



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 19 1986

PESTICIDE OFFICE OF
AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Captan. Addendum to Residue Reduction Data
Submitted in Response to 04/29/85 DCI Letter.
Accession No. 263843. RCB No. 1334.

FROM: Lynn M. Bradley, Chemist
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THRU: Andrew R. Rathman, Section Head
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TO: Carol Monroe, PM #73
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and

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The Captan Task Force has submitted additional analyses of almonds, grapes, oranges and summer squash, to accompany the earlier report of Residue Reduction Data. (Accession No. 262770, see the review of L. M. Bradley, 7/22/86). These data have been incorporated into the tables from that earlier review, and the entire table reproduced here.

These new data are consistent with the conclusions and observations from that 7/22/86 review. We agree with the Task Force's explanation that the high levels of captan in raisin waste are probably due to the captan dust particles remaining behind after good raisins were removed. These levels are well within the raisin tolerance.

Attachment (not CBI)

cc:w/Attachment:Captan, SF., L.M. Bradley(2), RF, Circu, E. Saito(SIS)
PMSD/ISB

TS-769:CM#2:RM804:LMBradley:wh:9/18/86
RDI:ARathman:9/17/86

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attachment

captan almonds

interim tolerances 2 ppm on nuts, 100 ppm on hulls

CA four applications @ 5 lb ai/A (ground) 128 day PHI

Recoveries 75-100% @ 0.1-0.5 ppm

	total	captan	THPI	% THPI
nutmeats	0.04	0.04	0.00	0.00
	0.03	0.03	0.00	0.00
hulls	6.45	6.40	0.05	0.78
	4.38	4.30	0.08	1.83
shells	0.09	0.09	0.00	0.00
	0.06	0.06	0.00	0.00

CA four applications @ 5 lb ai/A (aerial) 152 day PHI

Recoveries 71-96% @ 0.05-0.5 ppm

	total	captan	THPI	% THPI
nutmeats	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00
hulls	0.28	0.28	0.00	0.00
	0.19	0.19	0.00	0.00
shells	0.01	0.01	0.00	0.00
	0.01	0.01	0.00	0.00

captan grapes

tolerance 50 ppm raisins 50 ppm

NY 7 applications @ 3 lb ai/A 0 PHI
recoveries 78-114% @ 0.05-10 ppm

	total ppm	captan ppm	THPI ppm	%THPI	% total remaining
RAC	5.08	5.00	0.03	0.02	
	5.83	5.70	0.13	0.02	
washed	2.03	2.00	0.03	1.48	37.21
PROCESSED					
dry pomace	1.08	0.62	0.46	42.59	
wet pomace	2.23	0.53	1.70	76.23	
juice	2.90	0.00	2.90	100.00	

CA 7 applications @ 3 lb ai/A 85 day PHI
raisins dusted with captan 5%, 7 days PHI
recoveries 80-130% @ 0.01-5 ppm

	total ppm	captan ppm	THPI ppm	%THPI	% total remaining
RAC	1.93	1.90	0.03	1.55	
	1.61	1.60	0.01	0.62	
washed	0.69	0.67	0.02	2.90	38.98
PROCESSED					
raisins	1.23	0.86	0.42	32.81	
waste	5.50	5.00	0.50	9.09	
off-grade	24.98	24.00	0.98	3.92	

WA 5 applications @ 3.0 lb ai/A
Recoveries 80-106% @ 0.5-5 ppm

	total ppm	captan ppm	THPI ppm	%THPI	
RAC	12.21	12.00	0.21	1.72	
	10.01	9.80	0.21	2.10	
PROCESSED					
dry pomace	12.00	0.00	12.00	100.00	
	5.30	0.00	5.30	100.00	
wet pomace	2.90	0.00	2.90	100.00	
	3.42	0.02	3.40	99.42	
juice	3.30	0.00	3.30	100.00	
	6.20	0.00	6.20	100.00	

captan oranges

tolerance 25 ppm (interim)

CA 2 applications @ 8 lb ai/A plus one @ 5 lb ai/A 0 PHI
recoveries 82-120% @ 0.05-1pm

	total ppm	captan ppm	THPI ppm	XTHPI	% total remaining
RAC	2.03	2.00	0.03	1.48	
	1.52	1.50	0.02	1.32	
washed fruit	0.10	0.08	0.02	20.00	5.63
washed peel	0.10	0.02	0.08	80.00	5.63
pulp	0.10	0.00	0.10	100.00	5.63
COMMERCIAL PROCESSING					
washed wet fruit	0.19	0.19	0.00	0.00	
wet peel	0.13	0.01	0.12	92.31	
dried peel	0.00	0.00	0.00		
dried fines	0.02	0.00	0.02	100.00	
juice	0.00	0.00	0.00		
molasses	0.00	0.00	0.00		
cold pressed oil	0.00	0.00	0.00		

AZ 2 applications @ 8 lb ai/A plus one @ 5 lb ai/A 0 PHI
recoveries 80-101% @ 1-15 ppm

	total ppm	captan ppm	THPI ppm	XTHPI	% total remaining
RAC	2.33	2.30	0.03	1.29	
	2.34	2.30	0.04	1.71	
washed fruit	0.49	0.40	0.09	18.37	20.99
washed peel	0.70	0.23	0.47	67.14	29.98
pulp	0.02	0.01	0.01	50.00	0.86

captan summer squash

tolerance 25 ppm

CA 6 applications @ 2 lb ai/A 0 PHI
recoveries 90-111% @ 0.2-3 ppm

	total ppm	captan ppm	THPI ppm	%THPI	%total remaining
RAC	0.23	0.12	0.11	47.83	
	0.21	0.14	0.07	33.33	
washed fruit	0.04	0.01	0.03	75.00	18.18
washed peel	0.12	0.05	0.07	58.33	54.55
peeled fruit	0.01	0.00	0.01	100.00	4.55
cooked fruit	0.02	0.00	0.02	100.00	9.09
water (ug/ml)	0.02	0.00	0.02	100.00	

NY 6 applications @ 2 lb ai/A 0 PHI
recoveries 67-170% @ 0.01-2 ppm

	total ppm	captan ppm	THPI ppm	%THPI	%total remaining
RAC	1.21	1.10	0.11	9.09	
	1.54	1.40	0.14	9.09	
washed fruit	0.14	0.05	0.09	64.29	10.22
washed peel	0.32	0.12	0.20	62.50	23.36
peeled fruit	0.02	0.00	0.02	100.00	1.46
cooked fruit	0.04	0.00	0.04	100.00	2.92
water (ug/ml)	0.03	0.00	0.03	100.00	