

19th ANNUAL ALMOND RESEARCH CONFERENCE, DECEMBER 3, 1991

Project No. 90-P17 - Aflatoxin Monitoring Programs

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Objectives: 1) To continue the programs of monitoring aflatoxins in various almond projects which have been in effect since 1973. 2) To continue participation in an aflatoxin analytical check program carried out by the American Oil Chemist Society and World Health Organization.

Progress: The monitoring program, which has been continued since 1973, is intended to demonstrate the concern of the almond industry in policing itself and, more importantly, monitoring the yearly trend of removing aflatoxins from edible products intended for human consumption. This monitoring program, as always, remains extremely important to: (1) demonstrate the industry's concern for maintaining a high quality product free of aflatoxins and (2) provide regulatory officials with the opportunity to direct their resources to more likely areas of food contamination.

<u>Type of Sample</u>	<u>Samples Collected</u>	<u>Number Contaminated</u>
Select Nuts	98	3 (10, 16, 49 ppb)
Mfg. Stock	40	1 (20 ppb)
Hulls	23	3 (1, 3, 57 ppb)
Oil Stock	11	9 (9, 30, 40, 51, 56, 71, 75, 90, 123)

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	<u>SELECT NUTS</u>		<u>MFG. STOCK</u>		<u>OIL STOCK</u>		<u>HULLS</u>	
	<u>% Contaminated</u> <u>No. Sampled</u>	<u>%</u>	<u>% Contaminated</u> <u>No. Sampled</u>	<u>%</u>	<u>% Contaminated</u> <u>No. Sampled</u>	<u>%</u>	<u>% Contaminated</u> <u>No. Sampled</u>	
1973	NS	0	11/50	22	NS	0	NS	0
1974	0/34	0	7/50	14	22/34*	64.7	NS	0
1975	NS	0	13/100	13	16/16	100	NS	0
1976	NS	0	7/55	12.7	30/51*	59	1/15	6.7
1977	1/100	1.0	1/40	2.5	10/10	100	5/20	25
1978	5/100	5.0	2/41	4.9	10/10	100	3/20	15
1979	1/100	1.0	2/40	5	10/10	100	0/20	0
1980	2/100	2.0	1/41	2.4	10/10	100	2/21	9.5
1981	3/114	2.6	2/41	4.9	10/10	100	2/14	14
1982	4/93	4.3	2/41	4.9	6/9	67	2/19	11
1983	3/100	3.0	1/40	2.5	9/10	90	1/21	4.8
1984	2/107	1.9	1/40	2.5	8/13	62	4/16	25
1985	0/104	0	2/36	5.6	2/2	100	0/25	0
1986	0/95	0	3/44	6.8	6/7	86	0/20	0
1987	0/105	0	0/38	0	9/10	90	4/22	18
1988	1/97	1.0	3/44	6.8	19/21	90	0/20	0
1989	2/130	1.5	2/36	5.6	8/8	100	3/20	15
1990	3/98	3.0	1/40	2.5	9/11	82	3/23	13

NS = No Samples Taken

* = Reject Nuts, Not Press Cake Meal

	<u>SELECT NUTS</u>		<u>MF6. STOCK</u>		<u>OIL STOCK</u>		<u>HULLS</u>	
	<u>% Contaminated No. Sampled</u>	<u>%</u>	<u>% Contaminated No. Sampled</u>	<u>%</u>	<u>% Contaminated No. Sampled</u>	<u>%</u>	<u>% Contaminated No. Sampled</u>	
1973	NS	0	11/50	22	NS	0	NS	0
1974	0/34	0	7/50	14	22/34*	64.7	NS	0
1975	NS	0	13/100	13	16/16	100	NS	0
1976	NS	0	7/55	12.7	30/51*	59	1/15	6.7
1977	1/100	1.0	1/40	2.5	10/10	100	5/20	25
1978	5/100	5.0	2/41	4.9	10/10	100	3/20	15
1979	1/100	1.0	2/40	5	10/10	100	0/20	0
1980	2/100	2.0	1/41	2.4	10/10	100	2/21	9.5
1981	3/114	2.6	2/41	4.9	10/10	100	2/14	14
1982	4/93	4.3	2/41	4.9	6/9	67	2/19	11
1983	3/100	3.0	1/40	2.5	9/10	90	1/21	4.8
1984	2/107	1.9	1/40	2.5	8/13	62	4/16	25
1985	0/104	0	2/36	5.6	2/2	100	0/25	0
1986	0/95	0	3/44	6.8	6/7	86	0/20	0
1987	0/105	0	0/38	0	9/10	90	4/22	18
1988	1/97	1.0	3/44	6.8	19/21	90	0/20	0
1989	2/130	1.5	2/36	5.6	8/8	100	3/20	15

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