



Compatibility in the Spray Tank

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Editor's Note: Julie Meyer's column will be back next issue. For this one, it seemed a good opportunity to reproduce Dr. Paul Sartoretto's widely distributed and frequently followed guide for pesticide compatibility. For those who haven't seen it or who have lost track of your copy, here it is. Dr. Sartoretto has been a speaker in Wisconsin at a WGCSA meeting in the past. His recommendations are offered for your file; no endorsements are implied.

1. Never tank mix emulsifiable insecticide concentrates with other chemicals, but insecticides can be tank mixed with each other for better control.

2. All insolubles can be tank mixed without incurring phytotoxicity, provided the products are sprayed at recommended rates.

3. Only one soluble chemical can be tank mixed with one or more insolubles. If two soluble chemicals are tank mixed with or without insolubles, avoid phytotoxicity by cutting the rate of each soluble in half.

4. Soluble fertilizers and trace elements can be added individually or mixed, provided the amount will not exceed 2 ounce solid per gallon of tank spray mix in hot weather, or 4 ounces per gallon in warm weather. Six ounces per gallon can be used in cool weather.

Tank Mixing Different Products

A. Check for Compatibility

Fill a quart jar $\frac{3}{4}$ full of water. Add 12 teaspoons of dry product or 1 teaspoon of liquid product. Cover jar and shake. Let stand 15 minutes. Check the mixture for separation, formation of globules, or formation of films. If compatible, the mixture should appear uniform.

B. Adding Different Product Formulations to the Tank

Fill $\frac{1}{2}$ to $\frac{3}{4}$ full. Begin agitation and add products in this order:

1. Wettable Powders FIRST: allow for full suspension before adding other products.
2. Add Flowables next.
3. Add EC's (Emulsifiable Concentrates) last.

Solubles: EC, S, SP	Insolubles: WP, F	Soluble-insoluble combination (Treat as solubles)
FUNGICIDES		
Subdue	Tersan 75	Bayleton
BANOL	Tersan SP	Fore
ALLIETTE	Spotrete	Maneb
BANNER	Bromosan	Zeneb
RUBIGAN EC	Spectrol	Captain
	3336	Daconill 2787
	1991	Fungo
	Rubigan WP RP2601.9	
	Scotts fungicides I, II, III	
INSECTICIDES		
Dursban	Malathion	Oftanol
Diazinon	Proxol	Diazinon
Chlordane	Dylox	Dursban
Sevin	Triumph	Sevin
		Malthion
HERBICIDES		
Dacthal	2, 4-D	MCPA
MCPP	DSMA	Tupersan
Dicamba	MSMA	Balan
ACCLAIM	AMA	SURFLAN
	Betasan-EC	
FERTILIZERS		
urea		Nitroform (Powder Blue)
ammonium nitrate		IBDU
ammonium phosphate		Fluf (flowable ureaform)
ammonium sulfate		
potassium nitrate		
muriate of potash		
Formolene		
Cleary's Water Soluble N-P-K's		
<p>The ideal fungicide tank mix is a three-way combination of soluble contact/insoluble systemic chemicals. To get broader coverage than the single soluble at full rate, two soluble contacts can be mixed, each at half rate.</p>		