for the species that follow should act as a starting point in determining the best rate for your specific cultural and environmental growing conditions. Before you apply A-REST Seed Treatment to a large quantity of seed, be sure to read and understand the section titled **Determining Optimum Rates**.

#### **ORNAMENTAL BEDDING PLANT PLUGS**

Seed treatment with A-REST Seed Treatment is effective in controlling the height and strengthening the stem of bedding plant plugs. The person applying A-Rest to seeds should determine the optimum rate for the species grown under their cultural and environmental conditions by running trials on a small amount of seed. A recommended starting rate range is 0.05-0.6 mg active ingredient per 1000 seed.

## ORNAMENTAL FLOWERING PLANTS/ORNAMENTAL FOLIAGE PLANTS

Seed treatment with A-REST Seed Treatment is effective in controlling the height and strengthening the stem of many flowering and foliage plants. The person applying A-Rest to seeds should determine the optimum rate for the species

grown under their cultural and environmental conditions by running trials on a small amount of seed. A recommended starting rate range is 0.5-5.0 mg active ingredient per 1000 seed.

# STORAGE AND DISPOSAL

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

Pesticide Storage: Avoid freezing. Store in original container only. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

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

**Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## Warranty Disclaimer

SePRO Corporation warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. SEPRO CORPORATION MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

## Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Reduced seed germination, plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of SePRO Corporation as the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

## Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories) shall be limited to, at SePRO Corporation election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or

of the Warranty Disclaimer or Limitations of Remedies in any manner.

2. Replacement of amount of product used.

SePRO Corporation shall not be liable for losses or damages resulting from handling or use of this product unless SePRO Corporation is promptly notified of such losses or damages in writing. To the extent permitted by law in no case shall SePRO Corporation be liable for consequential or incidental damages or losses. The terms of the Warranty Disclaimer above and this Limitation of Remedies can not be varied by any written or verbal statements or agreements. No employee or sales agent of SePRO Corporation or the seller is authorized to vary or exceed the terms

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