

Project No. 93-P20 - Aflatoxin Monitoring Program

Project Leader: Mr. Frank A. Mosebar
 DFA of California
 P.O. Box 270-A
 Santa Clara CA 95052
 (408) 727-9302

Cooperating Personnel: Paul Bolin

- 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.

Results: 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) show that unavoidable aflatoxins in almonds are removed during normal processing (2) demonstrate the industry's concern for maintaining a high quality product free of aflatoxins and (3) 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	100	0
Mfg. Stock	40	1 (2ppb)
Hulls	20	3 (2,4,11 ppb)
Oil Stock	10	10 (13,13,16,17,23), (24,29,31,31,32), (ppb)

	<u>SELECT NUTS</u>		<u>MF6. 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>	<u>%</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
1991	1/99	1.0	3/40	7.5	3/4	75	2/20	10
1992	0/100	0	3/40	7.5	10/10	100	3/20	15

NS = No Samples Taken

* = Reject Nuts, Not Press Cake Meal