Summary of Cherry and Peach Trials for Control of Brown Rot Fruit Rot from 1989 to 2006.

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Frequent spring rains during bloom encourage the development of brown rot (*Monilinia fructicola* and *M. laxa)* on many different *Prunus* sp. in the Willamette Valley of Oregon. Brown rot is an annual problem in the cherry and peach blocks located at OSU's Botany and Plant Pathology Field Laboratory across the Willamette River from Corvallis, OR. The objective of this report is to summarize, in a simple way, the various cherry and peach brown rot fruit rot trials conducted from 1989 to 2006. (Blossom blight trials were summarized in 2005.)

Trials were conducted on cherry 'Royal Anne' or 'Black Republican' and/or peach 'Elberta' or 'Red Haven'. Results have been averaged across cultivars but cherry data was separated from peach data. All trees generally had applications during bloom of one or more materials. Pre-harvest applications, of which this summary is based, occurred anywhere from 14 to 0 days before harvest. There were generally 1 to 2 pre-harvest applications for cherry and 2 to 3 applications for peach. Only healthy appearing fruit were harvested, put in moist chambers at ambient temperatures and allowed to rot for many days.

Several synthetic (Tables 1 and 2), organic and biological (Table 3) products have been evaluated. The number of times a product or program has been evaluated is indicated by the "number of trials" column. Some were tested only once while others were tested for multiple years. The more times a product is evaluated (or the higher the number of trials) the more confidence one can have in the summary statistic presented.

Trial results are summarized relative to the nontreated control and expressed on a percentage basis. For example, if the nontreated control had 20% fruit rot and a certain treatment had 1% fruit rot then the percent control would be calculated as (1 - (1/20)) x 100 = 95% control. It should be noted that this approach does not focus on rates, timing, weather or other factors highly important for interpretation of the data. Unfortunately, there are no statistical comparisons possible between any of these materials given the way this data was summarized. It is not possible to say that 75% control is significantly different from 60% control.

Overall, it appears that post harvest brown rot fruit rot control in cherry is much easier and with much more effective chemistry than for peach (Table 1). Abound appears to be good to excellent for control of fruit rot in peach (Tables 1 and 2). Organic or biological materials have not preformed well in these trials (Table 3).

Table 1. Synthetic materials used alone for fruit rot management.

Material	Cherry		Peach	
	# of Trials	% Control of Brown Rot Fruit Rot	# of Trials	% Control of Brown Rot Fruit Rot
Captan	4	75	7	60
Thiram	0	----	2	54
Ronilan	1	56	3	58
Rovral	13	89	7	57
Fluazinam	1	9	0	---
Elevate	0	---	2	64
Vangard	1	71	1	70
Elite	4	73	1	61
Funginex	1	65	4	84
Indar	3	93	3	60
Orbit	3	91	5	69
Procure	2	98	0	---
Rally	2	97	3	66
Rubigan	2	88	0	---
Abound	1	92	6	82
Cabrio	2	98	0	---
Pristine	5	94	0	---

Table 2. Synthetic materials tank mixed or used in rotation.

Material*	Cherry		Peach	
	# of Trials	% Control of Brown Rot Fruit Rot	# of Trials	% Control of Brown Rot Fruit Rot
Captan + Benlate	0	---	1	89
Captan + Ronilan	0	---	1	85
Captan + Rovral	0	---	1	89
Ronilan + Thiram	0	---	1	86
Vangard + Orbit	0	---	2	78
Rubigan + Cyprex	1	91	0	---
Funginex/Rovral	0	---	2	72
Abound/Orbit	0	---	1	94

* + = tank mix of materials; "/" = alternation of materials.

Table 3. Organic and biological materials tested alone.

Material	**Cherry**		**Peach**	
	# of Trials	**% Control of Brown Rot Blossom Blight**	**# of Trials**	**% Control of Brown Rot Blossom Blight**
Sulfur	4	53	2	39
Neem Oil	1	5	0	---
Seaweed	0	---	2	11
Compost Tea (plant based)	0	---	1	0
Serenade	0	---	2	0