

2005 Soybean Rust Fungicide Use Guidelines

Fungicide strategy for 1 st application	Crop and disease status		Fungicide application		
	Crop stage ¹	Disease level ²	1 st application	Re-application, if needed ³	
				2 nd application	3 rd application
Pre-infection	Vegetative	No disease observed	SPRAYING NOT RECOMMENDED		
	R1 through R5	No disease observed RISK LOW	SPRAYING NOT RECOMMENDED		
	R6 or later	No disease observed but RISK HIGH	Chlorothalonil ⁴	Triazole ⁵	Premix ⁶
			OR	Premix ⁶	Premix ⁶ OR Triazole ⁵
			Strobilurin ⁷	Triazole ⁵	Premix ⁶
			OR	Premix ⁶	Triazole ⁵ OR Premix ⁶
			Triazole ⁵	Premix ⁶	Premix ⁶ OR Triazole ⁵
Premix ⁶			Triazole ⁵	Premix ⁶	
		Premix ⁶	Triazole ⁵		
R6 or later	Irrelevant	Limited product availability/non-economical			
Early-post infection	Early-vegetative	Increasing	BENEFIT TO SPRAYING UNCERTAIN		
	Late-vegetative through R5	10% or less incidence in lower canopy	Triazole ⁵	Premix ⁶	Premix ⁶ OR Triazole ⁵
			Premix ⁶	Triazole ⁵	Premix ⁶
				Premix ⁶	Triazole ⁵
R6 or later	Irrelevant	Limited product availability/non-economical			

1. Vegetative = collective stages before flowering; R1 = beginning flowering; R6 = full seed. The vast majority of reports from Africa and Brazil indicate that soybean rust does not need to be controlled when detected in the vegetative crop stages as long as a curative spray program is initiated as soon as crop flowering begins. Spraying before crop flowering, however, may be prudent if disease is increasing and the crop is approaching R1. This is especially true for late-planted crops and/or very late-maturing varieties that may develop a large canopy before flowering.

2. Incidence is number of plants out of 100 with any rust. Risk is determined according to national, regional, and local reports of rust activity and disease forecasts.

Yield loss is very likely once rust can be found in the mid crop canopy. Numerous factors play into the decision as to the latest one should apply a fungicide. Factors such as crop stage, disease level, yield potential, crop insurance, and many other factors should be considered. Fungicide labels specify upper limits for their products.

3. One, two, or three applications may be needed, depending upon when the disease comes in and at what crop stage the first application is made. Spray coverage and penetration into the canopy are essential to success. Before making applications late in the season, be sure to **consult the product label for days to harvest or growth stage restrictions**. Labels also indicate specific intervals between sprays for different disease situations. These spray intervals must be followed or rust control may be lost. **Consecutive, solo applications of a Strobilurin or a Triazole should never be made due to resistance concerns.**

4. Chlorothalonil is a protective fungicide that should only be used as the 1st application in a pre-infection program.

5. Triazoles (e.g., myclobutanil, propiconazole, tebuconazole, tetraconazole) have **limited curative ability** and may have reduced efficacy if disease incidence in the lower canopy exceeds 10%. Only one application of tetraconazole (i.e., Domark) is allowed. **No more than two applications may be made with any given section 18 active ingredient.**

6. A Premix is a manufactured combination product of a Strobilurin + Triazole. Use Triazole + Strobilurin co-packs and label-approved tank mixes the same as you would a manufactured premix. **No more than two applications may be made of any given section 18 active ingredient.**

7. Strobilurins (e.g., azoxystrobin, pyraclostrobin) are protective products and have NO curative activity. Solo applications of a Strobilurin should be restricted to the 1st application in a pre-infection program.