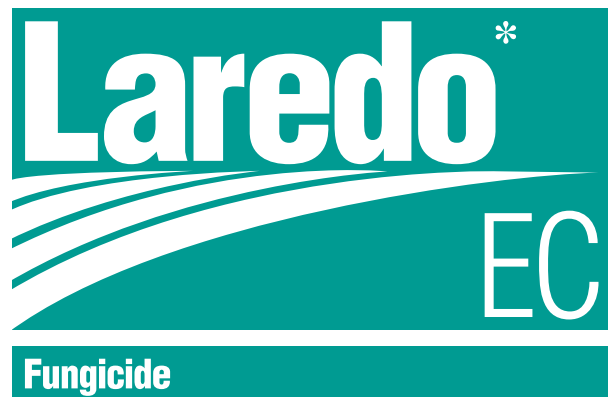


Soybean Rust Control Solutions from Dow AgroSciences

Brian Olson
Dow AgroSciences LLC
Geneva, NY

Products

 Dow AgroSciences



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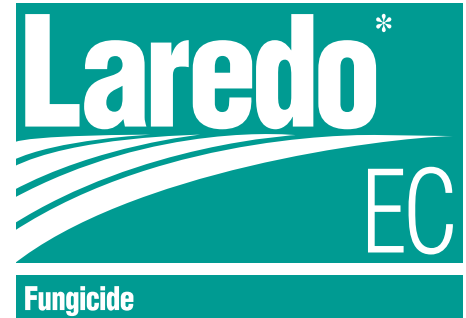
- Active ingredient: myclobutanil
- Mode of action: Demethylation Inhibitor
- Chemistry class: Triazole
- Crops on Section 3 myclobutanil labels in the USA include:
 - grapes, stone fruits, cherries, almonds, small fruits, strawberries, apples, cucurbits, tomatoes, snap beans, asparagus, turf.

Laredo[®] EC



- Active ingredient: myclobutanil
- Mode of action: Demethylation Inhibitor
- Chemistry class: Triazole
- Formulation: EC, 2 lb ai/gal
- Package size: 2.5 gal/container, 5 gal/case, 200 L drum
- REI is 24 hours

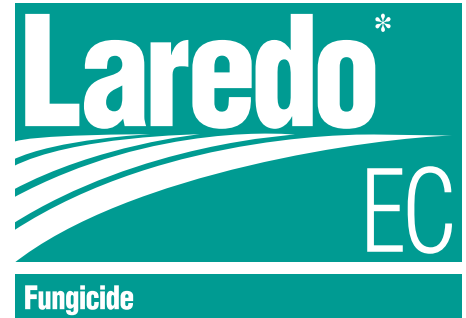
Laredo[®] EC



Section 18 for soybean rust control in soybean

- **Directions for use:**
 - Recommended use rate: 7 fl oz/acre
 - Ground or air application.
 - Apply early, before or at first signs of disease.
 - Follow with strobilurin, triazole, or strobilurin / triazole mix at 14-21 day intervals as needed if environmental conditions favor sustained epidemic.

Laredo[®] EC



Section 18 for soybean rust control in soybean

- **Use restrictions:**
 - **Do not** feed soybean forage and hay to livestock.
 - **Do not** exceed 2 applications or more than 16 fl oz of Laredo (0.25 lb ai myclobutanil / acre / year).
 - Limit of 3 applications of any combination of section 18 chemistries per season.

Laredo[®] EC



Section 18 for soybean rust control in soybean

- **Use restrictions:**
 - 0-day rotation for crops listed on Laredo and Nova labels.
 - 30-days crop rotation restriction for crops not listed on Laredo and Nova labels.

Nova[®] 40W



- Active ingredient: myclobutanil
- Mode of action: Demethylation Inhibitor
- Chemistry class: Triazole
- Formulation: WP, 40% ai
- Package size: 4x5 oz PVA/bag; 12 bag/case
- REI: 24 hours

Nova[®] 40W



Section 3 label for Snap beans

- **Directions for use:**
 - Diseases controlled: Rust (*Uromyces*) and Pod tip rot (*Rhizoctonia*)
 - Use rate: 4 – 5 oz./A
 - Begin applications when rust is first observed. Continue applications on a 7-10 spray schedule if conditions remain favorable for disease development.

Nova[®] 40W



Section 3 label for Snap beans

- Use restrictions:
 - PHI: 0-day
 - Do not apply more than 1.25 lb of Nova 40W per acre per crop.
 - 0-day rotation period for crops listed on Laredo and Nova labels.
 - 30-days rotation period restriction for crops not listed on Laredo and Nova labels.

Nova[®] 40W



Section 18 for legume crop groups 6+7 pending

- **Proposed Use Directions:**
 - Use rate: 4 – 5 oz./A
- Proposed Use restrictions:
 - PHI: 0-day
 - Do apply more than 1.25 lb of Nova 40W / acre / crop.
 - 0-day rotation for crops listed on Laredo and Nova labels.
 - 30-days rotation restriction for crops **not** listed on Laredo and Nova labels.

PropiMax[®] EC



- Registered crops in US include:
 - cereals (wheat, barley, rice), grasses grown for seed, corn, stone fruits, peanuts, pecans, celery, pineapple and sugarcane.
- Soybean Section 3 registration pending

PropiMax[®] EC



- Active ingredient: propiconazole
- Mode of action: Demethylation Inhibitor
- Chemistry class: Triazole
- Formulation: EC, 3.63 lb ai/gal
- Package size: 1 gal / jug, 4 gal / case
- REI: 24 hours

PropiMax[®] EC



Section 18 for soybean rust control in soybean

- Directions for use:
 - Recommended use rate: **6 fl oz/acre**
 - Ground or air application
 - Apply early, before or at very first signs of disease.
 - Follow with strobilurin, triazole, or strobilurin / triazole mix or at 14-21 day intervals as needed if environmental conditions favor sustained epidemic.

PropiMax[®] EC



Section 18 for soybean rust control in soybean

- **Use restrictions:**
 - PHI: Do not apply after R5 (pod fill)
 - Do not exceed 2 applications or apply more than 12 fl. oz. of PropiMax (0.34 lb ai propiconazole/acre/year)
 - Limit 3 applications of any combination of section 18 chemistries per season.

PropiMax[®] EC



Section 18 for soybean rust control in soybean

- **Use restrictions:**
 - **Do not** use hay, forage, or fodder from the soybean crop as any component of animal feed or bedding.
 - **Rotational Crop Restrictions:**
 - 0-day rotation restriction for crops listed on propiconazole labels.
 - 105-day rotation restriction for crops **not** on a propiconazole label.

Dithane[®] 75DF



Soybean rust Section 18 submission pending

- Active ingredient: mancozeb
- Mode of Action: multi-site
- Chemistry class: dithio-carbamate
- Powerful resistance management tool
- **Proposed Use Rates:**
 - 2.5 lbs/A alone (Residual control: 7-10 days alone)
 - 2.0 lbs/A tank-mixed with other products

Dithane[®] 75DF



Soybean rust Section 18 submission pending

- **Proposed Restrictions:**

- REI: 24-hours
- Do not apply more than two applications (do not apply more than 5 lb / A / year)
- PHI: 2.5 lbs/A alone, do not apply past R5; 2.0 lbs/A tank-mixed, do not apply past R6
- Do not use hay, forage, or fodder from the soybean crop as any component of animal feed or bedding.

SBR Efficacy Trials, Brazil, 2004.

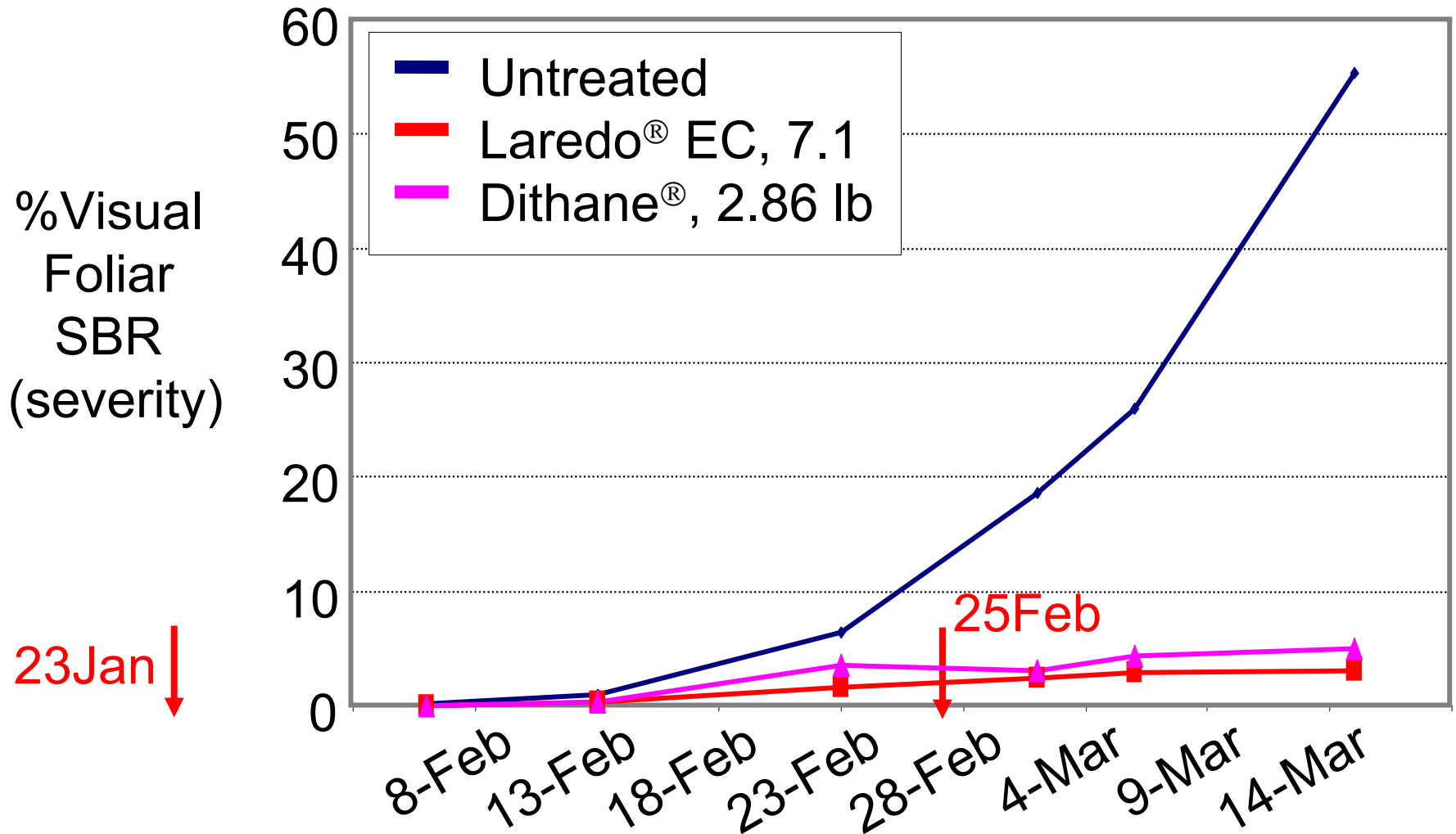
Treatments (1st application – protectant spray)

1. Untreated
2. Laredo[®] 2EC, 7.1 fl.oz./A (myclobutanil)
3. Dithane[®] 75DF, 2.86 lb/A (mancozeb)

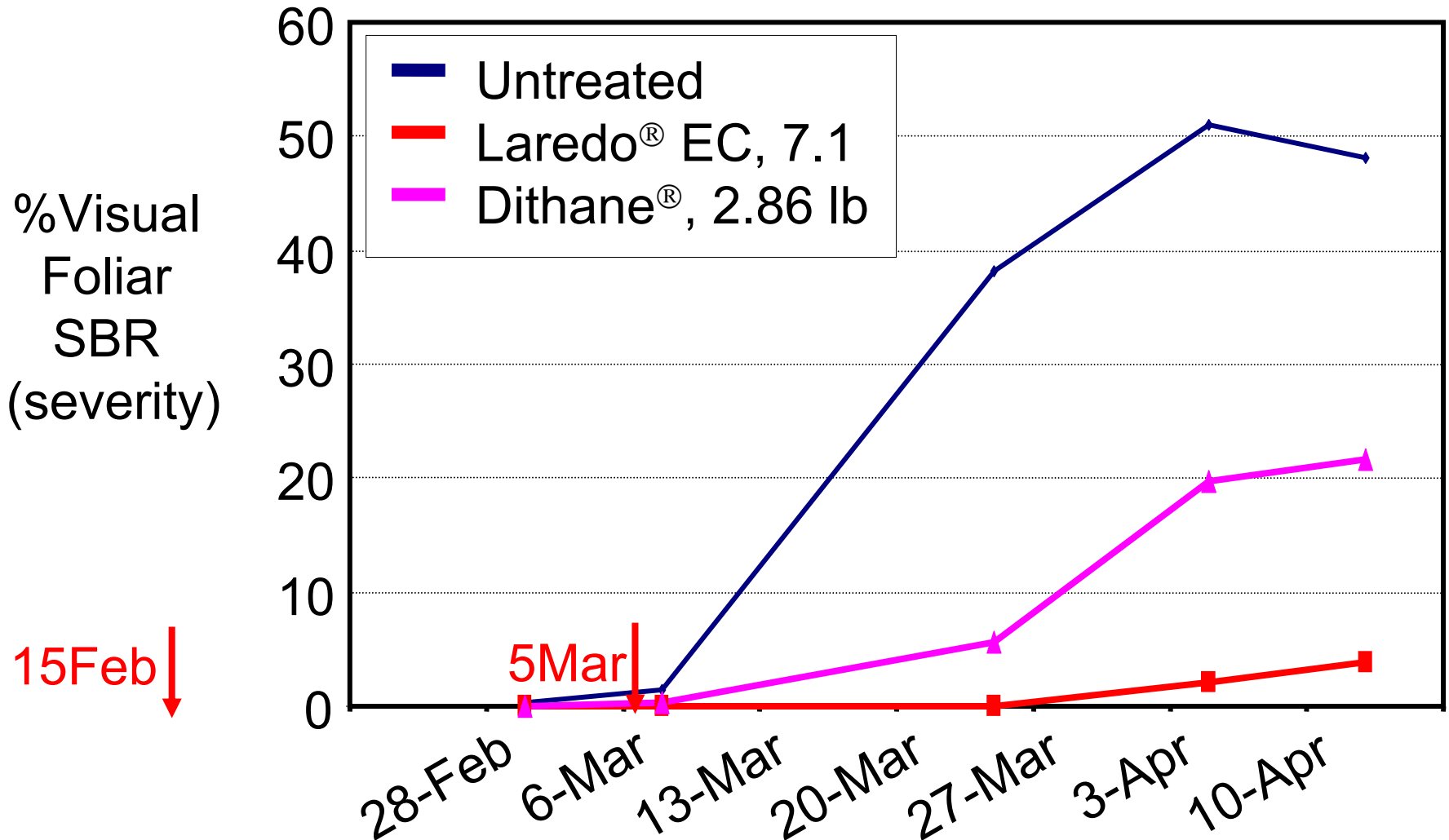
Location	Application dates	Application interval (days)	Growth stage
Cambe	23Jan, 25Feb	33	R2, R5
Mogi Mirim	14Feb, 5Mar	19	R1, R2

No SBR was observed at or prior to the 1st application.

Disease progress curves – Protectant applications. Cambe, Parana, Brazil, 2004



Disease progress curves – Protectant applications. Mogi Mirim, Sao Paulo, Brazil, 2004



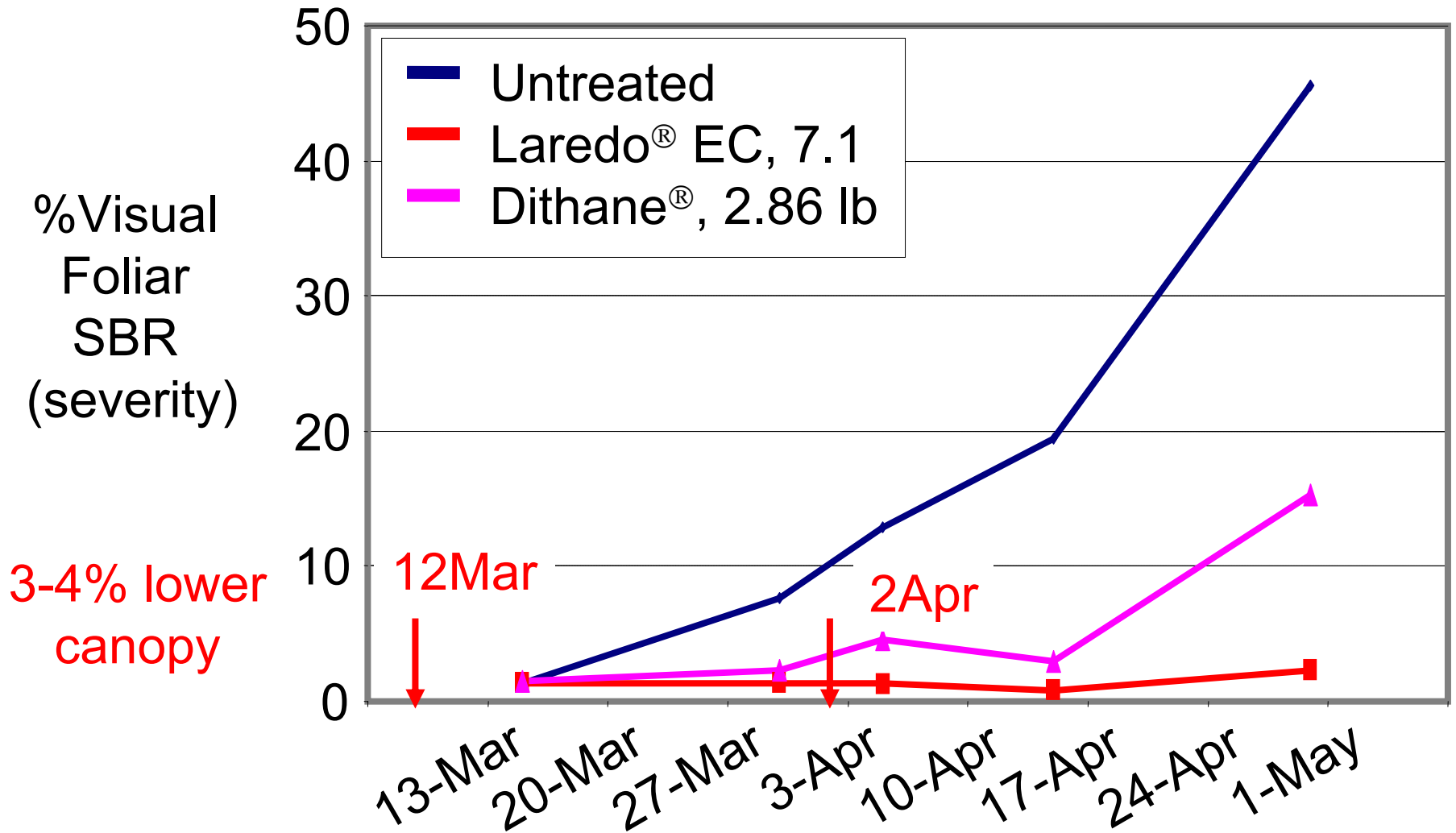
SBR Efficacy Trial, Brazil, 2004.

Treatments (1st application – curative spray)

1. Untreated
2. Laredo[®] 2EC, 7.1 fl.oz./A (myclobutanil)
3. Dithane[®] 75DF, 2.86 lb/A (mancozeb)

Location	Application dates	Application interval (days)	Growth stage	SBR infection L. canopy*
Mogi Mirim	12Mar, 2Apr	21	R1, R3	3-4%

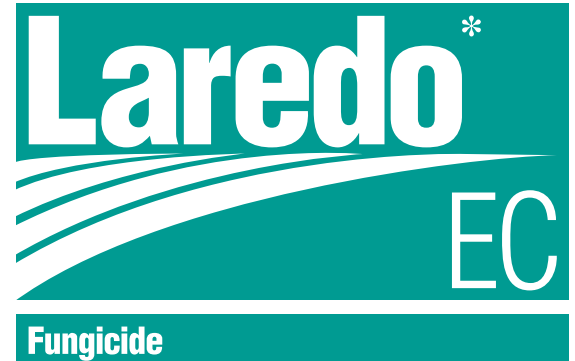
Disease progress curves – Curative applications. Mogi Mirim, Sao Paulo, Brazil, 2004



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Thank you

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