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1956 Report of the Experiment Station Avocado Test Plot

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At present 62 strains of avocados are growing in the Experiment Station avocado test plot. Most of these are selections made in northern and central Mexico. There also are a few Florida and California varieties included in the test. The first trees were planted in 1950. Since that time, data were recorded on the fruiting performance of several varieties. Cold tolerance of some strains in the plot was reported (Maxwell, 1950 and 1954) after several freezes in the Valley.

The 1956 growing season in the Lower Rio Grande Valley was excellent for avocados. Several hives of bees were placed near the test plot to facilitate pollination. A good fruit yield was obtained on the older trees including Atlixco 14382 and 14369 and on some of the younger trees that had not set fruit before (Table 1). Other young trees, including several other Atlixco strains, had only a few fruit.

The heaviest yield obtained was 134 pounds on a six-year-old Booth 8 tree. In past seasons, this same tree yielded fruit that weighed 15 to 30 ounces but in 1956 the crop was so heavy that the tree could not properly mature it and the average size was 10 ounces.

The following strains showed the most promise for Valley conditions for home garden or commercial planting: Castro, Diaz, R No. 1, Lula and Booth 8. Two Atlixco strains, 14382 and 14369 had fair fruit crops and were outstanding in flesh texture and flavor. Since this is the first year that they fruited, it will necessary to observe them several years before recommendations can be made as to their adaptability. Arsola 29/9 fruited for the first time in the Valley and was of excellent quality. However, several years data in the Valley are needed before its adaptability can be determined.

Table 1. Characteristics of some avocado strains in the Experiment Station test plot during 1956.

Variety	Average No. lbs. fruit per tree	Seed weight ounces	Fruit Characteristics		Anthraco-nose occurrence*	Harvest period	Tree age (yrs.)	Location parent tree	Race of avocado		
			Color	Shape						Flavor	
Castro	37	5	1.2	Black	Pyriform	Nutty	2	June, July	5	Victoria, Mex.	Mex.
W #1	31	5	1.3	Black	Pyriform	Nutty	2	July	5	San Juan, Tex.	Mex.
Alamiz #3	4	5	1.0	Black	Pyriform	Nutty	4	July	5	Llera, Mex.	Mex.
Arsola 12/5	2	7	1.6	Black	Round	Nutty	4	July	3	Llera, Mex.	Mex.
Arsola 29/9	2	12	2.8	Green	Pyriform	Nutty	1	July	3	Llera, Mex.	W.I.xMex.
Arsola 17/3	11	6	2.0	Black	Pyriform	Nutty	3	July, Aug.	3	Llera, Mex.	Mex.
Diaz	61	8	2.0	Purple	Oval	Nutty	1	July-Sept.	6	Victoria, Mex.	W.I.xMex.
Santa Engracia	3	10	2.5	Purple	Pyriform	Nutty	4	July, Aug.	6	Victoria, Mex.	W.I.xMex.
Arsola 1/18	14	12	3.5	Green	Oval	Nutty	4	Aug.	5	Llera, Mex.	W.I.xMex.
R #1	60	8	1.6	Black	Oval	Nutty	2	Aug., Sept.	5	Raymondville, Tex.	Mex.
McRill	31	15	3.6	Green	Pyriform	Sweet	1	Aug., Sept.	6	McAllen, Tex.	W.I.
Atlixco 14382	15	9	1.1	Green	Pyriform	Nutty	2	Aug., Sept.	6	Atlixco, Mex.	Mex.
Atlixco 14369	21	10	2.0	Green	Oval	Nutty	1	Nov., Dec.	6	Atlixco, Mex.	Guat.
Lula	65	12	3.0	Green	Pyriform	Sweet	1	Oct.-Dec.	6	Florida	W.I.xGuat.
Booth 7	27	15	3.5	Green	Round	Sweet	1	Oct., Nov.	6	Florida	W.I.xGuat.
Booth 8	134	10	1.5	Green	Obovate	Sweet	1	Nov., Dec.	6	Florida	W.I.xGuat.

* Anthracnose Occurrence

- 1 None
- 2 Present in wet years
- 3 Very susceptible
- 4 No determination