

# Recent Tests with Surface Disinfectants

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There is a need for a chemical that is safe to use on your skin and for foot-bath and treatment of surfaces (tables, small tools, etc.). Seven commercial hospital disinfectants were evaluated for control of Fusarium roseum, F. oxysporum and Phialophora cinerescens. Note that the test these compounds have undergone is quite strict and specialized. All of the tested chemicals might have value as disinfectants in other areas than commercial flower growing, but as you can see in Table 1, only one or two have value for this purpose.

It is also important to know how long the chemicals last when mixed and left in open containers. Experiments with soil added to the solutions (1 ml field soil per 100 ml solution) did not hasten the breakdown as compared to open bottles. As you can see, after three days Amphyl and LF 10 also had lost most of their activity. At seven days they still had activity but none was strong enough to sterilize the stones. The result from Table 1 was after 10 minutes treatment.

Amphyl was added to soap water to see if fungus and virus control could be combined. There was no complete kill at 1, 2, and 3%, so this combination cannot be recommended. Use amphyl and soap in

separate containers.

Amphyl sprays did not sterilize stones or agar cubes of F. roseum, F. oxysporum, Alternaria sp., Rhizoctonia solani or Pythium ultimum but growth was slowed down.

Spray solutions made of Amphyl at 1, 2, and 3% also did not give complete kill.

Amphyl, however, is the most effective of all and it can be recommended for repeated treatments at 2 and 5% concentrations.

Table 1. Result of 10 minutes treatment with seven hospital disinfectants on 3 carnation pathogens.

Chemical	F. roseum					F. oxysporum					Ph. cinerescens				
	1	2	4	8	50	1	2	4	8	50	1	2	4	8	50%
Amphyl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LF 10	+	+	(+)	-	-	+	+	(+)	(+)	-	+	-	-	-	-
NL 10	+	+	+	+	-	+	+	+	+	-	+	+	+	+	-
Tergisyl	+	+	+	(+)	-	+	+	+	-	-	+	+	+	-	-
O-Syl	+	+	+	+	-	+	+	+	+	-	+	+	+	-	-
Wescodyne	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-
Roccal	+	+	+	+	-	+	+	+	+	-	+	+	+	-	-

After 3 Days	F. roseum	F. roseum (7 days)			
Amphyl	+	+	+	-	Growth in all.
LF 10	+	+	+	+	
NL 500	+	+	+	+	
Tergisyl	+	+	+	+	+ = growth
O-Syl	+	+	+	+	(+) = very little growth
Roccal	+	+	+	+	- = no growth

Dips gave the following results:

Table 2. Idealite stones with Fusarium roseum dipped in the two most effective disinfectants.

Chemicals	Concentration percentage		
	5	20	50
Amphyl	+	(+)	-
LF 10	+	+	+

+ = growth; (+) = good effect but not 100% kill; - = no growth.

## Soil Fungicide 345

Soil fungicide 345 is a broad spectrum material showing high activity as an eradicator and as a protectant against many soil-inhabiting fungi that damage greenhouse plants. Dr. Arthur McCain, formerly Extension Plant Pathologist, and R. H. Sciaroni, Farm Advisor, conducted extensive experiments on the effectiveness of 345 when applied as a soil drench for controlling certain soil-borne diseases on ornamental plants grown in containers (clay pots, metal cans, and benches).

This fungicide is quite versatile and can be applied as a drench with a sprinkling can or a mechanical

proportioning system. Here are some ways that the fungicide can be used:

1. Treatment of established plantings to control existing infestation or prevent reinfestation of sterile soil.
2. Treatment of soil used for potting mix and cutting medium.
3. Preplant treatment of flats, seedbeds, and general planting areas for control of soil fungi.

345 is presently registered for use in California only. Growers who wish to use this product should do so on a small test plot basis at first. The directions on the package label as to dosage and other precautions in handling and using should be carefully followed. A brochure describing this fungicide is available.

R. H. Sciaroni - from Flower and Nursery Notes, Univ. of Calif. Agric. Extension Service, Nov. 1968.

Your editor,



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