

**3/2022 Year One Report SARE Farmer/Rancher Grant
 “Growing Table Grapes in Subtropical Hawaii Using Organic Practices”
 Gerry Herbert – Kawanui Farm – Kona, Hawaii**

The Red Folder Research Documents:

Below are photos and explanations of some of the important “working papers” that Gerry has created this past year to assist him in keeping track of important information and observations in the vineyards and greenhouse. Gerry has kept meticulous notes on all aspects of the variety trials of table grapes starting in 2015. This information will be summarized and compiled into charts or summarized into text at the end of next summer and pertinent information will be included in the published Booklet.

Objective Five: Write, publish, and mail 50 page booklet “Growing Table Grapes in Subtropical Hawaii Using Organic Practices.” Downloadable copy available on Kawanui Farm website. For this year, these are his working papers along with notes in his Log Book.

The Red Folder Research Documents 2015-2020 and 2020-2022

Below are samples of Research Working Notes and Observations from 2021-present. These examples reflect Research Objectives 1, 2, & 4.

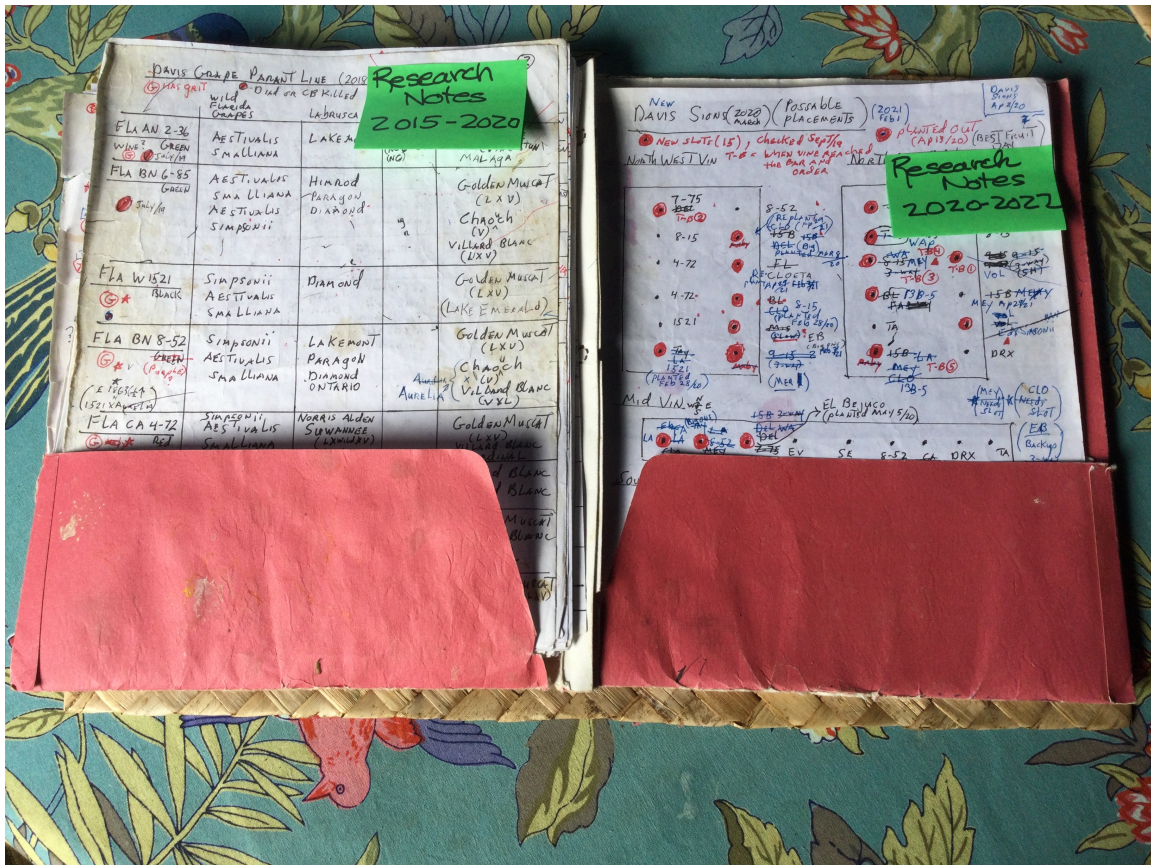


Chart vineyard placement of new UC Davis Grape Scions 2020

APR 13 } THE BEST FRUIT DAY OF THE MONTH
APR 14 }

South
GARDEN VIN DAVIS SION-PLANT OUT

(VERY Cold Spring Till MAY 1/20)
LATE Bud BREAK (MAY 18/20) (68 SIONS)

* = GROWING WELL (JUNE 23 STILL COLD 61°)
* = SECOND BEST GROWER
TB = WHEN IT GREW TO TOP OF THE BAR AND ORDER

* PLANT OUT FEB/21
ROOT STOCK GRAFTS
TWO GRAFTS ON FL (MUNSON GRAPES)

• LAR * • CLO * • MISS (SLOW GRTH)?

• SAL FA * • SAL * • MEY

• ED 13-B * • JAY 7-75 • WAP

• MER * • FEN? WAP • EB *

• 13B-5 • Vol? • FA *

• Vol (EX) * • 7-75 * • MEY (EX) *

T-B ①

□ WAP

□ MER

□ MEY

□ VOL

□ CLO

0-15 (in reached)

(MAY 18/20 ALL GRAFTS FAILED? Dug up ALL Rootstocks?)

Potting Shed Pots (VERY cold Spring MAY 20)
APR 14/20

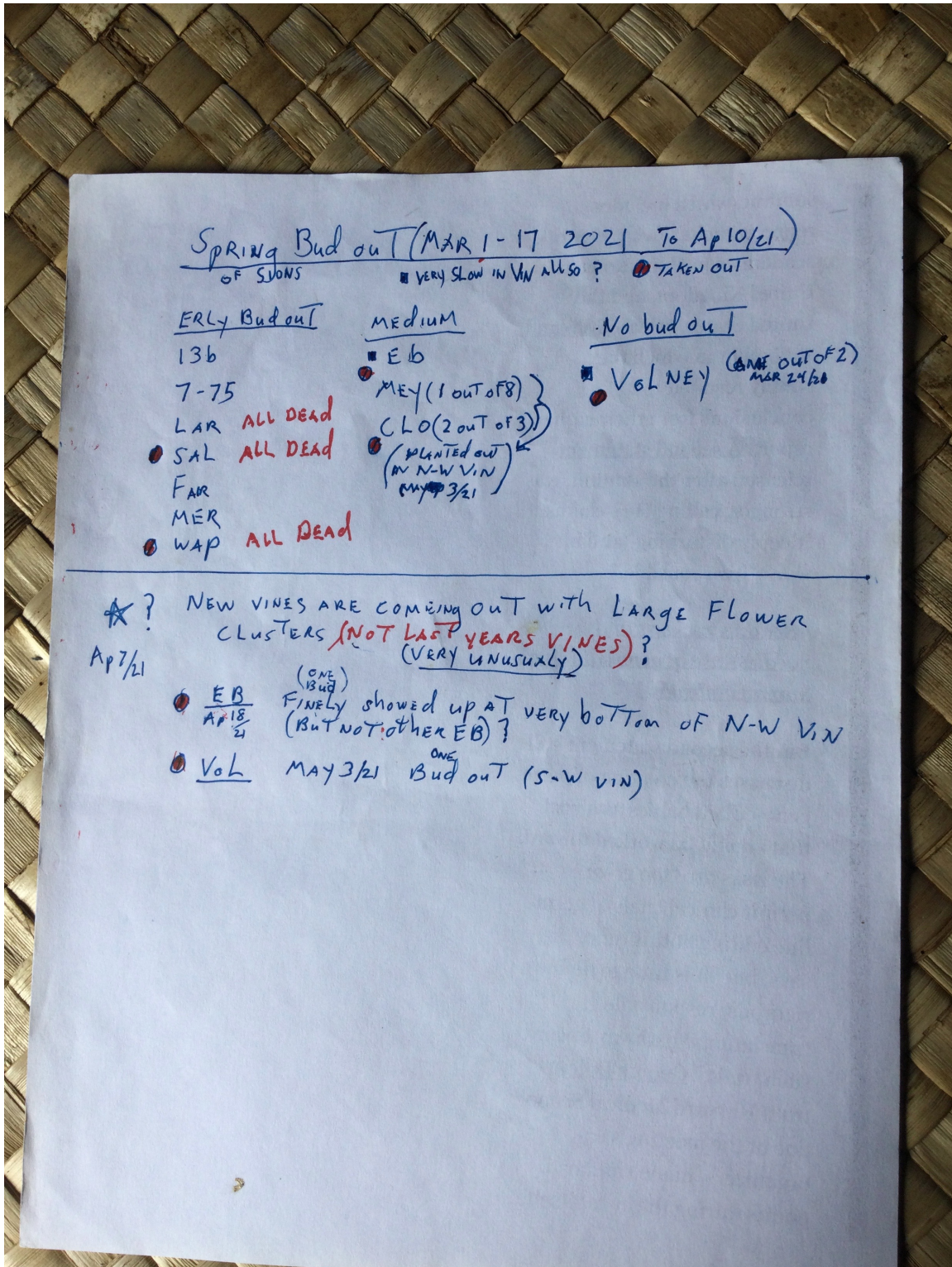
	# SIONS	1 PER POT	2 PER POT	GROWTH	DOA (DEAD ON ARRIVAL)
V CLO	3	X	2 (Two SIONS)	SLOW	
V MER	1	1	NONE	SLOW	
V SAL	2	1 IN TWO POTS	—	SLOW	
V JAY	4?	1	—	SLOW	
V VOL	2	1 IN TWO POTS	OUTSIDE garden	⊙ OUT	
V WAP	4-2	1	2 IN 2 POTS	VERY FAST	
V FA	3	1	2 IN 2 POTS	SLOW	
V ED?	2	1	2	SLOW-MED	
V EB	4	1 IN TWO POTS	—	VERY SLOW	
V MISS	3	1	2 IN 2 POTS	VERY FAST	
V FEN	3	1	2 ONE POT	SLOW-MED	
V MEY	3	1 (PUT 4 IN ONE)	2	VERY SLOW TO Bud out	
V LAR	3	1	2 & NONE	SLOW-MED	
V 13B	3	1	2	SLOW-MED	
V 7-75	1	1	2	SLOW-MED	
			NONE	SLOW-MED	
				MED-FAST	

ALL PLANTED MAY 21/20
2 PLANTED MAY 21/20

PLANTED OUT MAY 5/20
(NONE) ALL

DOA ALL
NES DAX DAX DAX
#13 FL FL
SIONS
VEXP

Spring vine budding Chart March - April 2021



Spring Bud out (MAR 1-17 2021 To Apr 10/21)
 OF SIONS ■ VERY SLOW IN VN ALSO? ● TAKEN OUT

- | | | |
|---|--|---|
| <p><u>ERLY Bud out</u></p> <ul style="list-style-type: none"> 13b 7-75 LAR ALL DEAD ● SAL ALL DEAD FAR MER ● WAP ALL DEAD | <p><u>MEDIUM</u></p> <ul style="list-style-type: none"> ■ Eb ● MEY (1 out of 8) ● CLO (2 out of 3) ● (PLANTED OUT IN N-W VIN MAY 3/21) | <p><u>No bud out</u></p> <ul style="list-style-type: none"> ● Vol NEY (ONE OUT OF 2) MAR 24/20 |
|---|--|---|

- ★? NEW VINES ARE COMING OUT WITH LARGE FLOWER CLUSTERS (NOT LAST YEARS VINES)? (VERY UNUSUALY)
- EB APR 18/21 (ONE BUD) FINELY showed up AT VERY bottom OF N-W VIN (BUT NOT OTHER EB?)
 - Vol MAY 3/21 (ONE) Bud out (S-W VIN)

Scion Planting and Growth Score – 2020 New UC Davis Scions

GROWTH OF SCIONS (DAVIS) PLANTED OUT AP 13 / 20

W → E VERY COLD Spring, VERY LATE Bud OUT - MAY (42 SCIONS IN POTS)
 S ↘ SW - SOUTH WEST VIN - checked OFF - = BEST GROWERS (JUNE 25) (ALL OUT OF POTS JUNE 30)

DIED IN POT
PERMANENT PLANT OUT

SCION VARIETY	ONE	TWO	THREE	FOUR	SCION GROWTH SCORE	WHEN SCIONS HIT T-BAR	1	2	3	4	5
FLA 13B-5	ONE TWO	ONE	ONE	ONE (ONE IN POT)	MED. VERY GOOD GROWTH	HIT T-BAR	1	1	1	1	1
FLA 13D 7B (3 SCIONS)	ONE	ONE	ONE	NONE	MED VERY GOOD GROWTH	3 (TO HIT T-BAR)					1
FANUEL 3 WAY (DOR)	NONE	ONE	NONE	(4 IN ONE 2 POT)	VERY SLOW TO ROOT OR Bud (NONE ROOTED OUT)		1	1	1	1	1
EL-BEJUG	NONE	ONE (SW) FOUR			VERY FAST FAST TO ROOT	1 (TO HIT T-BAR)					1
LARGO	NONE	ONE (SW) TWO ONE	ONE	TWO IN POT	SLOW - MED ONLY ONE GREW						1
FAIRCHILD	NONE ONE	ONE (MID VIN)		2 IN ONE POT	SLOW - MED VERY GOOD GROW OUT		1	1	1	1	1
EDNA (#6 SCIONS)	ONE	ONE (SW)	3 IN SINGLE BJS		SLOW VERY POOR GROWTH						1
CLOETA	ONE	ONE		3 - ONE IN POT	SLOW (MAY TAKE OUT) ONE GREW OUT						1
MERCADAL	ONE	TWO THREE ONE (SW)			SLOW - MED good growth		1	1	1	1	1
SALAMANDA	ONE	TWO	TWO ONE IN POT		SLOW - MED ONE GREW OUT						1
VOLNEYO	ONE	TWO	TWO		FAST LEAF OUT THREE did very well	2	1	1	1	1	1
WAPANUKA	NONE ONE	ONE	ONE	TWO IN POT	SLOW THREE GREW OUT						1
MEYER (#6 SCIONS)	ONE	ONE	ONE TWO ONE	NONE	SLOW ONLY ONE GREW WELL	4	1	1	1	1	1
MISS BLUE	ONE	ONE	ONE	TWO IN POT	SLOW		1	1	1	1	1
EXB DAX				2 pots							1
NECOT (15#)				ONE POT	VERY SLOW Did NOT ROOT OUT						
DAX FL IN 2 POTS				2 pots	DAX ↑ (ONE FL ROOTED)						
SEEDLINGS (2-2019)	IN SOUTH VIN	NES BIT			THE 2 BEST SEEDLINGS GREW TO 6' BY JUNE 30/20						

★ 3# SCIONS GREW OUT (42 SCIONS NEVER ROOTED OUT)
 (SCION VARIETY LOOK VERY GOOD JULY 20)

Chart of new UC Davis Scions from 2020 by variety name, Florida wild grape, Labrusca, Rotundifolia, or Mixed Hybrid parents in Variety.

PLANTED OUT (Apr 13-14) 2020

GOT GRAPES AT!

★ MOST INTERESTING
★ SECOND INTERESTING

● = BEST growth ● = TAKEN OUT (DIDN'T MAKE IT)

	FLORIDA WILD GRAPES	LABRUSCA	ROTUNDIFOLIA	MIXED HYBRIDS
FLA 13B-5 ★ (BLACK) ●	V. Shuttleworthii (HAINES CITY)	ALDEN		GROSSE (V) MUSECAT GUILLAUME
FLA BD7-75 ★	V. Shuttleworthii	LAKEMONT X	A-1105 (NC 6-15) ROTUN X MALAGA	CAROLINA BLACK ROSE ? Maby
FENNEL (DOA) 3-way Hybrid (BLACK) ●	SIMPSONII POPEOE (WILD MAX GRAPE)		SCHAPPENANG	
EL BEJUCO (CRIOLA NEGRA) (BLACK) ? MAY BE GREEN	CARIBEA			VIN (UNKNOWN) (THOUGHT TO BE FROM (FROM) VENIZUWALA IN 1600'S SPAIN)
LARGO ★ (FENNEL) (BLACK) (ONE ROOT OUT)	V. Shuttleworthii X RUFOMENTOSA (MAYBE SHALLEANA)	X		RIBIER (V) X RUFOMENTOSA V. SHUTTLEWORTHII
FAIR child ● (FENNEL) (BLACK)	CARIBEA			RIBIER (V)
EDNA ★ (ONLY ONE ROOTED OUT)	SIMPSONI			EDNA (MUNSON) ARMLONG X MALAGA
MUNSON GRAPES	TEXAS wild (PLUS OTHERS)			
CLOETA ● (BLACK) (OVERROOTED OUT)	AMERICA X R.W. MUNSON	(CHAMPINI) (DE GRASSE) TEX X BRILLIANT		
MERICADEL ★ (PURPLE) ●	AMERICA X DELAWARE	DELAWARE		
SALAMANDA ● (RED) ★ (ONE ROOTED OUT)	SALADO (TEX) X DELAWARE LIMLEY (SS)	DELAWARE LAWSON (WILD MAX GRAPE)		MUSCAT (V) (GOLDEN CHASSALAS)

Work Plan for Cutting Scions January-February 2022 all Vineyards

GRAPE WORK TO DO <small>JAN 22 - End of FEB 22</small>		Scions #
<p>Scions (FEB END of F) * VERY EARLY (JAN 28)</p> <p>* 13B</p>	<p>To SEE (Thought THAT ONLY ONE OF DAUS SCIONS GREW out)</p> <p>SCIONS</p>	
<p>* 7-75 ✓ <u>3</u> For 1 gal pots AND <u>2</u> For Garden Vin</p>		5
<p>LARGO ✓ <u>2</u> pots * To SEE How it grows</p>	<p><u>2</u> For Garden Vin</p>	4 2
<p>Ed ✓ <u>6</u> pots * To SEE</p>	<p>4 Garden Vin 4 <u>2</u> (W) ✓ (Feb 5) 2 (S) ✓ (Feb 22)</p>	13
<p>* MEYER ✓ <u>3</u> pots * To SEE</p>	<p>4 Gard Vin</p>	8
<p><u>14</u> pots <u>12</u> pots</p>	<p>12 garden Vin</p>	
<p>* Southern HOME } maby? LIN'S SCIONS (LET IT GROW OUT IN GARDEN VIN)</p>		

Chart of Scions to Cut in February 2022

Scions to cut for LATE Feb/21 (Backup)

(Rooted out (1 gal pot) (PRUNED Feb 8-11/21) FOR SCIONS)

→ = ONLY ONE SILENT GROWN OUT IN 2020

FIRST SCIONS Feb 3/21 SECOND PRUNINGS

● SCIONS NOT ROOTING OUT
Apr 3/21
★ WORST Bud out (VERY Cold and WET)
BLACK POT WET
GROW OUT #

2020 Scion Bud Out	Scion	MAR 8 OUT	FIRST SCIONS Feb 3/21	SECOND	PRUNINGS	YES	YES	GROW OUT #
(1) ALL	13b-5	✓	✓	✓	YES	YES	2	
(1) ALL	7-75			✓		YES	4	
	EB	NOT PLANTED OUT						
(1) ALL	LARGO	MAR 8 NOT	✓	✓		YES	4	
(1) ALL	MEYER 6-7 (early)				YES	YES	8	
(1) ALL	SAL (early)	NOT MAR 8	✓	✓		YES	1	
(1) ALL	CLOETA	✓	✓	✓		YES	3	
(1) ALL	MERICADEL	✓	✓	✓	YES (BIG ONE)	YES	2	
(1) ALL	VOLNEY	NOT	✓	✓		YES	2	
(1) ALL	WAPANUKA	NOT MAR 8	✓	✓		YES	2	
	SEMINALE	(GRAPPE CLUSTERS)		NOT PLANTED OUT				
(1) ALL	CARIB	MAR 8 (PLANTED OUT Apr 26/21)				YES?	3	

EARLY MARCH TO LATE APRIL

Vineyard Variety Placement January 20-January 2022
 Current variety placement

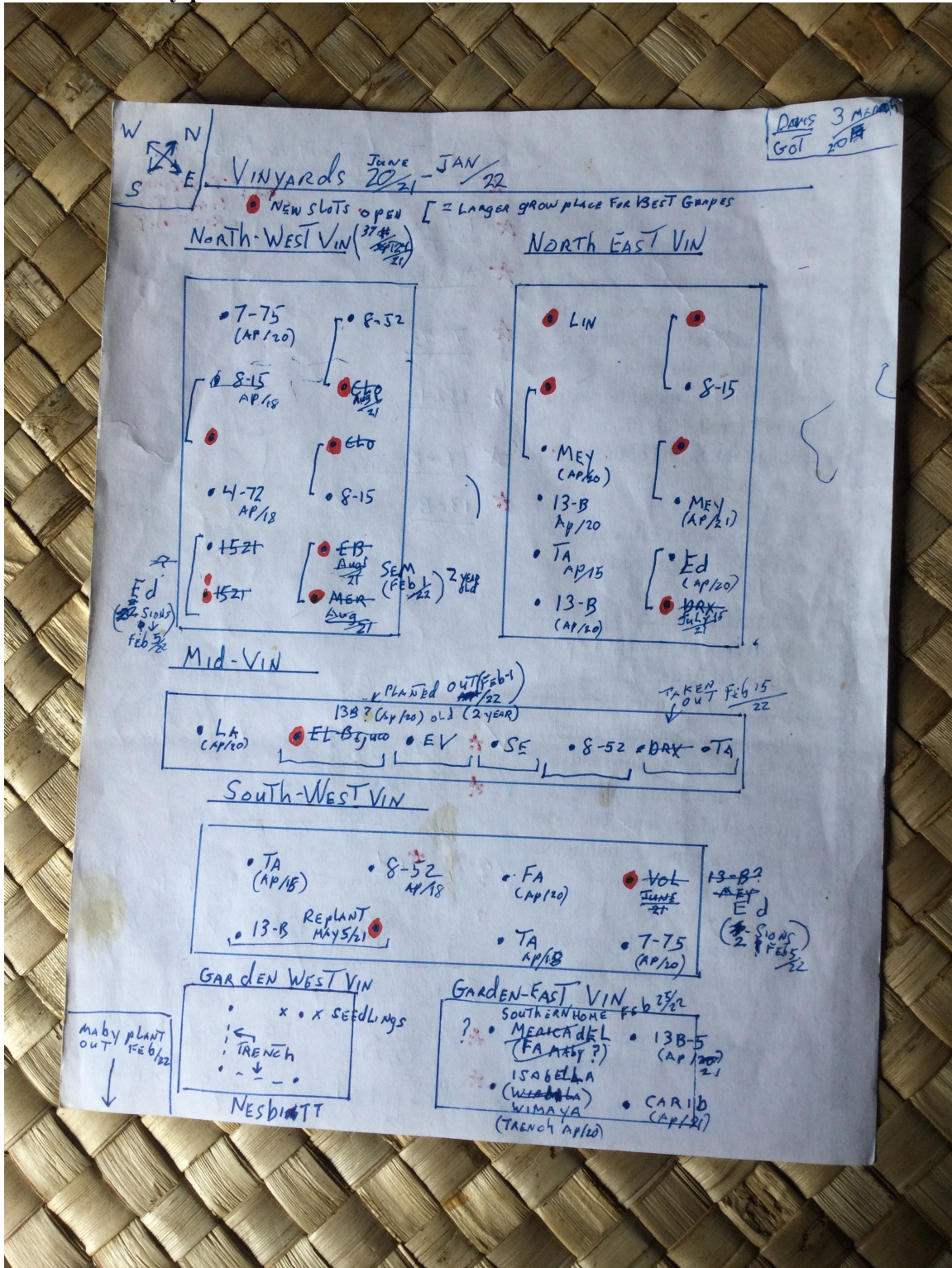


Chart and Notes of Scion Rooting and Plant out in all vineyards with new UC Davis scions varieties 2020-2021.

