

## REGISTERED AVOCADO TREES A Short History of the Program and List of Trees

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*Member Nurseyemen's Section.*

An early activity of the C.A.S. Nurserymen's Section was the formation of a Registration Program to prevent the introduction of Sunblotch into new plantings. Oliver Atkins first suggested the project at the Section's Organizational Meeting in September 1968.

His thought was to design a program similar to that of the Psorosis Program for citrus. As with psorosis, sunblotch has no known vectors, can be detected by indexing techniques onto healthy plants, and is therefore possible to contain provided that certain procedures are followed. The Nurserymen, therefore, contacted the Nursery Service of the California Department of Agriculture. Stan Mather, Chief, and his assistant, E. H. McEachern, were of great help in formulating the program.

Fortunately, Dr. J. M. Wallace (1) had previously studied avocado sunblotch in a most effective way and developed systematic procedures for detecting infected trees which show no visible symptoms. His laboratory technician, Bob Drake, was knowledgeable in the subject and available to index and diagnose prospective foundation trees for the proposed program.

The Nursery Service conferred at length with Dr. Wallace and Section Nurserymen with the result that a Registration Program was adopted by the California Department of Agriculture in February of 1971.

This was the year in which funds for the University were severely cut back and it became apparent that if the program were to succeed, the avocado industry would have to finance it to some degree. Consequently, plans were laid for Nurserymen to provide greenhouse space, growing conditions, and ordinary plant care for most of the index testing. Further, Nurserymen agreed to support the program with a voluntary assessment of fifty cents per tree for each Increase Block tree planted. (Nearly \$3,000.00 has so far been thus conferred to the University by Nurserymen for work on Avocado Sunblotch.)

In the fall of 1971, seeds were planted to raise the index seedlings for testing candidate scions for future seed and budwood trees. The index seeds were taken from trees that had been previously indexed by Drake at Riverside, and these were planted in three locations: greenhouses at UCR, Jameson Nursery in Corona, and Brokaw Nursery at Saticoy. These nurseries were to graft the clean index seedlings with buds from candidate trees, grow candidate Increase Block trees concurrently with seeds from *previously* tested trees, and scions from candidate trees. The trees were to be sold later to Nurserymen's Section members at their request and their own risk. If any of the candidate trees proved to carry the virus, they would be rejected from the program and removed from either the nurseries in question or from the candidate Increase Blocks.

The resulting trees were distributed and planted during the spring and summer of 1972. There are now Increase Blocks containing approximately 300 trees planted with these materials and it is expected that nearly all of the selections will be officially declared free of Sunblotch during 1973.

We were able to produce this substantial number largely because of previous indexing work by Drake during the late 1960's. Bud Lee, Farm, Advisor in Ventura County, foresaw the need and vigorously sought many commonly used seed trees submitting their buds to Drake.

The Increase Blocks will, for the first time, provide assuredly clean budwood for future propagations. We expect that significant quantities of their elite progeny will be offered for sale beginning in the spring of 1975.

One of the tasks in designing the program was selection of candidate trees. Many Nurserymen cooperated in this endeavor. We could not index every available variety because the indexing process is lengthy and expensive. We were able, however, to index 39 selections of 21 varieties. Additionally, some of the Nurserymen requested special selections amounting to 28 selections of 12 varieties.

The selections include some famous trees. Among them are the Parent Mass, Parent Bacon, and the remarkably prolific Newman Fuerte. Other candidates were chosen as outstanding examples of their variety. Below is a complete list of foundation trees in the program. The indexing for some has been completed. Most are still undergoing tests. We expect the majority to clear testing during February of 1973.

## **REFERENCES**

1. J. M. Wallace and R. J. Drake. "A high rate of seed transmission of avocado Sunblotch virus from symptomless trees and the origin of such trees" *Phytopathology*, Vol. 52, No. 3, 237-241, March 1962.
- J. M. Wallace and R. J. Drake. "Report on the Program for Production of Avocado Nursery Trees Free of Sunblotch." *Yearbook, California Avocado Society*, 120-123, 1971-72.

## **APPLICANT**

1. Brokaw Nursery P. O. Box 4818, Saticoy 93003
2. Oliver H. Atkins, 3129 Reche Rd., Fallbrook
3. University of California, Riverside
4. I. W. Jameson, P. O. Box 606 Corona

Applicant	Sel. No.	Date of App.	Variety	Tree Location in Grove	Property Location	Date Testing Started	Date Testing Completed	Registration No.
1	1	1-25-71	Zutano	Fence Row T2W	Brokaw El Rio, Calif.	1-21-71		3425
1	2	1-25-71	Hass, Dickenson #3	13A T3	Dickenson Santa Paula	1-21-71		3426
1	2	1-25-71	Hass, Dickenson #1	13A T4	Dickenson Santa Paula	1-21-71		3427
1	2	1-25-71	Hass, Dickenson #2	13A T5	Dickenson Santa Paula	1-21-71		3428
1	3	2-12-71	Susan	Variety Plot N/W Tree	Lloyd Corp. Ventura	1-21-71		3429
1	4	2-12-71	Brokaw CX	Variety Plot S/E Tree	Lloyd Corp. Ventura	1-21-71		3430
1	5	1-25-71	Mexicola	R15SW T9SE	Hospital Plot Santa Barbara	1-21-71		3431
1	6	2-12-71	Reed	R14N T2E	Geo Goodall Goleta	2-11-71		3432
1	7	1-25-71	Everett	R32N T38W	Everett Ojai	7-10-67	10- 9-70	3433
1	8	1-25-71	Martin	Middle of Grove	Reuben Martin Santa Paula	7-10-67	10- 9-70	3434
1	9	1-25-71	Bacon	R52E T4S	Leavens Prop. Santa Paula	2-11-71		3435
1	16	5- 6-71	Harmon	N2-T4	Roy Newsom Ojai	3-25-71		3436
1	16	5- 6-71	Harmon	NI-T5	Roy Newsom Ojai	3-25-71		3437
3	4	3-11-71	Ganter	R14SW T3SE	Hospital Plot Santa Barbara	11-19-70		3438
3	4	3-11-71	Duke	R15SW T7SE	Hospital Plot Santa Barbara	11-19-70		3439
3	4	3-11-71	Topa Topa	R15SW T3SE	Hospital Plot Santa Barbara	11-19-70		3440
1	16	5- 6-71	Fuerte	N2 T4B	Roy Newsom Ojai	9- 8-71		3441
1	21	12-28-71	Hass	R4 T12	Roy Newsom Ojai	9- 8-71		3442

Applicant	Sel. No.	Date of App.	Variety	Tree Location in Grove	Property Location	Date Testing Started	Date Testing Completed	Registration No.
1	16	5- 6-71	Harmon	S3 T8	Roy Newsom Ojai	9- 8-71		3443
1	16	5- 6-71	Harmon	S2 T7	Roy Newsom Ojai	9- 8-71		3444
1	16	5- 6-71	Harmon	S1 T6	Roy Newsom Ojai	9- 8-71		3445
3	6	12- 2-71	Topa Topa	R15SW T1SE	Hospital Plot Santa Barbara	9-16-71		3446
3	6	12- 2-71	Ganter	R14SW T1SE	Hospital Plot Santa Barbara	6- 9-60		3447
3	6	12- 2-71	Duke	R15SW T5SE	Hospital Plot Santa Barbara	9-17-71		3448
1	18	10-25-71	Anaheim	Drive Tree - 1st Tree South of Water Hydrant	Geo Goodall Goleta	9-14-71		3449
1	10	1-23-71	Walter Hole #1	Front Yard	Brokaw Whittier	1-21-71		3450
1	10	1-23-71	Walter Hole #2	Front Yard	Brokaw Whittier	1-21-71		3451
2	1	6- 2-71	Thurber #1 Atkins Seed Tree #1	Only Large Tree in Front Yard	V. J. Archambault Sierra Madre	1-21-71		3452
2	1	6- 2-71	Thurber #2 Atkins Seed Tree #2	Adjacent to Tree #1	V. J. Archambault Sierra Madre	1-21-71		3453
1	11	1-25-71	Jim	West of Lath & Bldgs.	Jim Bacon Buena Park	2-23-71		3454
3	1	2-11-71	Bacon	R20 T5	Field 19B U.C. Riverside	8- 1-69		3455
3	1	2-11-71	Duke 6	R3 T3	Field 20E U.C. Riverside	11- 3-70		3456
3	1	2-11-71	Duke 3	R2 T2	Field 20E	2-23-70		3457
3	1	2-11-71	Topa Topa	1st Tree from North End Parking Lot #10	Field 20E U.C. Riverside	1-28-71		3458
3	2	2- 5-71	G-22	R5E T14S	Field 3 S. Coast Field Stn. Santa Anna	2-23-70		3459

Applicant	Sel. No.	Date of App.	Variety	Tree Location in Grove	Property Location	Date Testing Started	Date Testing Completed	Registration No.
3	2	2- 5-71	McArthur	R9E T6S	Field 3 S. Coast Field Stn. Santa Anna	1-12-71		3460
3	2	2- 5-71	Zutano	R15E T11S	Field 3 S. Coast Field Stn. Santa Anna	12- 3-70		3461
3	2	2- 5-71	Hass	R15E T12S	Field 3 S. Coast Field Stn. Santa Anna	12- 3-70		3462
3	2	2- 5-71	Duke #7	R16E T7S	Field 3 S. Coast Field Stn. Santa Anna	10-30-70		3463
1	12	2-26-71	Hass, Prince	Back Yard	O. J. West Whittier	1-21-71		3465
1	13	2-26-71	Hass, Parent	60' E/O H <sub>2</sub> O Tank 60' S/O West Road	Roy Wilks La Habra	1-21-71		3466
1	14	2-26-71	Bacon, Original	Back Yard	Jim Bacon Buena Park	12-3-70		3467
1	15	6- 2-71	Fuerte, Newman	Blk. 3C N/W Corner Single Tree	S. Joaquin Fruit Co. Santa Anna	12- 3-70		3468
2	2	3- 1-71	Fuerte, Atkins #1	R1 T1	Oliver Atkins Vista	1-26-71		3469
2	2	3- 1-71	Fuerte, Atkins #2	R2 T2	Oliver Atkins Vista	1-26-71		3470
3	3	5- 5-71	Duke, Howard	R35N T16E	Chas Howard Hemet	5-13-63		3471
3	2	5- 5-71	Al Boyce	R27W T20S	Field 23 S. Coast Field Stn. Santa Anna	1-12-71		3472
4	1	2- 4-71	14-11 Teague	R22W T7N From Center Drive	Jameson Crown Rch. Blk. 13 Corona	12- 4-70		3473
4	2	2- 4-71	17-51	West Side Valencia Grove above Arroyo	Jameson Crown Rch. Blk. 23 Corona	1-11-71		3474
2	3	7-20-71	Reed #1	Eastside Property	Atkins Fallbrook	1-27-71		3475

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2	3	7-20-71	Reed #2	Eastside Property	Atkins Fallbrook	5-28-71		3476
2	3	7-20-71	Wurtz	Six Rows Below House on Oiled Road South Tree	Atkins Fallbrook	7- 1-71		3477
1	20	10-25-71	Mexican Seedling	North Tree	Bob Blanchard Cayucas	10-21-71		3490
1	20	10-25-71	Mexican Seedling (Adj. Tree)	North Tree	Bob Blanchard Cayucas	10-21-71		3491
1	19	10-25-71	Ganter	R50S T6W	Navel Blk. 3 Newhall Rch. Piru	10-21-71		3492
1	19	10-25-71	Duke	R12S T17W	Valencia Blk. 11 Newhall Rch. Piru	10-21-71		3493
1	19	10-25-71	Topa Topa	R12S T1W	Valencia Blk. 11 Newhall Rch. Piru	10-21-71		3494
3	5	11-17-71	Rincon	R17SW T3SE	Hospital Plot Santa Barbara	7-29-71		3495
3	6	12- 2-71	Topa Topa	R16SW T5SE	Hospital Plot Santa Barbara	4-21-58 2- 3-72	6- 9-60	3496
3	6	12- 2-71	Duke	R14SW T9SE	Hospital Plot Santa Barbara	4-21-58 2-10-72	6- 9-60	3497
3	6	12- 2-71	Ganter	R12SW T13SE	Hospital Plot Santa Barbara	4-21-58 6-14-63	10- 2-67	3498
1	16	5- 6-71	Harmon	S4 T9	Roy Newsom Ojai	68		1000
1	16	5- 6-71	Harmon	S5 T10	Roy Newsom Ojai	68		1001
1	16	5- 6-71	Harmon	R3 T11	Roy Newsom Ojai	68		1002
1	16	5- 6-71	Black Seedling	R3 T1	Roy Newsom Ojai	68		1003
1	16	5- 6-71	Harmon	R2 T2	Roy Newsom Ojai	68		1004
1	16	5- 6-71	Harmon	R1 T3	Roy Newsom Ojai	68		1005