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CITRUS FOUNDATION BUDWOOD RELEASE 1966 THROUGH THE ARIZONA COOPERATIVE CITRUS REGISTRATION-CERTIFICATION PROGRAM

BY

R. M. ALLEN, J. C. MATEJKA, R. A. NELSON and D. R. RODNEY

IN COOPERATION WITH

ARIZONA CROP IMPROVEMENT ASSOCIATION, INC.

AND

ARIZONA COMMISSION OF AGRICULTURE AND HORTICULTURE

ARIZONA AGRICULTURAL EXPERIMENT STATION
THE UNIVERSITY OF ARIZONA
TUCSON

CITRUS FOUNDATION BUDWOOD RELEASE 1966[1,2]

R. M. Allen, J. C. Matejka, R. A. Nelson, and D. R. Rodney[3]

The Arizona Cooperative Citrus Registration-Certification Program was authorized in July 1964, when rules and regulations governing the program were accepted for certificatory and administrative sponsorship by the Arizona Crop Improvement Association, Inc. Regulatory functions were assumed by the Arizona Commission of Agriculture and Horticulture. Industry representatives provide guidance and establish operating policy through the Arizona Citrus Advisory Council which group also serves as the Citrus Commodity Committee of the Arizona Crop Improvement Association. Participation by growers is entirely voluntary.

The primary source of citrus propagation material for the program is a foundation block at the University of Arizona's Yuma Citrus Experiment Farm. This block, started in 1956, contains four or more trees of each of 56 commercially-important citrus budlines. Selected foundation block trees have been or are being tested for the viruses causing tristeza, seedling yellows, psorosis, vein enation, exocortis, tatterleaf, and xyloporosis. The trees are being checked visually for continued freedom from stubborn disease until suitable tests are devised.

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[1]Departments of Plant Pathology and Horticulture cooperating with the Arizona Crop Improvement Association, Inc. and the Arizona Commission of Agriculture and Horticulture. The assistance of personnel of the United States Department of Agriculture is gratefully acknowledged.

[2]Supersedes mimeographed Budwood Releases 1 and 2, dated May 8, 1965 and July 7, 1965, respectively.

[3]Plant Pathologist, Research Assistant, and Research Associate, Department of Plant Pathology, respectively, and Horticulturist, Department of Horticulture, Arizona Agricultural Experiment Station, Yuma Citrus Experiment Farm, Yuma, Arizona.

Registration of citrus trees under the Arizona program consists of two classes determined by the amount of virus disease testing completed for each foundation block tree. Registration accession numbers identifying each tree are followed by letters "RX," meaning complete registration, or "RL," meaning limited registration. Trees of the "RX" class have been tested and found free from the viruses causing tristeza, seedling yellows, psorosis, vein enation, exocortis, tatterleaf, and xyloporosis. Unless designated otherwise, trees of the "RL" class have passed tests for tristeza, vein enation, psorosis, and exocortis; tests for seedling yellows and tatterleaf have been completed in most cases or are in progress. Tests for xyloporosis are in progress for all tested trees but this test requires at least 3 years for completion. Limited registration has been extended to the variety Temple orange, although exocortis-infected, because all known budlines of this variety carry this virus. None of the trees listed is registered for freedom from stubborn disease because adequate testing methods are lacking. The trees offered in this report as budwood sources, varying in age from 3-1/2 to 9 years, have shown no distinguishable symptoms of this disease.

The principal purpose of releasing "RL" budlines is to save time. Early release of these lines will allow program participants to plan for and initiate propagations on a restricted basis pending completion of the tests in progress. Should an "RL" budline prove to be virus infected the participant should be prepared to remove all propagations of the line from the program. Probability of xyloporosis infection of these "RL" releases in considered slight since most of them have been grown, and some tested, elsewhere with no indications of infection. The only known means of spread of this disease is by infected budwood. Seedling yellows is known to occur only in conjunction with tristeza infection while tatter-

leaf has been found only in the variety Meyer lemon. Nevertheless, specific tests are being made for all of these viruses to assure cleanliness of all registered budlines.

Foundation trees having attained sufficient size and fruit yield to be regarded as typical representatives of their variety are indicated by an asterisk preceding the variety name. Trees fruiting, but for which horticultural information is insufficient at present, are similarly indicated by a # sign. It should be noted, however, that the source trees of these foundation budlines are producing acceptably. Danger of varietal failure or off-type propagations are minimal although no guarantees are made for these or other releases through the Registration-Certification Program.

Included in this 1966 release of foundation material are 126 different trees representing 48 varietal budlines:

Number of Trees	Variety	Registration Number and Class
	ORANGES	
2	*Parent Washington navel	125RX, 1664RL
3	*Warren Washington navel	114RX, 1823RL, 1824RL
3	*Frost Washington navel (N)	120RX, 1704RL, 1705RL
2	Sunny Mountain Washington navel	140RX, 1831RL
2	Gillette Washington navel, CSDA 2876	488RL, 1813RL
2	Gillette Washington navel, CSDA 2877	489RL, 1814RL
6	*Frost Valencia (N)	118RX, 1657RL, 1658RL 1659RL, 1660RL, 1661RL
5	#Campbell Valencia (N)	130RX, 848RL, 1687RL 1688RL, 1689RL
4	#Campbell Valencia	134RX, 1681RL, 1682RL, 1683RL

Number of Trees	Variety	Registration Number and Class
4	#Olinda Valencia	135RX, 1684RL, 1685RL, 1686RL
2	Chapman Valencia	141RX, 1801RL
2	Jaffa orange (N)	246RL, 1800RL
1	Louisiana Sweet orange	1799RL
1	Hamlin orange (N)	490RL
1	Hamlin orange (seedling)	1532RL
4	Texas Hamlin orange	494RL, 1701RL, 1702RL, 1703RL
	LEMONS AND LIMES	
4	*Prior Lisbon lemon	386RL, 1707RL, 1708RL, 1709RL
4	*Rosenberger Lisbon lemon	849RX, 1710RL, 1711RL, 1712RL
1	Rough lemon (seedling)	1533RL
3	Mexican lime (N)	480RL, 1815RL, 1816RL
2	Kornell Rch. Bearss (Tahiti) lime	483RL, 1798RL
	(All budlines carry genetically induced wood pockets)	
	GRAPEFRUIT AND SHADDOCKS	
4	*RCES #3 Red Blush grapefruit (N)	115RX, 1791RL, 1792RL, 1793RL
4	*Frost Marsh grapefruit (N)	116RX, 1713RL, 1714RL, 1715RL
2	Garner grapefruit	855RL, 1822RL
1	Reinking shaddock	487RL
1	Red shaddock	495RL
	MANDARINS	
2	Frost Owari satsuma (N)	385RL, 1819RL
2	*Willowleaf mandarin (N)	235RL, 1794RL
4	*Kinnow mandarin (N)	240RL, 1788RL, 1789RL, 1790RL
2	#Honey mandarin	237RL, 1795RL

Number of Trees	Variety	Registration Number and Class
	MANDARINS (continued)	
2	Sunki mandarin (N)	491RL, 1820RL
4	*USDCS Dancy tangerine (N)	123RX, 1678RL, 1679RL, 1680RL
2	Tempe Clementine tangerine	522RL, 1534RL
2	Cleopatra mandarin	482RL, 1818RL
4	Wise Clementine tangerine	477RL, 1698RL, 1699RL, 1700RL
	TANGELOS	
2	#Allspice tangelo	132RL, 1796RL
7	*Orlando tangelo	121RX, 1672RL, 1673RL, 1674RL 1675RL, 1676RL, 1677RL
6	*Frost Orlando tangelo (N)	122RX, 1665RL, 1666RL, 1667RL 1668RL, 1669RL
2	#Pearl tangelo	236RX, 1797RL
2	V-3 tangelo	247RL, 1812RL
4	Minneola tangelo (N)	857RL, 1694RL, 1695RL, 1696RL
	MISCELLANEOUS	
1	Calamondin (seedling)	1538RL
2	Murcott	492RL, 1821RL
1	Rubidoux trifoliata	493RL
1	#Troyer citrange	1528RL
1	#Citrus pennivesiculata (Moi) (seedling)	1529RL
1	#Citrus macrophylla (seedling)	1530RL
2	*Temple tangor	124RL, 1826RL

(Exocortis-infected; avoid susceptible rootstocks)

Applicants having nursery stock qualified for budding under the Rules and Regulations of the Arizona Cooperative Citrus Registration-Certification Program must submit written applications for Fall delivery of budwood not later than October 1, 1966. Spring distribution requests must be received by January 1, 1967 and requests for Summer distribution must be on file by May 1, 1967. Requests for standard application forms should be directed to the Secretary, Arizona Crop Improvement Association, University of Arizona, Tucson, Arizona 85721.

Because amounts of budwood are very limited at present first allocations of budwood shall be made to applicants establishing Mother Block and Nursery Increase Block plantings with priority based on date of receipt of applications. All applications shall be reviewed and budwood allotments made by the Citrus Commodity Committee, ACIA. Normal allotments shall consist of 25-50 buds of each available variety per individual, company, or organization in order to protect the foundation trees from overharvesting. In the event that larger allocations are possible additional budwood shall be distributed at the discretion of the Citrus Commodity Committee.

Copies of the Rules and Regulations (July 28, 1964) of the Arizona Cooperative Citrus Registration-Certification Program are available through the Secretary, Arizona Crop Improvement Association, the Office of the State Entomologist, Phoenix, or County Agents of the University of Arizona Cooperative Agricultural Extension Service for Maricopa, Pinal and Yuma Counties.