Products, Labels & Legislation

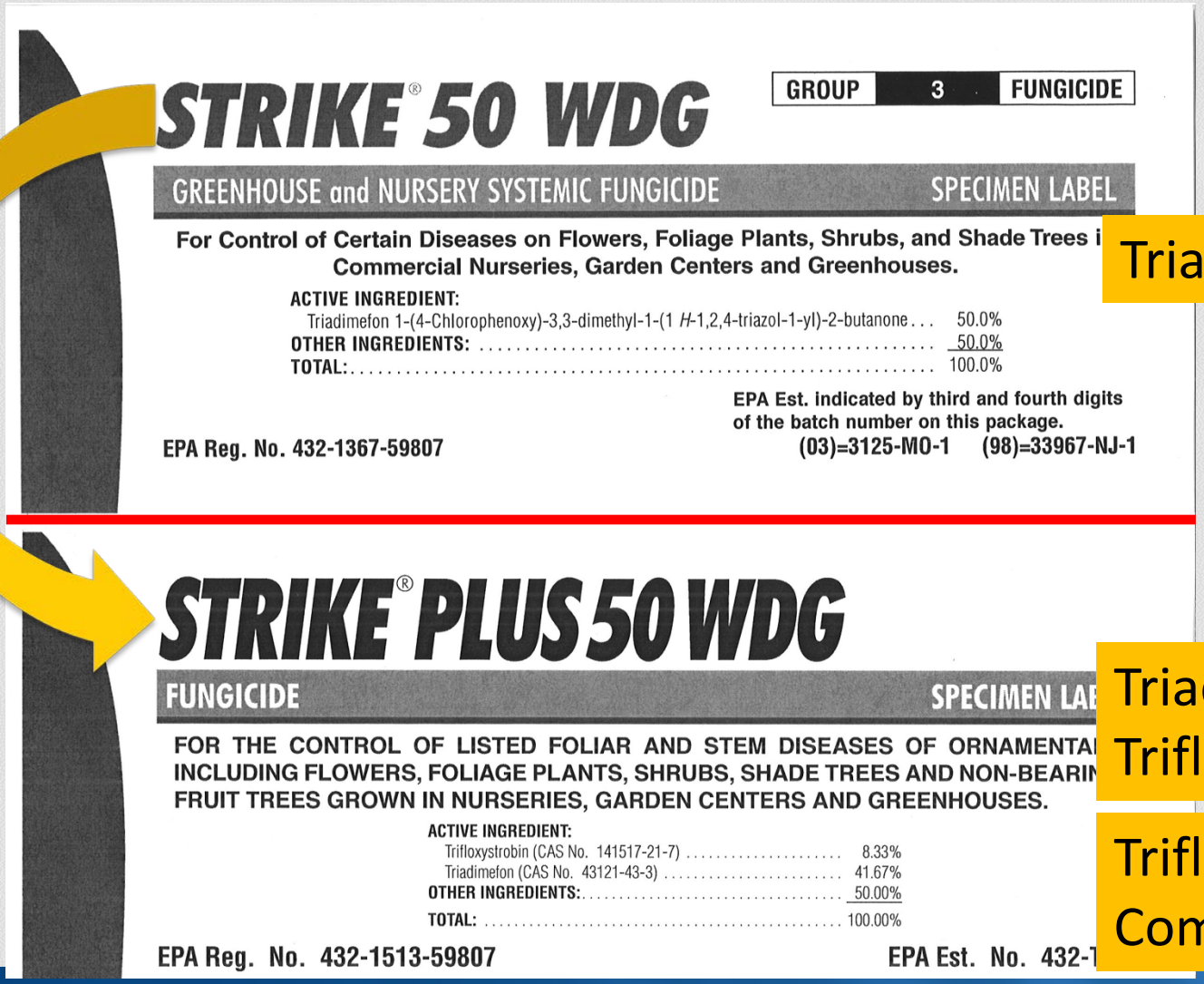
Tom Starkey
Southern Forest Nursery Management Cooperative
Auburn University


NEW

Labels


ZAPPIT
Directions for Use
CAUTION
First Aid
EPA Reg No. # 555-555
Active Ingredients

Strike to Strike Plus



STRIKE® 50 WDG

GROUP 3 FUNGICIDE

GREENHOUSE and NURSERY SYSTEMIC FUNGICIDE SPECIMEN LABEL

For Control of Certain Diseases on Flowers, Foliage Plants, Shrubs, and Shade Trees i
Commercial Nurseries, Garden Centers and Greenhouses.

ACTIVE INGREDIENT:
Triadimefon 1-(4-Chlorophenoxy)-3,3-dimethyl-1-(1 *H*-1,2,4-triazol-1-yl)-2-butanone . . . 50.0%
OTHER INGREDIENTS: 50.0%
TOTAL: 100.0%

EPA Est. indicated by third and fourth digits of the batch number on this package.

EPA Reg. No. 432-1367-59807

(03)=3125-MO-1 (98)=33967-NJ-1

STRIKE® PLUS 50 WDG

FUNGICIDE SPECIMEN LA

FOR THE CONTROL OF LISTED FOLIAR AND STEM DISEASES OF ORNAMENTA
INCLUDING FLOWERS, FOLIAGE PLANTS, SHRUBS, SHADE TREES AND NON-BEARIN
FRUIT TREES GROWN IN NURSERIES, GARDEN CENTERS AND GREENHOUSES.

ACTIVE INGREDIENT:
Trifloxystrobin (CAS No. 141517-21-7) 8.33%
Triadimefon (CAS No. 43121-43-3) 41.67%
OTHER INGREDIENTS: 50.00%
TOTAL: 100.00%

EPA Reg. No. 432-1513-59807 EPA Est. No. 432-

Triadimefon 50%

Triadimefon 42%
Trifloxystrobin 8%

Trifloxystrobin = Compass/Flint

New Terminology

- Foliar application
- Drench Application
- Sprench Application The term sprench was a result of modern pop culture, defining a hybridization of a spray and drench, and is essentially a heavy spray directed at the base of the plant. Light Foliar/Heavy Drench. Used especially with PGR

Fire Ant Control

- **UNIQUE TWO-WAY KILLING ACTION – ELIMINATES THE FIRE ANT COLONY**
- **FOR USE ON RESIDENTIAL AND COMMERCIAL PROPERTY, CONTAINER OR NURSERY STOCK, SOD FARMS, COMMERCIAL TURF, PASTURE AND RANGELAND**
- **LONG LASTING CONTROL APPROVED FOR INDOOR AND OUTDOOR USE**

SPECIMEN LABEL

ACTIVE INGREDIENTS:
Hydramethylnon (CAS #67485-29-4) 0.365%
S-Methoprene (CAS #65733-16-6) 0.250%
OTHER INGREDIENTS: 99.385%
Total 100.000%
EPA Reg No. 2724-496

PERSONAL PROTECTIVE EQUIPMENT (PPE):
WPS USES:
Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) - in general, agricultural-plant uses are covered – must wear:

Wellmark Intl
Schaumburg, IL

Insect Control

GROUP	4A	INSECTICIDE

VALENT PROFESSIONAL PRODUCTS

Safari® 2 G INSECTICIDE

For systemic insect control in ornamental plants

For Greenhouse, Interior Plantscape, Lath and Shadehouses, Nursery and Outdoor Landscape Use

Active Ingredient:	By Wt.
*Dinotefuran	2%
Other Ingredients	98%
Total	100%

*N-methyl-N'-nitro-N"-[(tetrahydro-3-furanyl)methyl] guanidine

EPA Reg. No. 59639-149
EPA Est. No. 67545-AZ-01

PESTS CONTROLLED BY *SAFARI* 2 G

- Adelgids including:
  - Hemlock Woolly
- Flatheaded Borers including:
  - Flatheaded Appletree
- Fungus Gnats (larvae)
- Glassy-Winged Sharpshooter
- Lacebugs including:
  - Azalea
- Leaf Beetles
- Leafhoppers
- Leafminers including:
  - Boxwood
  - Serpentine
- Mealybugs including:
  - Citrus
  - Long-tailed
  - Madeira
  - Obscure
  - Pink Hibiscus
  - Root
- Psyllids including:
  - Asian Citrus
- Root Weevils (larvae and adults) including:
  - Black Vine
- Roundheaded Borers including:
  - Asian Longhorned
- Scales (Armored and Soft) including:
  - Cottony Cushion
  - Cryptomeria
  - Cycad Aulacaspis
  - Duplachionaspis
  - Elongate Hemlock
  - Euonymus
  - False Oleander
  - Fletcher
  - Florida Red
  - Florida Wax
  - Oystershell
  - Pine needle
  - Tea
  - Tulip Tree
- Thrips including:
  - Chilli
  - Western Flower (suppression)
- Whiteflies including:
  - Giant
  - Greenhouse
  - Silverleaf/Sweetpotato (B and Q biotypes)
- White Grubs including:
  - Oriental Beetle

And Pending Legislation

Proposed changes to the Clean Water Act

- Farm groups fear the rules could expand EPA's ability to regulate ditches and other areas on private land, including intermittent streams. If regulated, the groups say farmers could be subject to permits and other requirements before completing typical farming tasks.
- Comment period extended to Oct. 20 2014
- EPA has received tremendous amount of flack about proposal.
- EPA has created web site to publically discuss what is true and not. (See packet for example)

Products

Got an idea???

From: Hawkins, Keith [mailto:KHawkins@agcenter.lsu.edu]
Sent: Tuesday, January 21, 2014 4:21 PM
Subject: engineering ideas
Thank you for your time.
The ag engineering students at LSU are looking for projects. If you have an idea for these young minds to engineer, please let me know.
Regards,

Keith Hawkins
PO Box 609
DeRidder, LA 70634
khawkins@agcenter.lsu.edu
Office: 337-463-7006
Cell: 318-264-2448

Liquid Micronutrient package

Ryan Atwood

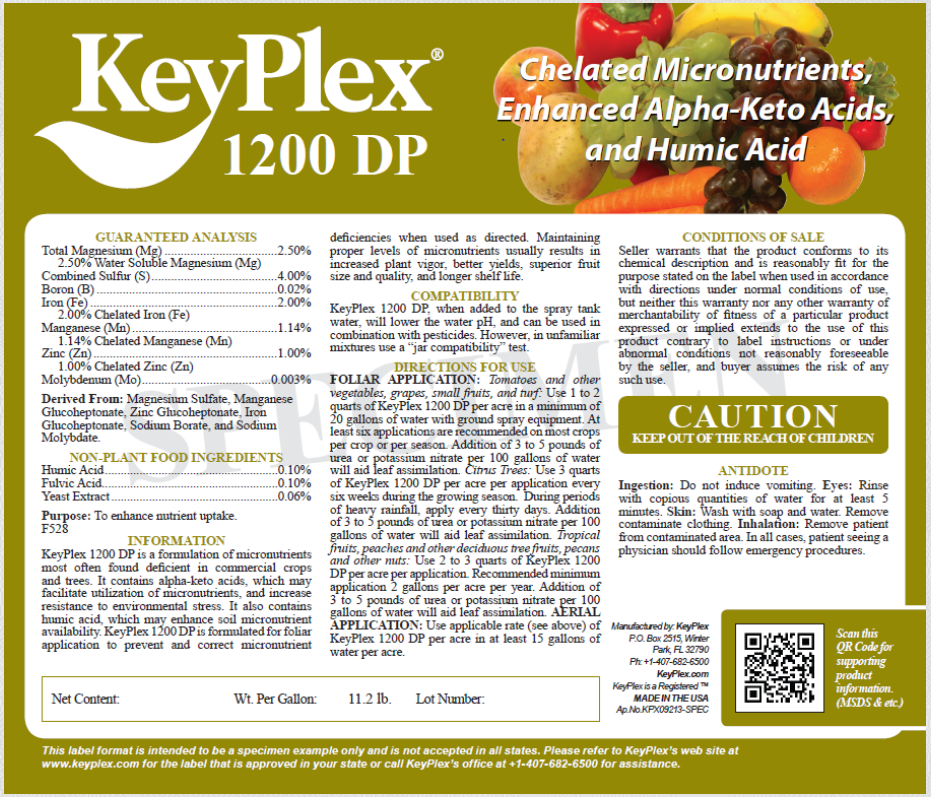
Certified Crop Advisor

Keyplex Representative

ryan@keyplex.com

352-267-3229

www.keyplex.com



KeyPlex® 1200 DP

Chelated Micronutrients, Enhanced Alpha-Keto Acids, and Humic Acid

GUARANTEED ANALYSIS

Total Magnesium (Mg)	2.50%
2.50% Water Soluble Magnesium (Mg)	
Combined Sulfur (S)	4.00%
Boron (B)	0.02%
Iron (Fe)	2.00%
2.00% Chelated Iron (Fe)	
Manganese (Mn)	1.14%
1.14% Chelated Manganese (Mn)	
Zinc (Zn)	1.00%
1.00% Chelated Zinc (Zn)	
Molybdenum (Mo)	0.003%

Derived From: Magnesium Sulfate, Manganese Glucoheptonate, Zinc Glucoheptonate, Iron Glucoheptonate, Sodium Borate, and Sodium Molybdate.

NON-PLANT FOOD INGREDIENTS

Humic Acid	0.10%
Fulvic Acid	0.10%
Yeast Extract	0.06%

Purpose: To enhance nutrient uptake.
F528

INFORMATION

KeyPlex 1200 DP is a formulation of micronutrients most often found deficient in commercial crops and trees. It contains alpha-keto acids, which may facilitate utilization of micronutrients, and increase resistance to environmental stress. It also contains humic acid, which may enhance soil micronutrient availability. KeyPlex 1200 DP is formulated for foliar application to prevent and correct micronutrient deficiencies when used as directed. Maintaining proper levels of micronutrients usually results in increased plant vigor, better yields, superior fruit size and quality, and longer shelf life.

COMPATIBILITY

KeyPlex 1200 DP, when added to the spray tank water, will lower the water pH, and can be used in combination with pesticides. However, in unfamiliar mixtures use a "jar compatibility" test.

DIRECTIONS FOR USE

FOLIAR APPLICATION: *Tomatoes and other vegetables, grapes, small fruits, and turf:* Use 1 to 2 quarts of KeyPlex 1200 DP per acre in a minimum of 20 gallons of water with ground spray equipment. At least six applications are recommended on most crops per crop or per season. Addition of 3 to 5 pounds of urea or potassium nitrate per 100 gallons of water will aid leaf assimilation. *Citrus Trees:* Use 3 quarts of KeyPlex 1200 DP per acre per application every six weeks during the growing season. During periods of heavy rainfall, apply every thirty days. Addition of 3 to 5 pounds of urea or potassium nitrate per 100 gallons of water will aid leaf assimilation. *Tropical fruits, peaches and other deciduous tree fruits, pecans and other nuts:* Use 2 to 3 quarts of KeyPlex 1200 DP per acre per application. Recommended minimum application 2 gallons per acre per year. Addition of 3 to 5 pounds of urea or potassium nitrate per 100 gallons of water will aid leaf assimilation. **AERIAL APPLICATION:** Use applicable rate (see above) of KeyPlex 1200 DP per acre in at least 15 gallons of water per acre.

CONDITIONS OF SALE

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of merchantability of fitness of a particular product expressed or implied extends to the use of this product contrary to label instructions or under abnormal conditions not reasonably foreseeable by the seller, and buyer assumes the risk of any such use.

CAUTION
KEEP OUT OF THE REACH OF CHILDREN

ANTIDOTE

Ingestion: Do not induce vomiting. **Eyes:** Rinse with copious quantities of water for at least 5 minutes. **Skin:** Wash with soap and water. Remove contaminate clothing. **Inhalation:** Remove patient from contaminated area. In all cases, patient seeing a physician should follow emergency procedures.

Net Content: Wt. Per Gallon: 11.2 lb. Lot Number:

Manufactured by: KeyPlex P.O. Box 2515, Winter Park, FL 32790 Ph: +1-407-682-6500 KeyPlex.com KeyPlex is a Registered ™ MADE IN THE USA Ap.No.KPX09213-SPEC

Scan this QR Code for supporting product information. (MSDS & etc.)

This label format is intended to be a specimen example only and is not accepted in all states. Please refer to KeyPlex's web site at www.keyplex.com for the label that is approved in your state or call KeyPlex's office at +1-407-682-6500 for assistance.

- Former Tree Improvement Forester for MeadWestvaco

Seed Polymers – a substitute for latex?

Current use of latex

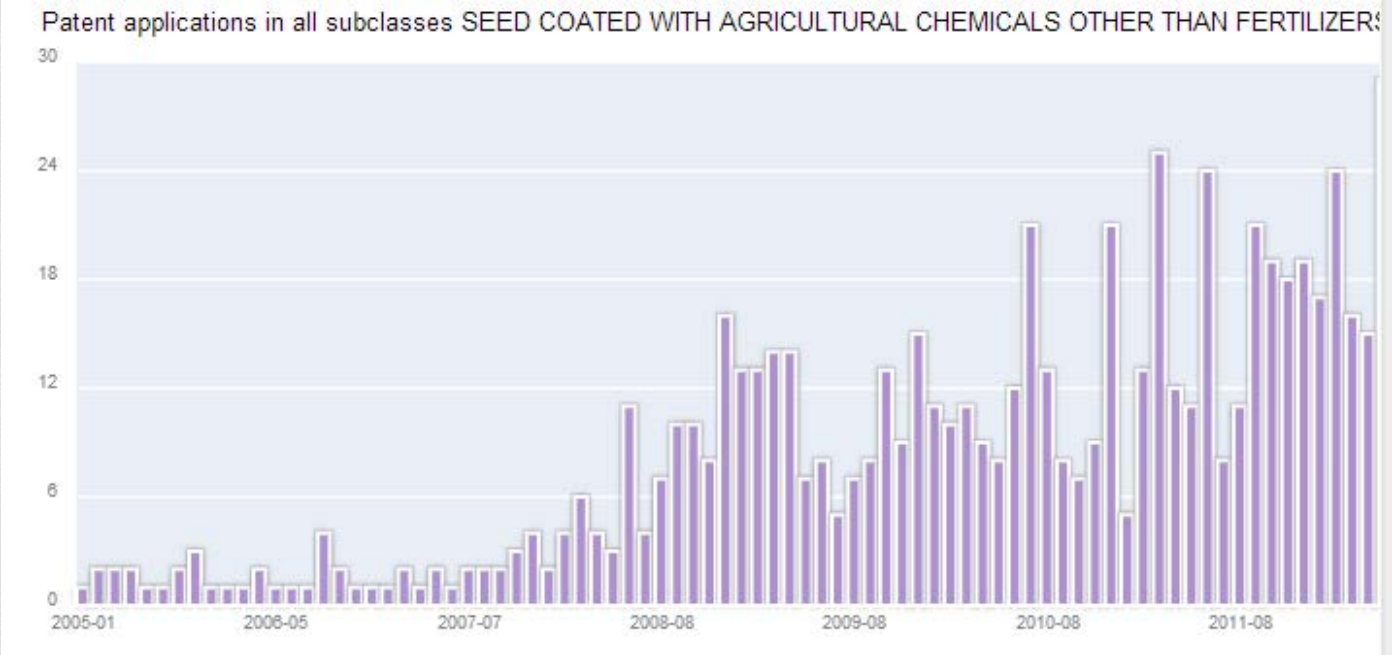
- >80% of all nurseries use latex
  - ~ 1/2 buy latex from local paint store
  - ~1/2 use Dow latex
    - “Still using latex I bought > 15+ years ago”
    - “Twisted arm and bought some from another nursery”
    - “Not an easy task to buy from DOW, especially small quantities.”
    - “DOW sent small quantity free”

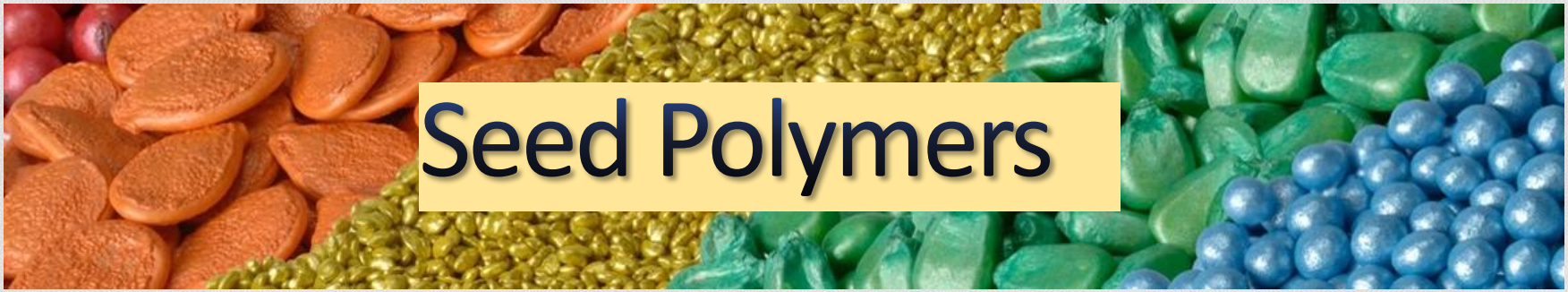
Current use of latex

- Some concerns:
  - Finding latex – at least DOW latex
  - What is a good latex?
  - Clumping of seed after drying
  - Worker Protection concerns - “dust off” during sowing

Another option??
Seed Polymers in Agriculture

- Last 5-10 years enormous amount of research on seed treatment





Seed Polymers

- Seeds and seed treatments are costly
- Ability to protect seed treatments
- To reduce “dust-off” concerns (an EPA concern)
- To enhance plantability
- Desire to enhance seed appearance & ID

Seed Polymers

- “Seed polymers are a bit like force fields: You cannot always see them, but they are there to protect.”
- To protect the growing number of pesticides and biologicals being applied to the seed.
- Provides uniform coverage of other seed treatments

Seed Polymers

- Polymers can help reduce the possibility of skips and doubles when planting – no clumping or stickiness. Increases seed drop accuracy
- Compatible with major fungicides, insecticides, inoculants and colorants

Seed Polymer

BECKER UNDERWOOD
Inventing the Future
Now part of BASF

CF CLEAR

HOME » PRODUCTS/SERVICES » SEED COATINGS » POLYMERS

Polymer seed conditioner film

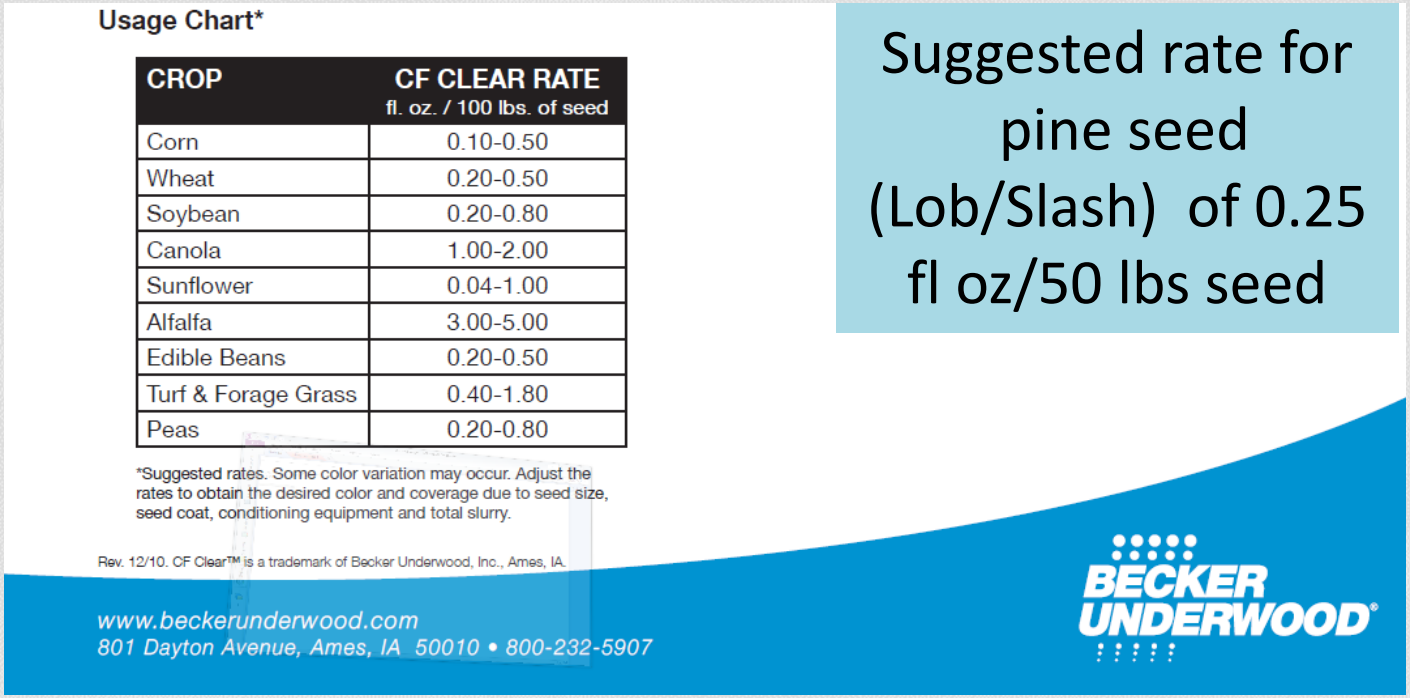
CF Clear is a water-based, low-viscosity polymer that keeps actives on the seed, controls dust-off, improves application coverage, plantability, seed flow in seed facilities, seed performance, seed appearance and seed build up, all with easy clean up.

CF Clear gives you . . .

- Strong bond for active onto seed
- Reduced dust-off
- Improved plantability and seed flow
- Easy clean-up
- Low viscosity
- Water based

Packaging: 4x1 gallons (36 per pallet), 2x2.5 gallons (36 per pallet), 30 gallons (5 per pallet), and 260 gallons (1 per pallet).

CF Clear – Becker Underwood



Usage Chart*

CROP	CF CLEAR RATE fl. oz. / 100 lbs. of seed
Corn	0.10-0.50
Wheat	0.20-0.50
Soybean	0.20-0.80
Canola	1.00-2.00
Sunflower	0.04-1.00
Alfalfa	3.00-5.00
Edible Beans	0.20-0.50
Turf & Forage Grass	0.40-1.80
Peas	0.20-0.80

*Suggested rates. Some color variation may occur. Adjust the rates to obtain the desired color and coverage due to seed size, seed coat, conditioning equipment and total slurry.

Rev. 12/10. CF Clear™ is a trademark of Becker Underwood, Inc., Ames, IA.

www.beckerunderwood.com
801 Dayton Avenue, Ames, IA 50010 • 800-232-5907

BECKER UNDERWOOD

Suggested rate for pine seed (Lob/Slash) of 0.25 fl oz/50 lbs seed

- Cost is ~ $60/gallon
- All major chemical suppliers (Helena, Greenpoint Ag, etc) can order the product.

Summary thoughts…..

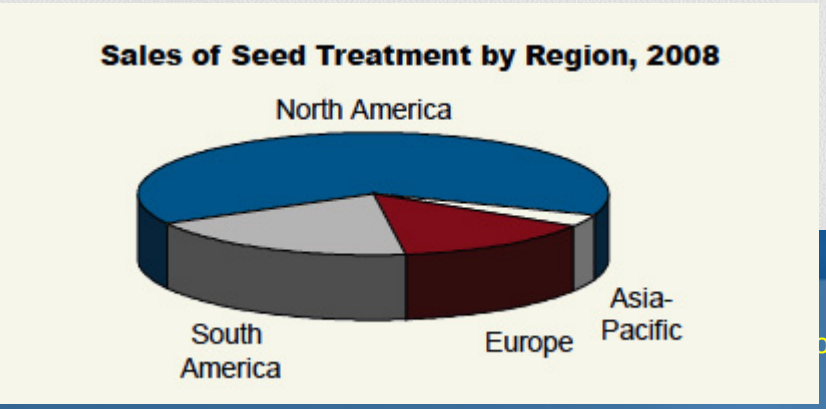
- Never assume any seed treatment will not effect seed germination. Test all additives.
- Advisory caution on use of commercial seed colorants if not previously tested.

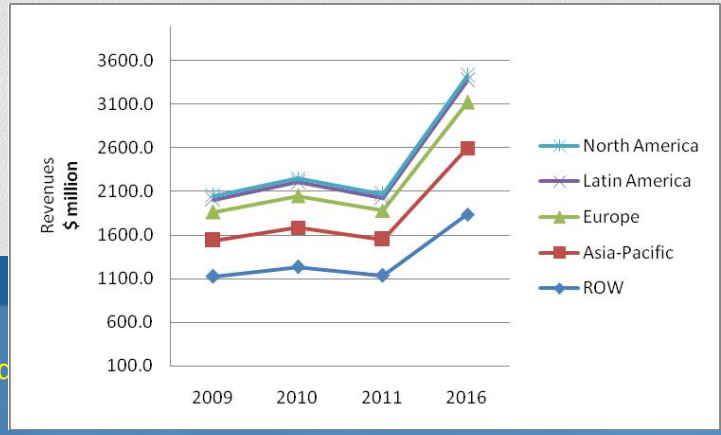
Summary of nursery managers comments on use of CF Clear

- Overall germination was the same for CF Clear and latex.
- Dustoff was absent with CF Clear – no problems with colored fingers or workers wiping chemicals accidently on face.
- CF Clear dried faster than latex which meant more seedlots could be processed in same time.

Conclusions – CF Clear

- Continue testing CF Clear if you like.
- CF Clear has definite advantages over latex
  1. Specifically formulated for seed, not the side of a house
  2. Easy to purchase
  3. Uniformity of product over region and time
  4. OSHA/EPA friendly
  5. Better coverage of seed treatments





oward Increasing Nursery Proc