#### **Supplementary Discussion**

## Distinct properties of [PSI<sup>+</sup>] prion states

The Sup35 prion states in wild strains had different biochemical and genetic behaviors. The extent of aggregation of Sup35 appeared to differ between strains:

Sup35 amyloids were easily detected in strains UCD#978, #5672, and NCYC#3467, but the signal was weaker for strains UCD#587, UCD#824, and UCD#2534. Because our SDD-AGE data were not quantitative, we did not characterize this further. Strains UCD#779, UCD#885, and UCD#939 occasionally produced colonies that lacked Sup35 amyloids.

These colonies also lacked Rnq1 amyloids. We speculate that the simultaneous loss of both prions reflects a high degree of co-aggregation between these two proteins in these strains.

The over-expression of WT Hsp104 potently eliminates [ $PSI^{\dagger}$ ] in laboratory strains. We also observed that transient over-expression of Hsp104 eliminated [ $PSI^{\dagger}$ ] from strains UCD#978 and NCYC#3467. In contrast, strains #5672 and UCD#824 remained [ $PSI^{\dagger}$ ] after this treatment (Supplementary Fig. 1). Thus, the susceptibility of [ $PSI^{\dagger}$ ] to elevated levels of Hsp104 is not shared by all natural [ $PSI^{\dagger}$ ] states.

Not all curable phenotypes in  $[PSI^{\dagger}]$  strains could be attributed to a loss of function of Sup35 in its prion state. Two curable phenotypes were not recapitulated by expression of Sup35 $\Delta$ PrD in  $[PSI^{\dagger}]$  strains: resistance of UCD#2534 (a commercial dry wine strain) to acidic growth conditions and sensitivity of UCD#621 (a natural fermentation isolate) to 4-NQO. These traits could be due either to a gain of function of Sup35 in its prion conformation, or to other Hsp104-dependent prions.

#### **Environmental contingency of prion-dependent traits**

Under a wide range of stressful growth conditions, cells increase the rate at which they switch into and out of the [*PSI*<sup>†</sup>] state<sup>1</sup>. Other prions are also influenced by environmental changes including refrigeration and nutrient limitation<sup>2</sup>. This link between heritable phenotypic diversity and environmental contingency is a natural consequence of stress-induced disruptions in protein homeostasis. Conformational changes in Sup35's PrD are strongly influenced by temperature<sup>3</sup> and by a host of protein homeostasis mechanisms that regulate prion nucleation and inheritance. In addition to Hsp104, factors as diverse as osmolytes<sup>4</sup>, molecular chaperones<sup>5,6</sup>, and the protein degradation machinery<sup>2,7</sup>, all influence the link between prions and environmental stress. In any case, the gain and loss of prions appears to constitute a sophisticated bethedging mechanism that allows cells to more frequently explore heritable new phenotypes when they are not well suited to their environments.

## Evidence for an adaptive cycle for [PSI<sup>+</sup>]

Defects in translation are certain to be deleterious in the long run, and the original bet-hedging hypothesis therefore posited that  $[PSI^{\dagger}]$  would be transient in the wild<sup>8</sup>. That we observed  $[PSI^{\dagger}]$ -dependent adhesion to be readily fixed in UCD#978 makes the retention of this prion in 1% of wild strains seem even more surprising.  $[PSI^{\dagger}]$ -dependent traits would be more difficult to assimilate in strains with defects in sexual reproduction. These strains might, therefore, harbour  $[PSI^{\dagger}]$  longer than their sexually

reproducing counterparts. A recent wide survey of wine strains determined that 95% are fertile diploids<sup>9</sup>. Yet three of the six randomly selected wild [*PSI*<sup>†</sup>] strains that we examined either did not sporulate or had very low spore viability, even with three different sporulation protocols – a greater fraction than expected by chance. Indeed, two of the three strains had genome sizes consistent with low fertility – #5672 was triploid and UCD#978 was approximately tetraploid. This suggests a natural adaptive cycle for [*PSI*<sup>†</sup>], in which the prion appears spontaneously, is maintained by selection for the beneficial phenotypes it confers, and finally is lost after those phenotypes have been fixed.

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#### **Supplementary Figures and Legends**

**Supplementary Figure 1.** Hsp104-dependence of natural Sup35 and Rnq1 amyloids. (A) SDD-AGEs probed for Sup35 or Rnq1 for the indicated strains before and after treatment with GdHCl. (B) The indicated strains were probed for Sup35 and Rnq1 after they had transiently carried a plasmid constitutively over-expressing either GFP or Hsp104<sup>DN</sup>. (C) The indicated strains were probed for Sup35 and Rnq1 after they had transiently carried a plasmid constitutively over-expressing either GFP (-) or WT Hsp104. (+). Strain YJW508 is a  $[PSI^{\dagger}]$  lab strain (1). (D) Immunoblot of the indicated strains over-expressing Hsp104 and Hsp104<sup>DN</sup>, probed with anti-Hsp104.

### **Supplementary Figure 2.**

Wild strains (in blue) are as evolutionarily distant from each other as they are from lab strains (in black) or other wild strains whether they are other wine strains (green) or even clinical isolates (purple). Neighbor-joining tree was constructed using the genetic distance estimated from the number of pairwise distinct SNPs.

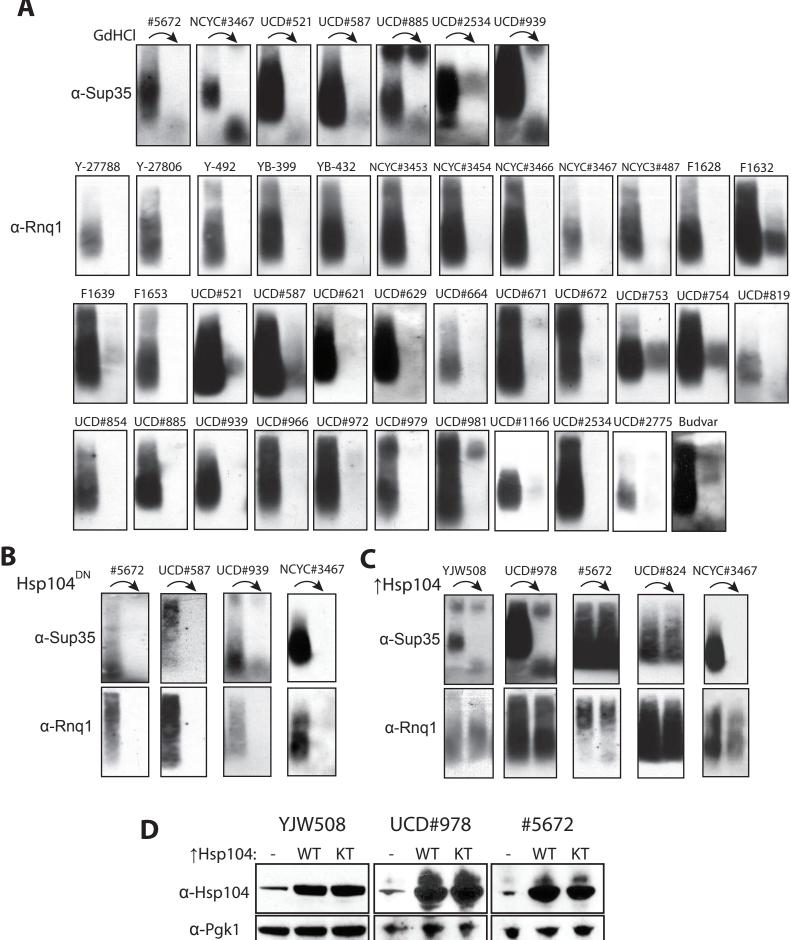
#### **Supplementary Figure 3.**

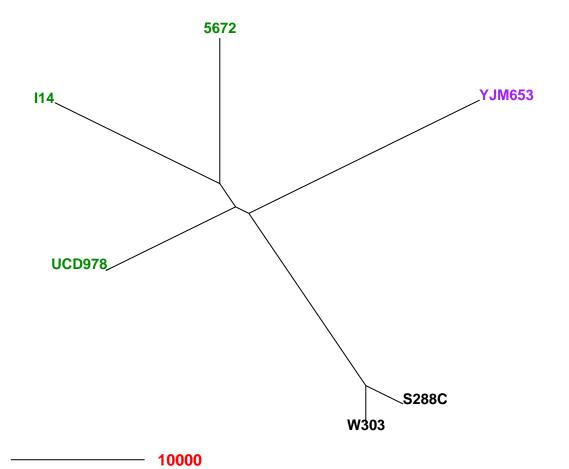
Growth of wild [ $PSI^{\dagger}$ ] strain #5672 and its cured derivative in minimal grape must medium (MMM) (2). This contrasts with very little difference in growth rate in rich medium (Table S4). Four independent isolates of each strain were inoculated in 96-well plates containing 150  $\mu$ L MMM at an initial OD<sub>600</sub> of 0.1. Plates were incubated at 30C, with shaking every 15 min prior to OD readings in a plate reader (Thermo multiskan). Error bars represent the standard deviation of the four measurements at each timepoint.

#### **Supplementary Figure 4.**

Experimental schematic for high throughput phenotyping of cured wild strains. Hundreds of wild yeast strains were cured of Hsp104-dependent prions they might harbor by passage on GdHCl. The original wild isolates and their cured derivatives were exposed in quadruplicate to diverse stressful conditions in 384-well plates. Their growth was measured every 20 hours by  $OD_{600}$  in a microplate reader following gentle agitation to re-suspend settled cells. In some strains and conditions the original isolates and cured strains grew comparably. In others the original isolate or the cured strain grew better.

Figure S1





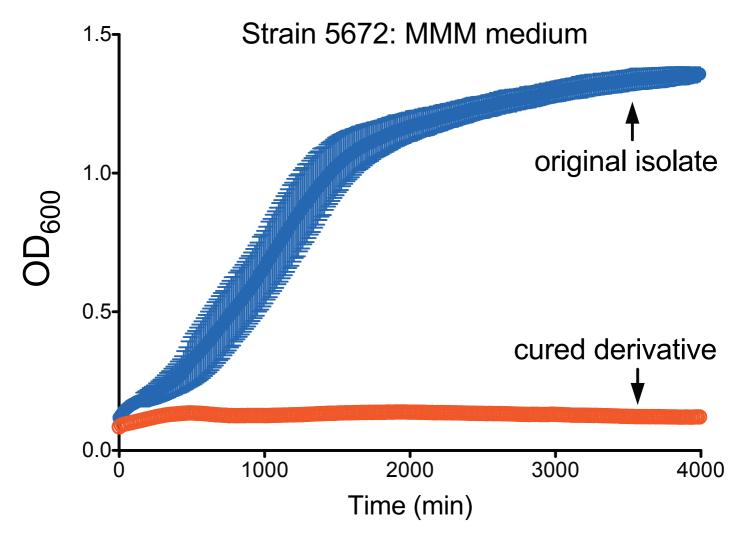
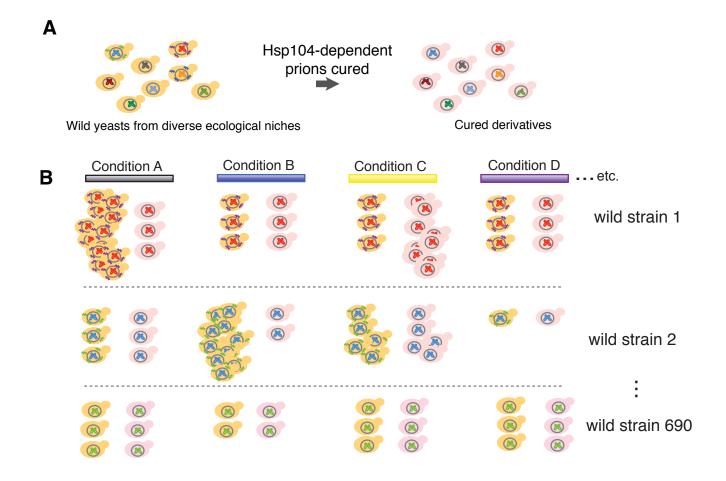


Figure S4



# **Supplementary Tables**

**Supplementary Table 1.** Saccharomyces strains used in this study, prions they harbor, and their curable phenotypes. Sample source abbreviations are: (ARSC). Agricultural Research Service Culture Collection; (NCYC) National Collection of Yeast Cultures.

Strain	Saccharomyces species	Ecotype	Origin	Source	Prion status	Curable phenotype?	Condition	Cured with dominant negative Hsp104?
					[RNQ+]	improved	minimal grape	
5672	. cerevisiae	unknown	unknown	ARSC*	[PSI+]	growth reduced	must medium	
bey Ale	cerevisiae	beer	brewing	White Labs		growth reduced	Acid	-
CC 26249	cerevisiae	wine	AWRI 729	ATCC		growth improved	Base	Yes
lgian Ale	cerevisiae	beer	brewing	White Labs		growth	YPD	-
dvar Lager	cerevisiae	beer	Czech republic brewery	Wyeast	[RNQ+]			
3VPG1794	cerevisiae	soil	soil, Finland	DBVPG				
193	cerevisiae	fruit	rotting fig, Merced, California	ARSC				
glish Ale	cerevisiae	beer	brewing	White Labs				
411	cerevisiae	unknown	unknown Cabernet sauvignon must,	Gerry Fink				
534	cerevisiae	wine	natural inoculum; Mortimer Cabernet sauvignon must,	Gerry Fink		reduced		
535	cerevisiae	wine	natural inoculum; Mortimer Cabernet sauvignon must,	Gerry Fink		growth	4-NQO	Yes
536	cerevisiae	wine	natural inoculum; Mortimer Cabernet sauvignon must,	Gerry Fink				
537	cerevisiae	wine	natural inoculum; Mortimer Cabernet sauvignon must,	Gerry Fink				
538	cerevisiae	wine	natural inoculum; Mortimer Cabernet sauvignon must,	Gerry Fink				
539	cerevisiae	wine	Mortimer	Gerry Fink				

			Cabernet sauvignon must,	
F1540	cerevisiae	wine	Mortimer	Gerry Fink
			Cabernet sauvignon must,	
F1541	cerevisiae	wine	Mortimer	Gerry Fink
			Cabernet sauvignon must,	
F1542	cerevisiae	wine	Mortimer	Gerry Fink
F4 F 4 2			Cabernet sauvignon must,	C 5: 1
F1543	cerevisiae	wine	Mortimer	Gerry Fink
F1544	cerevisiae	wine	zinfandel; Mortimer	Gerry Fink
F1545	cerevisiae	wine	zinfandel; Mortimer	Gerry Fink
F1546	cerevisiae	wine	zinfandel; Mortimer	Gerry Fink
		_	•	
F1547	cerevisiae	wine	zinfandel; Mortimer	Gerry Fink
F1548	cerevisiae	wine	zinfandel; Mortimer	Gerry Fink
. 13 .0	cerevisiae	· · · · · · ·	Zimanaci, Worthine	Cerry rank
F1549	cerevisiae	wine	Cabernet sauvignon; Mortimer	Gerry Fink
F1550	cerevisiae	wine	Cabernet sauvignon; Mortimer	Gerry Fink
F1551	cerevisiae	wine	Cabernet sauvignon; Mortimer	Gerry Fink
F1552	cerevisiae	wine	Cabernet sauvignon; Mortimer	
F1583	cerevisiae	clinical	AIDS patient; Rubin	Gerry Fink
F1608	cerevisiae	clinical	induced sputum; Rubin	Gerry Fink
F1619	cerevisiae	clinical	Rubin	Gerry Fink
F1620	cerevisiae	clinical	larynx wash; Rubin	Gerry Fink
F1621	cerevisiae	clinical	blood; Rubin	Gerry Fink
F1622	cerevisiae	clinical	sputum; Rubin	Gerry Fink
F1623	cerevisiae	clinical	pelvic drain; Rubin	Gerry Fink

improved		
growth	Hydroxyurea	Yes
		-
		-
reduced		
growth	4-NQO	Yes
improved		
growth	YP-galactose	Yes

F1624	cerevisiae	clinical	blood; Rubin	Gerry Fink				
F1625	cerevisiae	clinical	bronch wash; Rubin	Gerry Fink				
F1626	cerevisiae	clinical	sputum; Rubin	Gerry Fink				
F1627	cerevisiae	clinical	lung wound; Rubin	Gerry Fink				
F1628	cerevisiae	clinical	wound left arm; Rubin	Gerry Fink	[RNQ+]			
F1629	cerevisiae	clinical	Rubin	Gerry Fink				
F1630	cerevisiae	clinical	blood; Rubin	Gerry Fink				
F1631	cerevisiae	clinical	Rubin	Gerry Fink	[RNQ+]			
F1632	cerevisiae	clinical	Rubin	Gerry Fink	[RNQ+]			
F1633	cerevisiae	clinical	Rubin	Gerry Fink				
						improved		
F1634	cerevisiae	clinical	Rubin	Gerry Fink		growth	39C	Yes
F1635	cerevisiae	clinical	bronch wash; Rubin	Gerry Fink				
F1636	cerevisiae	clinical	Rubin	Gerry Fink				
F1637	cerevisiae	clinical	urine; Rubin	Gerry Fink				
F1638	cerevisiae	clinical	peritoneal fluid; Rubin	Gerry Fink				
F1639	cerevisiae	clinical	lft chest wall; Rubin	Gerry Fink	[RNQ+]			
						reduced		
F1640	cerevisiae	clinical	Rubin	Gerry Fink		growth	Hydroxyurea	Yes
F1641	cerevisiae	clinical	blood; Rubin	Gerry Fink				
F1642	cerevisiae	clinical	Rubin	Gerry Fink				
F1643	cerevisiae	clinical	wound; Rubin	Gerry Fink				
F1644	cerevisiae	clinical	esophageal brushing; Rubin	Gerry Fink				
						reduced		
F1645	cerevisiae	clinical	blood; Rubin	Gerry Fink		growth	Ethanol	-
F1646	cerevisiae	clinical	Rubin	Gerry Fink				

F1647	cerevisiae	clinical	Rubin	Gerry Fink				
F1648	cerevisiae	clinical	Rubin	Gerry Fink				
F1649	cerevisiae	clinical	tongue; Rubin	Gerry Fink				
F1650	cerevisiae	clinical	blood; Rubin	Gerry Fink				
F1651	cerevisiae	clinical	stool; Rubin	Gerry Fink				
						reduced		
F1652	cerevisiae	clinical	pleural tissue; Rubin	Gerry Fink		growth	4-NQO	Yes
F1653	cerevisiae	clinical	abdominal wound; Rubin	Gerry Fink	[RNQ+]			
F1654	cerevisiae	clinical	ovary pus; Rubin	Gerry Fink				
F1655	cerevisiae	clinical	bronch wash; Rubin	Gerry Fink				
F1656	cerevisiae	clinical	bronch wash; Rubin	Gerry Fink				
F1657	cerevisiae	clinical	urine; Rubin	Gerry Fink				
F1658	cerevisiae	clinical	tongue; Rubin	Gerry Fink				
F1659	cerevisiae	clinical	bronch wash; Rubin	Gerry Fink				
F1660	cerevisiae	clinical	Rubin	Gerry Fink				
F1661	cerevisiae	clinical	Rubin	Gerry Fink				
F1662	cerevisiae	clinical	body fluid; Rubin	Gerry Fink				
F1667	cerevisiae	unknown	unknown	Gerry Fink				
F1689	cerevisiae	clinical	sputum; Rubin	Gerry Fink				
F2089	cerevisiae	wine	Tokay 22 wine	Gerry Fink				
Forbidden						reduced		
Fruit Ale	cerevisiae	beer	brewing	Wyeast		growth	YP-maltose	-
Gambrinus								
Lager	cerevisiae	beer	brewing	Wyeast				
						improved		
I14	cerevisiae 	wine	wine	Leonid Kruglyak		growth	Fluconazole	Yes
Irish Ale	cerevisiae 	beer	brewing	White Labs				
Nevesser	cerevisiae	C 11		NOVO				
NCYC 3264	boulardii	fruit	Lici fruit, Indonesia.	NCYC				

NCYC 3265	cerevisiae	soil	soil	NCYC			
NCYC 3266	cerevisiae	wine	wine/lab	NCYC			
NC1C 3200	cerevisiae	WITIC	Willeriab	Nere			
			Exudate of Quercus				
NCYC 3273	paradoxus	oak	mongolica, Ternei City, Russia.	NCYC			
			Drosophila, Tijuca Forest,				
NCYC 3274	paradoxus	insect	Brazil.	NCYC			
			Exudate of Quercus				
NCYC 3275	paradoxus	oak	mongolica, Ternei City, Russia.	NCYC			
NOVC 2276		1-	Oals Desails	NOVO	reduced	206	V
NCYC 3276	paradoxus	oak	Oak, Russia. Bark of Quercus robur,	NCYC	growth	39C	Yes
			Silwood park, Ascot, London,				
NCYC 3277	paradoxus	oak	UK.	NCYC			
NCYC 3277	paradoxus	oak	Oak, London, UK.	NCYC			
	paradonas	oun	Soil beneath Q. velutina,				
NCYC 3279	paradoxus	soil	Pennsylvania, USA.	NCYC			
NCYC 3280	paradoxus	oak	Oak, London, UK.	NCYC			
NCYC 3281	paradoxus	oak	Oak, London, UK.	NCYC			
NCYC 3282	paradoxus	oak	Oak, London, UK.	NCYC			
					improved		
NCYC 3283	paradoxus	oak	Oak, London, UK.	NCYC	growth	YPD	-
			Soil beneath Q. alba,				
NCYC 3284	cerevisiae	soil	Pennsylvania, USA	NCYC			
NCYC 3285	paradoxus	guano	Guano, Italy.	NCYC			
NCYC 3286	paradoxus	oak	Oak, London, UK.	NCYC			
			Exudate of Quercus				
NGVC 2207	,		mongolica, Cape Peschannyi,	Nove			
NCYC 3287	paradoxus	oak	Vladivostok, Russia.	NCYC	reduced		
NCYC 3288	paradoxus	soil	Soil of moor, Denmark.	NCYC	growth	YPD	
NC1C 3200	puruuuxus	2011	Jon of filoof, Defilliark.	NCTC	growth	ורט	-

			Drosophila, Davis, California,					
NCYC 3289	paradoxus cerevisiae	insect	USA.	NCYC				
NCYC 3290	manginii	wine	Bili Wine, West Africa.	NCYC	[MOT3	improved		
NCYC 3311	cerevisiae	soil	Soil, Turku, Finland	NCYC	+]	growth	pH 4	-
NCYC 3312	cerevisiae	soil	Soil, Netherlands.	NCYC			•	
NCYC 3313	cerevisiae	grain	White tecc, Ethiopia. Barrel fermentation, Napa	NCYC				
NCYC 3314	cerevisiae	wine	Valley, USA.	NCYC				
NCYC 3315	cerevisiae	oak	Oak, Woodland, Pennsylvania.	NCYC				
NCYC 3316	paradoxus	oak	Oak, Montreal , Canada	NCYC				
NCYC 3317	paradoxus	oak	Oak, Montreal, Canada Wine fermentation, Maule	NCYC				
NCYC 3318	cerevisiae	wine	Region, Chile. Wine fermentation, Maule	NCYC				
NCYC 3319	cerevisiae	wine	Region, Chile.	NCYC				
NCYC 3335	paradoxus	oak	Oak, London, UK	NCYC				
NCYC 3336	paradoxus	oak	Oak, London UK.	NCYC				
NCYC 3337	paradoxus	oak	Oak, London UK.	NCYC				
			Exudate of Quercus robur,					
	_		Central Siberian Botanical			improved		
NCYC 3377	paradoxus	oak	Garden, Novo Sibirsk, Russia.	NCYC		growth	YPD	-
NCYC 3445	cerevisiae	wine	Palm Wine, Africa. Isolated from Grapes,	NCYC				
NCYC 3447	cerevisiae	grapes/must	Australia. Fruit of Opuntia stricta,	NCYC				
NCYC 3448	cerevisiae	fruit	Bahamas. Cladode of Opuntia	NCYC		improved		
NCYC 3449	cerevisiae	fruit	megacantha, Hawaii	NCYC		growth	4-NQO	Yes

	cerevisiae		Beer spoilage strain, from wor	t			
NCYC 3451	diastaticus	beer	in Irish brewery.	NCYC			
NCYC 3452	cerevisiae	sake	Shochu Sake strain, Japan	NCYC			
	00.01.00	ouo	Silosina Sano silami, vapan				
NCYC 3453	cerevisiae	baking	Baker's strain, Netherlands	NCYC	[RNQ+]		
			Le Saffre Baker's strain,				
NCYC 3454	cerevisiae	baking	Singapore	NCYC	[RNQ+]		
			Clinical isolate (Throat-				
NCYC 3455	cerevisiae	clinical	sputum), Newcastle, UK	NCYC			
			Clinical Isolate (Sputum),				
NCYC 3456	cerevisiae	clinical	Newcastle, UK	NCYC			
			Clinical isolate (Fecal),				
NCYC 3457	cerevisiae	clinical	Newcastle, UK	NCYC			
			Clinical isolate (Vaginal),				
NCYC 3458	cerevisiae	clinical	Bergamo, Italy.	NCYC			
					reduced		
NCYC 3460	cerevisiae	sake	Ragi (Sake type wine), Japan.	NCYC	growth	YP-maltose	Yes
	cerevisiae		Nectar of Bertam Palm,				
NCYC 3461	uvarum	fruit	Malaysia.	NCYC			
NCYC 3461		fruit		NCYC			
NCYC 3461 NCYC 3462		fruit fruit	Malaysia.	NCYC NCYC			
	uvarum		Malaysia. Nectar of Bertam Palm,				
	uvarum		Malaysia. Nectar of Bertam Palm, Malaysia.				
	uvarum		Malaysia. Nectar of Bertam Palm, Malaysia. Lab strain derived from				
	uvarum		Malaysia. Nectar of Bertam Palm, Malaysia. Lab strain derived from crosses of wild strains (EM93		[RNQ+]		
NCYC 3462	uvarum cerevisiae	fruit	Malaysia. Nectar of Bertam Palm, Malaysia. Lab strain derived from crosses of wild strains (EM93 and EM126 isolated from	NCYC			
NCYC 3462 NCYC 3466	uvarum cerevisiae cerevisiae	fruit fruit	Malaysia. Nectar of Bertam Palm, Malaysia. Lab strain derived from crosses of wild strains (EM93 and EM126 isolated from rotting figs, Californ	NCYC	[RNQ+]		
NCYC 3462	uvarum cerevisiae	fruit	Malaysia. Nectar of Bertam Palm, Malaysia. Lab strain derived from crosses of wild strains (EM93 and EM126 isolated from rotting figs, Californ	NCYC			
NCYC 3462 NCYC 3466 NCYC 3467	uvarum  cerevisiae  cerevisiae  cerevisiae	fruit fruit unknown	Malaysia. Nectar of Bertam Palm, Malaysia. Lab strain derived from crosses of wild strains (EM93 and EM126 isolated from rotting figs, Californ  lab strain W303 Bertam Palm, Trigona,	NCYC NCYC	[RNQ+]		
NCYC 3462 NCYC 3466	uvarum  cerevisiae  cerevisiae  cerevisiae  cerevisiae	fruit fruit	Malaysia. Nectar of Bertam Palm, Malaysia. Lab strain derived from crosses of wild strains (EM93 and EM126 isolated from rotting figs, Californ  lab strain W303 Bertam Palm, Trigona, Malaysia	NCYC	[RNQ+]		
NCYC 3462 NCYC 3466 NCYC 3467 NCYC 3468	uvarum  cerevisiae  cerevisiae  cerevisiae  cerevisiae  cerevisiae	fruit fruit unknown fruit	Malaysia. Nectar of Bertam Palm, Malaysia. Lab strain derived from crosses of wild strains (EM93 and EM126 isolated from rotting figs, Californ  lab strain W303 Bertam Palm, Trigona, Malaysia Fermenting Fruit Juice,	NCYC NCYC NCYC	[RNQ+]		
NCYC 3462 NCYC 3466 NCYC 3467	uvarum  cerevisiae  cerevisiae  cerevisiae  cerevisiae	fruit fruit unknown	Malaysia. Nectar of Bertam Palm, Malaysia. Lab strain derived from crosses of wild strains (EM93 and EM126 isolated from rotting figs, Californ  lab strain W303 Bertam Palm, Trigona, Malaysia	NCYC NCYC	[RNQ+]		

NCYC 3471	cerevisiae	clinical	Clinical isolate (vaginal), Bergamo, Italy.	NCYC				
NCYC 3472	cerevisiae	clinical	Clinical isolate (vaginal), Bergamo, Italy.	NCYC				
NCYC 3473	paradoxus	oak	Oak, London, UK	NCYC				
NCYC 3474	paradoxus	oak	Oak, London, UK	NCYC				
NCYC 3475	paradoxus	oak	Oak, London, UK	NCYC				
NCYC 3476	paradoxus	oak	Oak, London, UK	NCYC				
NCYC 3477	paradoxus	oak	Oak, London, UK	NCYC				
NCYC 3478	paradoxus	oak	Oak, London, UK	NCYC				
NCYC 3479	paradoxus	oak	Oak, London, UK	NCYC				
NCYC 3480	paradoxus	oak	Oak, Russia	NCYC				
NCYC 3481	paradoxus	oak	Oak, London, UK	NCYC				
NCYC 3482	paradoxus	oak	Oak, Siberia Drosophila, Catalao point,	NCYC				
NCYC 3483	paradoxus	insect	Brazil	NCYC				
NCYC 3484	paradoxus	oak	Oak, Japan	NCYC				
NCYC 3485	paradoxus	fruit	Myoporum flux, Hawaii	NCYC				
	cerevisiae		Ginger Beer from Z. officinale,					
NCYC 3486	chevalieri	beer	West Africa	NCYC				
NCYC 3487	cerevisiae	baking	Baker's strain, Australia.	NCYC	[RNQ+	]		
Northwest Ale	e <i>cerevisiae</i>	beer	brewing	Wyeast				
OP1	cerevisiae	soil	Occoneechee Park, VA	Dietzmann, Dietrich				
						improved		
OP10	cerevisiae	soil	Occoneechee Park, VA	Dietzmann, Dietrich		growth	YP-maltose	Yes
OP2	cerevisiae	soil	Occoneechee Park, VA	Dietzmann, Dietrich				
OP3	cerevisiae	soil	Occoneechee Park, VA	Dietzmann, Dietrich				
OP4	cerevisiae	soil	Occoneechee Park, VA	Dietzmann, Dietrich				
OP6	cerevisiae	soil	Occoneechee Park, VA	Dietzmann, Dietrich				

OP7	cerevisiae	soil	Occoneechee Park, VA	Dietzmann, Dietrich			
OP8	cerevisiae	soil	Occoneechee Park, VA	Dietzmann, Dietrich			
OP9	cerevisiae	soil	Occoneechee Park, VA	Dietzmann, Dietrich			
SK1	cerevisiae	soil	soil, USA	Leland Hartwell			
SM1	cerevisiae	soil	Stone Mountain, GA	Dietzmann, Dietrich			
SM12	cerevisiae	soil	Stone Mountain, GA	Dietzmann, Dietrich			
SM17	cerevisiae	soil	Stone Mountain, GA	Dietzmann, Dietrich			
					reduced		
SM2	cerevisiae	soil	Stone Mountain, GA	Dietzmann, Dietrich	growth	Fluconazole	Yes
SM66	cerevisiae	soil	Stone Mountain, GA	Dietzmann, Dietrich			
					reduced		
SM69	cerevisiae	soil	Stone Mountain, GA	Dietzmann, Dietrich	growth	Base	No
T73	cerevisiae	wine	wine	Leonid Kruglyak			
Trappist Ale	cerevisiae	beer	brewing	White Labs			
			Wine, 1979, unioculated UC	Viticulture and Enology Yeast	reduced		
UCD690		0 wine	Davis wine	Collection, UC Davis	growth	Base	-
					reduced		
					growth	Hydroxyurea	-
			Wine yeast, cold tolerant,	Viticulture and Enology Yeast	reduced		
UCD762		0 wine	Italy, 1984	Collection, UC Davis	growth	Base	-
11604020			Obtained from C. Lindegren	Viticulture and Enology Yeast	reduced	4.1100	
UCD1038	cerevisiae	unknown	(09/1945)	Collection, UC Davis	growth	4-NQO	-
					reduced growth	Ethanol	
			Red Star Premeir Cuvee Iraji	Viticulture and Enology Yeast	reduced	Ethanoi	-
UCD1044	cerevisiae	wine	Honori isolates	Collection, UC Davis	growth	4-NQO	_
0001044	cerevisiae	Wille	Honor isolates	concetion, de bavis	reduced	4 NQO	
					growth	Ethanol	_
					reduced		
					growth	Fluconazole	-
					reduced		
					growth	YP-maltose	-

UCD1047	cerevisiae	wine	Commercial dry wine yeast	Viticulture and Enology Yeast Collection, UC Davis	reduced growth	Ethanol	_
				Viticulture and Enology Yeast			
UCD105	cerevisiae	wine	wine	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD1109	cerevisiae	grapes/must	must	Collection, UC Davis	growth	4-NQO	-
					reduced		
					growth	Fluconazole	-
					reduced		
					growth reduced	Hydroxyurea	-
					growth	pH 9	
					reduced	рпэ	-
					growth	YP-glycerol	_
			ATCC through J. Castor,	Viticulture and Enology Yeast	8. 6	8.700.0.	
UCD1114	cerevisiae	unknown	(06/01/47), ATCC 4360	Collection, UC Davis			
			L. Hohl, Division of Fruit				
			Products (1945), UCB,	Viticulture and Enology Yeast			
UCD1144	cerevisiae	unknown	California	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD1146	kudriavzevii	wine	wine	Collection, UC Davis	growth	Ethanol	-
					reduced		
					growth 	Fluconazole	-
					reduced		
				Vitiguiture and Englagy Vesst	growth	pH 4	-
UCD1148	cerevisiae	wine	wine, California, 1935	Viticulture and Enology Yeast Collection, UC Davis			
0001140	CETEVISIUE	WILL	L. Hohl, Division of Fruit	Confection, OC Davis			
			Products (1945), UCB,	Viticulture and Enology Yeast	reduced		
UCD1149	cerevisiae	unknown	California	Collection, UC Davis	growth	Fluconazole	_
5-2-15	20.01.0740			2233, 22.24	reduced		
					growth	NaCl	-
					-		

				Viticulture and Enology Yeast		reduced		
UCD1152	cerevisiae	wine	winery	Collection, UC Davis		growth	4-NQO	-
						reduced		
						growth	Fluconazole	-
						reduced		
						growth	YP-galactose	-
			L. Hohl, Division of Fruit					
			Products (1945), UCB,					
			California; Possible flor yeast					
			based on analysis by Jean-Luc	Viticulture and Enology Yeast		reduced		
UCD1162	cerevisiae	unknown	LeGras	Collection, UC Davis		growth	Fluconazole	-
			L. Hohl, Division of Fruit					
			Products (1945), UCB,	Viticulture and Enology Yeast		reduced		
UCD1165	cerevisiae	unknown	California	Collection, UC Davis		growth	Ethanol	-
						reduced		
						growth	Fluconazole	-
			Obtained from B. Porchet	Viticulture and Enology Yeast		reduced		
UCD1166	cerevisiae	unknown	(1940) Switzerland	Collection, UC Davis	[RNQ+]	growth	4-NQO	-
						reduced		
						growth	Fluconazole	-
			Fruit Products Collection	Viticulture and Enology Yeast				
UCD1167	cerevisiae	unknown	(1940) UCB, California	Collection, UC Davis				
			Fruit Products Collection	Viticulture and Enology Yeast				
UCD1168	cerevisiae	unknown	(1940) UCB, California	Collection, UC Davis				
			Fruit Products Collection	Viticulture and Enology Yeast				
UCD1169	cerevisiae	unknown	(1940) UCB, California	Collection, UC Davis				
			Fruit Products Collection	Viticulture and Enology Yeast				
UCD1172	cerevisiae	unknown	(1940) UCB, California	Collection, UC Davis				
			Fruit Products Collection	Viticulture and Enology Yeast				
UCD1173	cerevisiae	unknown	(1940) UCB, California	Collection, UC Davis				
			misidentified in Viticulture and			reduced		
UCD1174	cerevisiae	unknown	Enology	Collection, UC Davis		growth	YP-glycerol	-

UCD1175	cerevisiae	unknown	Fruit Products Collection (1940) UCB, California Fruit Products Collection	Viticulture and Enology Yeast Collection, UC Davis Viticulture and Enology Yeast
UCD1176	cerevisiae?	unknown	(1940) UCB, California	Collection, UC Davis Viticulture and Enology Yeast
UCD1177	cerevisiae	wine	winery, Europe Fruit Products Collection	Collection, UC Davis Viticulture and Enology Yeast
UCD1178	cerevisiae	unknown	(1940) UCB, California	Collection, UC Davis Viticulture and Enology Yeast
UCD1180	cerevisiae	wine	wine, Riesling	Collection, UC Davis
				Viticulture and Enology Yeast
UCD1181	cerevisiae	wine	wine, Riesling	Collection, UC Davis
11601102			inam. F.mana	Viticulture and Enology Yeast
UCD1182	cerevisiae	wine	winery, Europe	Collection, UC Davis Viticulture and Enology Yeast
UCD1186	cerevisiae	grapes/must	grape, California	Collection, UC Davis
0021100	00.07.0.00	8. ap 23,as	8. apc, camorma	Viticulture and Enology Yeast
UCD1187	cerevisiae	wine	wine, Sauterne	Collection, UC Davis
				Viticulture and Enology Yeast
UCD1210	cerevisiae	fruit	Fig, California, fermenting	Collection, UC Davis
				Viticulture and Enology Yeast
UCD1212	cerevisiae	grapes/must	FM grapes, Brazil	Collection, UC Davis
11604242			in - Diseas Daw	Viticulture and Enology Yeast
UCD1213	cerevisiae	wine	wine, Rimac, Peru	Collection, UC Davis Viticulture and Enology Yeast
UCD1219	cerevisiae	beer	Beer brewing strain	Collection, UC Davis
0 00 1210	22.27.5.42	2001	grapes, Thompsons seedless,	Viticulture and Enology Yeast
UCD1222	cerevisiae	grapes/must		Collection, UC Davis

reduced
growth YP-maltose 
reduced
growth Fluconazole reduced
growth 4-NQO reduced
growth Hydroxyurea reduced
growth YP-glycerol -

			grapes, Thompson's seedless,	Viticulture and Enology Yeast			
UCD1223	cerevisiae	grapes/must	= :	Collection, UC Davis			
		<b>6</b> - 1, ,	must, Thompson seedless,	Viticulture and Enology Yeast			
UCD1224	cerevisiae	grapes/must		Collection, UC Davis			
		0 1 /		Viticulture and Enology Yeast	improved		
UCD1225	cerevisiae	grapes/must	must, Muscat, California	Collection, UC Davis	growth	Fluconazole -	
		<b>5</b> , ,	,	Viticulture and Enology Yeast	S		
UCD1226	cerevisiae	grapes/must	must, California	Collection, UC Davis			
		<b>5</b> . ,	·	Viticulture and Enology Yeast			
UCD1227	cerevisiae	grapes/must	must, California	Collection, UC Davis			
			·	Viticulture and Enology Yeast	reduced		
UCD1229	cerevisiae	wine	wine, California	Collection, UC Davis	growth	Ethanol -	
				Viticulture and Enology Yeast			
UCD1230	cerevisiae	grapes/must	must, Semillon, California	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD1231	cerevisiae	grapes/must	must, California	Collection, UC Davis	growth	4-NQO -	
				Viticulture and Enology Yeast			
UCD1232	cerevisiae	grapes/must	must, California	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD1233	cerevisiae	grapes/must	must, Concord, California	Collection, UC Davis	growth	4-NQO -	
					improved		
					growth	Ethanol -	
					improved		
					growth	Fluconazole -	
				Viticulture and Enology Yeast	improved		
UCD1234	cerevisiae	grapes/must	must, concord, California	Collection, UC Davis	growth	Fluconazole -	
				Viticulture and Enology Yeast			
UCD1235	cerevisiae	grapes/must	must, Muscat, California	Collection, UC Davis			
		,		Viticulture and Enology Yeast			
UCD1244	cerevisiae	grapes/must	grape, Chasselas, California	Collection, UC Davis			
11004345			Alicente C III	Viticulture and Enology Yeast	reduced	Falson al	
UCD1245	cerevisiae	grapes/must	grape, Alicante, California	Collection, UC Davis	growth	Ethanol -	

				Viticulture and Enology Yeast			
UCD1246	cerevisiae	granes/must	grape, Muscat, California	Collection, UC Davis			
0001240	CETEVISIAE	grapes/mast	grape, wascat, camorna	Viticulture and Enology Yeast			
UCD1248	cerevisiae	grapes/must	must, Muscat, California	Collection, UC Davis			
00212.0	00.07.0.00	8. 4 6 6 5 11. 4 6 6		Viticulture and Enology Yeast			
UCD1250	cerevisiae	grapes/must	pomace, red, California, wine	Collection, UC Davis			
		0 - 1 1	pomace, white, California,	Viticulture and Enology Yeast			
UCD1251	cerevisiae	grapes/must	•	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD1252	cerevisiae	grapes/must	must, white, California	Collection, UC Davis			
			grapes, Thompson Seedless &	Viticulture and Enology Yeast	improved		
UCD1253	cerevisiae	grapes/must	Malaga, California	Collection, UC Davis	growth	Ethanol	-
				Viticulture and Enology Yeast	reduced		
UCD1254	cerevisiae	wine	wine, muscat, California	Collection, UC Davis	growth	pH 9	-
					improved		
					growth	4-NQO	-
				Viticulture and Enology Yeast			
UCD1256	cerevisiae	wine	Tokay yeast preparation, wine	Collection, UC Davis			-
				Viticulture and Enology Yeast			
UCD1257	cerevisiae	grapes/must	grapes, Tokay, California	Collection, UC Davis			-
				Viticulture and Enology Yeast	reduced		
UCD1259	cerevisiae	grapes/must	must, California	Collection, UC Davis	growth	Ethanol	-
		_		Viticulture and Enology Yeast	reduced		
UCD126	cerevisiae	unknown	Mrak 1948, Sacch. uvarum	Collection, UC Davis	growth 	Ethanol	-
					improved		
					growth	4-NQO	-
					improved	VD 1 .	
				Vitigulture and Englagy Veset	growth	YP-galactose	-
UCD1260	cerevisiae	wine	wing sweet	Viticulture and Enology Yeast Collection, UC Davis			
0001200	cerevisiue	wille	wine, sweet	Viticulture and Enology Yeast	reduced		
UCD1263	cariocanus	wine	France, grape or wine	Collection, UC Davis	growth	Ethanol	_
0001203	carrocarras	WILLE	Trance, grape of wille	Concetion, Oc Davis	giowuii	Lillanoi	_

				Viticulture and Enology Yeast	reduced		
UCD1265	cerevisiae	beer	Ale, beer, USA	Collection, UC Davis	growth	4-NQO	-
					reduced		
					growth	YP-maltose	-
				Viticulture and Enology Yeast			
UCD1267	cerevisiae	beer	Ale, beer, USA	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD1268	cerevisiae	beer	Ale, beer, USA	Collection, UC Davis			
			Killer yeast, from Wickner:				
			Wickner RB, Leibowitz MJ. J.	Viticulture and Enology Yeast			
UCD1273	cerevisiae	unknown	Mol. Biol. 105: 427-443, 1976.	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD1282	cerevisiae	grapes/must	Grape, Jundiri, Brazil	Collection, UC Davis			
			Possibly an original "lab" yeast				
			from Castor to Mrak in 1940,	Viticulture and Enology Yeast			
UCD13	cerevisiae	unknown	"P-CN of Stier and Castor"	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD1419	cerevisiae	beer	Denmark, beer	Collection, UC Davis			
			distillary, Australia,	Viticulture and Enology Yeast	reduced		
UCD1427	cerevisiae	distilling	fermentation	Collection, UC Davis	growth	Fluconazole	-
		J	"Culture obtained from Waite	·	3		
			Institute, original # J16				
			(1947)" "Adelaide University,	Viticulture and Enology Yeast			
UCD1444	cerevisiae	unknown	Australia"	Collection, UC Davis			
			"Culture obtained from Waite	,			
			Institute, original # J3 (1947)"				
			"Adelaide University,	Viticulture and Enology Yeast			
UCD1445	cerevisiae	unknown	Australia"	Collection, UC Davis			

			"Culture obtained from Waite				
			Institute, original # J7B				
			(1947)" "Adelaide University,	Viticulture and Enology Yeast			
UCD1448	cerevisiae	unknown	Australia"	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD153	sp.	wine	wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD155	sp.	wine	wine	Collection, UC Davis			
			Fomachon to Mrak, 1956,				
			Possibly from Australia, isolate	2			
			was probably from				
			fermentation of wine or	Viticulture and Enology Yeast			
UCD157	sp.	unknown	bread?	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD160	pastorianus	wine	wine, Region de Monbazillac	Collection, UC Davis	growth	tBOOH	-
					reduced		
					growth	YP-galactose	-
				Viticulture and Enology Yeast	reduced		
UCD167	cerevisiae	wine	wine,Tripoli	Collection, UC Davis	growth	tBOOH	-
				Viticulture and Enology Yeast			
UCD168	cerevisiae	wine	wine,Tripoli	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD173	pastorianus	grapes/must	Must, Western Sicily	Collection, UC Davis	growth	Hydroxyurea	-
				Viticulture and Enology Yeast			
UCD174	pastorianus	grapes/must	Must, Island of Pantelleria	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD175	cerevisiae	grapes/must	Must, Eastern Sicily (Etna)	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD176	cerevisiae	grapes/must	Must, Eastern Sicily (Etna)	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2031	cerevisiae	wine	commercial yeast	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2032	cerevisiae	wine	Commercial dry yeast	Collection, UC Davis			

				Viticulture and Enology Yeast				
UCD2033	cerevisiae	wine	Commercial dry yeast	Collection, UC Davis				
			, ,	Viticulture and Enology Yeast				
UCD2034	cerevisiae	wine	Commercial yeast	Collection, UC Davis				
			·	Viticulture and Enology Yeast				
UCD2035	cerevisiae	wine	Commercial dry wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast		reduced		
UCD2036	cerevisiae	wine	Commercial dry wine yeast	Collection, UC Davis	[RNQ+]	growth	Ethanol	-
				Viticulture and Enology Yeast				
UCD2038	cerevisiae	wine	Commercial dry wine culture	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD2039	cerevisiae	wine	Commercial dry wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast		reduced		
UCD2061	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis		growth	Fluconazole	-
				Viticulture and Enology Yeast				
UCD2068	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD2069	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast		improved		
UCD2070	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis		growth	Fluconazole	-
				Viticulture and Enology Yeast				
UCD2071	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD2073	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD2074	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast		reduced		
UCD2086	sp.	wine	Stuck fermentation, wine	Collection, UC Davis		growth	YP-maltose	-
				Viticulture and Enology Yeast				
UCD2087	sp.	wine	Stuck fermentation, wine	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD2088	sp.	wine	Stuck fermentation, wine	Collection, UC Davis				

				Viticulture and Enology Yeast			
UCD2089	sp.	wine	Stuck fermentation, wine	Collection, UC Davis			
	·			Viticulture and Enology Yeast			
UCD2090	sp.	wine	Stuck fermentation, wine	Collection, UC Davis			
	cerevisiae race			Viticulture and Enology Yeast			
UCD2099	bayanus	wine	Commercial wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2103	cerevisiae	wine	Barrel fermentation, Luna	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2118	cerevisiae	wine	Barrel fermentation, Luna	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2120	cerevisiae	wine	Wine, Barrel fermentation	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2121	cerevisiae	wine	Barrel fermentation, Luna	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2122	cerevisiae	wine	Barrel fermentation, Luna	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2176	cerevisiae	wine	wine, barrel	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2177	cerevisiae	wine	wine, barrel	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2199	cerevisiae	wine	wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2201	cerevisiae	wine	wine or must	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2205	cerevisiae	wine	wine or must	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD2206	cerevisiae	wine	wine	Collection, UC Davis	growth	4-NQO	-
				Viticulture and Enology Yeast	improved		
UCD2211	servazzii	grapes/must	must	Collection, UC Davis	growth	4-NQO	-
				Viticulture and Enology Yeast			
UCD2212	cerevisiae	wine	commercial wine yeast	Collection, UC Davis			

				Viticulture and Enology Yeast			
UCD2213	cerevisiae	wine	wine	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD2214	cerevisiae	wine	commercial wine yeast	Collection, UC Davis	growth	4-NQO	-
				Viticulture and Enology Yeast	improved		
UCD2215	cerevisiae	wine	commercial wine yeast	Collection, UC Davis	growth	4-NQO	-
				Viticulture and Enology Yeast	improved		
UCD2216	cerevisiae	wine	commercial wine yeast	Collection, UC Davis	growth	4-NQO	-
				Viticulture and Enology Yeast	improved		
UCD2389	cerevisiae	wine	Commercial dry wine yeast	Collection, UC Davis	growth	4-NQO	-
				Viticulture and Enology Yeast	improved		
UCD2390	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	pH 4	-
	cerevisiae race			Viticulture and Enology Yeast	improved		
UCD2391	bayanus	wine	commercial dry wine yeast	Collection, UC Davis	growth	4-NQO	-
					improved		
					growth	YP-maltose	-
				Viticulture and Enology Yeast	improved		
UCD2392	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	4-NQO	-
					improved		
					growth	pH 4	-
				Viticulture and Enology Yeast	improved		
UCD2393	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	Fluconazole	-
	cerevisiae race			Viticulture and Enology Yeast	improved		
UCD2394	bayanus	wine	commercial dry wine yeast	Collection, UC Davis	growth	Ethanol	-
				Viticulture and Enology Yeast			
UCD2395	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD2410	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	Hydroxyurea	-
				Viticulture and Enology Yeast			
UCD2411	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD2412	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	YP-glycerol	-

				Viticulture and Enology Yeast	improved		
UCD2413	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	pH 4	-
	cerevisiae race			Viticulture and Enology Yeast	reduced		
UCD2414	bayanus	wine	commercial dry wine yeast	Collection, UC Davis	growth	Fluconazole	-
					improved		
					growth	pH 4	-
				Viticulture and Enology Yeast			
UCD2415	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2416	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD2417	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	Fluconazole	-
					improved		
					growth	NaCl	-
				Viticulture and Enology Yeast	reduced		
UCD2454	cerevisiae	beer	Beer	Collection, UC Davis	growth	Ethanol	-
				Viticulture and Enology Yeast	improved		
UCD2496	cerevisiae	wine	Commercial dry wine Yeast	Collection, UC Davis	growth	4-NQO	-
			·		improved		
					growth	YP-maltose	-
				Viticulture and Enology Yeast	improved		
UCD2497	cerevisiae	wine	Commercial dry wine yeast	Collection, UC Davis	growth	pH 4	-
	cerevisiae var.			Viticulture and Enology Yeast	reduced		
UCD2498	bayanus	wine	commercial dry wine yeast	Collection, UC Davis	growth	Ethanol	-
					improved		
					growth	Fluconazole	-
				Viticulture and Enology Yeast			
UCD2499	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2500	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD2501	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	4-NQO	-

					improved growth improved	Hydroxyurea	-
				Viti sultana sud Englasa Vasat	growth	YP-maltose	-
11003503				Viticulture and Enology Yeast	improved	4 NOO	
UCD2502	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	4-NQO	-
					improved	VD maltage	
				White drops and English Wash	growth	YP-maltose	-
				Viticulture and Enology Yeast			
UCD2521	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
		_		Viticulture and Enology Yeast	improved		
UCD2522	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	Fluconazole	-
				Viticulture and Enology Yeast	improved		
UCD2523	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	Fluconazole	-
				Viticulture and Enology Yeast			
UCD2524	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2525	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2526	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD2527	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	tBOOH	-
					improved		
					growth	YP-maltose	-
				Viticulture and Enology Yeast	improved		
UCD2528	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	Fluconazole	-
				Viticulture and Enology Yeast	improved		
UCD2529	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	YP-maltose	-
	cerevisiae race			Viticulture and Enology Yeast	improved		
UCD2530	bayanus	wine	commercial dry wine yeast	Collection, UC Davis	growth	4-NQO	-
					improved		
					growth	pH 4	-
					-		

				Viticulture and Enology Yeast		improved		
UCD2531	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis		growth	Fluconazole	-
				Viticulture and Enology Yeast		improved		
UCD2532	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis		growth	4-NQO	-
						improved		
						growth	Fluconazole	-
						improved		
						growth	YP-galactose	-
				Viticulture and Enology Yeast		improved		
UCD2533	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis		growth	Fluconazole	-
				Viticulture and Enology Yeast	[RNQ+]	improved		
UCD2534	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	[PSI+]	growth	pH 4	-
				Viticulture and Enology Yeast		improved		
UCD2535	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis		growth	Ethanol	-
						improved		
						growth	Fluconazole	-
						improved		
						growth	Hydroxyurea	-
						improved		
						growth	pH 4	-
				Viticulture and Enology Yeast		improved		
UCD2536	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis		growth	4-NQO	-
						improved		
						growth	NaCl	-
				Viticulture and Enology Yeast		improved		
UCD2537	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis		growth	4-NQO	_
			, , , , , , , , , , , , , , , , , , , ,	Viticulture and Enology Yeast		improved		
UCD2538	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis		growth	4-NQO	_
			, , , , , , , , , , , , , , , , , , , ,	Viticulture and Enology Yeast		0		
UCD2539	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis				
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Viticulture and Enology Yeast				
UCD2540	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis				
20220.0	2212110101	*******	commercial ary time yeast	cocodiony de bario				

				Viticulture and Enology Yeast			
UCD2541	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2542	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD2543	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	NaCl	-
					improved		
					growth	4-NQO	-
				Viticulture and Enology Yeast	reduced		
UCD2544	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	NaCl	-
					improved		
					growth	Ethanol	-
					improved		
					growth	YP-maltose	-
		_		Viticulture and Enology Yeast	reduced		
UCD2545	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth 	Hydroxyurea	-
					improved		
				Wiking days and Frankers Wash	growth	Fluconazole	-
LICD2E46	corouiciae	wina	commercial dry wine veset	Viticulture and Enology Yeast	reduced	[than al	
UCD2546	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	Ethanol	-
					improved growth	YP-maltose	
				Viticulture and Enology Yeast	growth	ir-illaitose	_
UCD2547	cerevisiae	wine	Wine Spain	Collection, UC Davis			
0022317	cerevisiae	Wille	vinc spani	Viticulture and Enology Yeast	reduced		
UCD2553	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	Hydroxyurea	_
				, , , , , , , , , , , , , , , , , , , ,	reduced	, ,	
					growth	NaCl	_
					improved		
					growth	Fluconazole	-
				Viticulture and Enology Yeast			
UCD2554	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			

UCD2555	cerevisiae	wine	commercial dry wine yeast	Viticulture and Enology Yeast Collection, UC Davis	improved growth improved	4-NQO -	
					growth	NaCl -	
		<b>.</b>	Figs, Merced California,	Viticulture and Enology Yeast			
UCD2607	cerevisiae	fruit	fermenting	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2608	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD2609	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth 	Fluconazole -	
110000010				Viticulture and Enology Yeast	improved		
UCD2610	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	Fluconazole -	
					improved	VD II	
					growth	YP-maltose -	
				Viticulture and Enology Yeast	reduced		
UCD2611	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth 	NaCl -	
					improved		
					growth	Fluconazole -	
110000014				Viticulture and Enology Yeast	improved		
UCD2614	cerevisiae	wine	wine, 2006 California	Collection, UC Davis	growth 	Hydroxyurea -	
			Chardonnay, 2007, Napa	Viticulture and Enology Yeast	improved		
UCD2616	cerevisiae	wine	Valley, California, wine	Collection, UC Davis	growth	YP-galactose -	
				Viticulture and Enology Yeast	improved		
UCD2617	cerevisiae	wine	Wine	Collection, UC Davis	growth	Fluconazole -	
					improved		
					growth	tBOOH -	
				Viticulture and Enology Yeast			
UCD27	sp.	wine	wine	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD2747	sp	wine	Commercial yeast, Anchor	Collection, UC Davis	growth	Fluconazole -	
				Viticulture and Enology Yeast			
UCD2756	cerevisiae	wine	Commercial wine yeast	Collection, UC Davis			

11002772			Commonsial	Viticulture and Enology Yeast			
UCD2773	cerevisiae	unknown	Commercial yeast	Collection, UC Davis Viticulture and Enology Yeast	reduced		
UCD2774	cerevisiae	unknown	Commercial yeast	Collection, UC Davis	growth	tBOOH	_
002277	00.01.0.0.0	G	commendati y cast	Viticulture and Enology Yeast	reduced		
UCD2775	cerevisiae	wine	Wine yeast	Collection, UC Davis	growth	pH 4	-
			,	Viticulture and Enology Yeast	S	•	
UCD2778	cerevisiae	wine	wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD2779	cerevisiae	wine	Wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD2780	cerevisiae	wine	Wine yeast	Collection, UC Davis	growth	pH 9	-
				Viticulture and Enology Yeast	improved		
UCD2781	cerevisiae	wine	Wine yeast	Collection, UC Davis	growth	Fluconazole	-
				Viticulture and Enology Yeast	improved		
UCD2782	cerevisiae	wine	Wine yeast	Collection, UC Davis	growth	Ethanol	-
					improved		
					growth	Fluconazole	-
					improved	VD 1 1	
				Visit outstand and England Value	growth	YP-glycerol	-
UCD2783	cerevisiae	wing	Mina vaast	Viticulture and Enology Yeast	improved	Fluconazole	
UCD2783	cerevisiae	wine	Wine yeast	Collection, UC Davis Viticulture and Enology Yeast	growth	Fluconazole	-
UCD447	cerevisiae	unknown	Mrak 1948	Collection, UC Davis			
000447	CCTCVISIAC	anknown	WII dk 1340	Viticulture and Enology Yeast			
UCD49	cerevisiae	fruit	citrus fermentation	Collection, UC Davis			
3 32 .3	00.01.0.0.0			Viticulture and Enology Yeast			
UCD501	cerevisiae	wine	Wine	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD502	cerevisiae	wine	wine	Collection, UC Davis	growth	Hydroxyurea	-
				Viticulture and Enology Yeast			
UCD503	cerevisiae	wine	champagne, wine	Collection, UC Davis			

				Viticulture and Enology Yeast		
UCD505	cerevisiae	wine	wine	Collection, UC Davis		
00000	cerevisiae	WIIIC	Wille	Viticulture and Enology Yeast		
UCD506	cerevisiae	wine	wine	Collection, UC Davis		
00000	cerevisiae	WIIIC	Wille	Viticulture and Enology Yeast		
UCD507	cerevisiae	wine	wine	Collection, UC Davis		
000007	CETEVISIAE	WITE	Wille	Viticulture and Enology Yeast		
UCD509	cerevisiae	wine	wine	Collection, UC Davis		
00000	CETEVISIAE	WITE	Wille	Viticulture and Enology Yeast		
UCD51	cerevisiae	wine	wine	Collection, UC Davis		
OCDSI	cerevisiae	WITE	Wille	Viticulture and Enology Yeast		
UCD510	cerevisiae	wine	wine	Collection, UC Davis		
000310	cerevisiae	WITE	wille	Viticulture and Enology Yeast	reduced	
UCD511		0 wine	wine, Champagne, 1958	Collection, UC Davis	growth	Hydroxyurea -
000311		O WITE	wille, Champagne, 1938	Viticulture and Enology Yeast	growth	riyuroxyurea -
UCD512	cerevisiae	wine	cognac, ferm	Collection, UC Davis		
000312	cerevisiae	WITE	cognac, lerm	Viticulture and Enology Yeast		
UCD513	cerevisiae	distilling	fermentation	Collection, UC Davis		
000515	cerevisiae	distilling	Termentation	Viticulture and Enology Yeast		
UCD514	cerevisiae	wine	wine	Collection, UC Davis		
0CD314	cerevisiae	WITE	wille	Viticulture and Enology Yeast	reduced	
UCD515	cerevisiae	wine	Wine	Collection, UC Davis	growth	Hydroxyurea -
000313	cerevisiae	WITE	wille	Viticulture and Enology Yeast	reduced	riyuroxyurea -
UCD517	cerevisiae	wine	Wine	Collection, UC Davis	growth	Hydroxyurea -
000317	cerevisiae	WITE	wille	Viticulture and Enology Yeast	reduced	riyuroxyurea -
UCD518	cerevisiae	wine	Wine	Collection, UC Davis	growth	Hydroxyurea -
0CD318	cerevisiue	wille	wille	Viticulture and Enology Yeast	growth	пуштохуштеа -
UCD519	coroviciao	wing	Charmanina	- ·		
000519	cerevisiae	wine	Sherry wine	Collection, UC Davis Viticulture and Enology Yeast	reduced	
HCDE30	coroviciao	wing	Malaga wing	- ·		Undrovauroo
UCD520	cerevisiae	wine	Malaga wine	Collection, UC Davis	growth	Hydroxyurea -
				Viticulture and Enology Yeast	[RNQ+] reduced	
UCD521	cerevisiae	wine	Marsala wine	Collection, UC Davis	[PSI+] growth	Hydroxyurea -
000021	CETEVISIAE	WILL	IVIGISAIA WITIC	Concetion, de Davis	[1311] BIOWEII	Trydroxydred -

				Vitigulture and Englogy Veast	reduced	
HCDE33			N. A control of the control of	Viticulture and Enology Yeast		I lead was a see a
UCD522	cerevisiae	wine	Montrachet wine	Collection, UC Davis	growth	Hydroxyurea -
LICDEAN			NA all - coder -	Viticulture and Enology Yeast		
UCD523	cerevisiae	wine	Moselle wine	Collection, UC Davis		
				Viticulture and Enology Yeast	improved	
UCD524	cerevisiae	wine	Muscatel wine	Collection, UC Davis	growth	YP-glycerol -
				Viticulture and Enology Yeast		
UCD525	cerevisiae	wine	Port wine	Collection, UC Davis		
				Viticulture and Enology Yeast		
UCD526	cerevisiae	wine	wine, Rhine	Collection, UC Davis		
				Viticulture and Enology Yeast	improved	
UCD527	cerevisiae	wine	Riesling wine	Collection, UC Davis	growth	Fluconazole -
					improved	
					growth	Hydroxyurea -
				Viticulture and Enology Yeast	improved	
UCD529	cerevisiae	wine	Wine	Collection, UC Davis	growth	Fluconazole -
				Viticulture and Enology Yeast		
UCD530	cerevisiae	wine	Wine, Tokay	Collection, UC Davis		
				Viticulture and Enology Yeast		
UCD532	cerevisiae	wine	Wine yeast	Collection, UC Davis		
				Viticulture and Enology Yeast		
UCD533	cerevisiae	wine	Wine	Collection, UC Davis		
				Viticulture and Enology Yeast		
UCD535	cerevisiae	wine	wine	Collection, UC Davis		
				Viticulture and Enology Yeast		
UCD538	cerevisiae	wine	Bourgogne wine	Collection, UC Davis		
				Viticulture and Enology Yeast		
UCD539	cerevisiae	wine	Wine	Collection, UC Davis		
				Viticulture and Enology Yeast		
UCD541	cerevisiae	wine	Wine	Collection, UC Davis		
				Viticulture and Enology Yeast	reduced	
UCD542	cerevisiae	wine	wine	Collection, UC Davis	growth	Hydroxyurea -
				•	-	•

					reduced		
					growth	YP-maltose	-
				Viticulture and Enology Yeast			
UCD544	cerevisiae	wine	wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD545	cerevisiae	wine	Sauternes wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD546	cerevisiae	wine	Wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD547	cerevisiae	beer	Beer	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD550	cerevisiae	wine	wine?	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD552	cerevisiae	wine	Sherry wine	Collection, UC Davis	growth	Hydroxyurea	-
				Viticulture and Enology Yeast			
UCD553	cerevisiae	wine	Sherry wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD554	cerevisiae	wine	Sherry wine	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD555	cerevisiae	wine	Sherry wine	Collection, UC Davis	growth	Hydroxyurea	-
					improved		
					growth	pH 4	-
				Viticulture and Enology Yeast			
UCD556	cerevisiae	wine	Sherry wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD557	cerevisiae	wine	Sherry wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD558	cerevisiae	wine	Sherry wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD561	cerevisiae	wine	Sherry wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD562	cerevisiae	wine	Sherry wine	Collection, UC Davis			

				Viticulture and Enology Yeast			
UCD563	cerevisiae	wine	Sherry wine	Collection, UC Davis			
00000	cerevisiae	WIIIC	Sherry wine	Viticulture and Enology Yeast			
UCD565	cerevisiae	wine	Sherry wine	Collection, UC Davis			
000303	cerevisiae	WIIIC	Sherry while	Viticulture and Enology Yeast			
UCD567	cerevisiae	wine	Sherry wine	Collection, UC Davis			
000007	CCTCVISIAC	WITE	Sherry while	Viticulture and Enology Yeast			
UCD568	cerevisiae	wine	Sherry wine	Collection, UC Davis			
00000	cerevisiae	WITE	Sherry while	Viticulture and Enology Yeast			
UCD569	cerevisiae	wine	Sherry wine	Collection, UC Davis			
000309	cerevisiae	wille	Sherry while	·	reduced		
LICDE71			Chammunian	Viticulture and Enology Yeast		l looduson nonss	
UCD571	cerevisiae	wine	Sherry wine	Collection, UC Davis	growth	Hydroxyurea	-
					reduced		
				we have	growth	pH 4	-
			_	Viticulture and Enology Yeast	reduced		
UCD574	cerevisiae	wine	wine	Collection, UC Davis	growth	Hydroxyurea	-
				Viticulture and Enology Yeast	reduced		
UCD575	cerevisiae	wine	Sylvaner wine	Collection, UC Davis	growth	pH 9	-
					improved		
					growth	Ethanol	-
				Viticulture and Enology Yeast			
UCD577	cerevisiae	wine	Muscat wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD578	cerevisiae	wine	Gewurtraminer wine	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD579	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD580	sp	wine	Flor Yeast, Sherry wine	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD586	cerevisiae	wine	wine	Collection, UC Davis	growth	YP-maltose	-

UCD587	cerevisiae (determined by ITS1 sequencing in our lab; originally annotated as bayanus)	grapes/must	Must Semillon	Viticulture and Enology Yeast Collection, UC Davis	[RNQ+] [PSI+]	improved growth improved	4-NQO	-
						growth	Ethanol	_
				Viticulture and Enology Yeast		8. 0		
UCD588	cerevisiae	wine	Wine	Collection, UC Davis				
				Viticulture and Enology Yeast		reduced		
UCD591	cerevisiae	wine	wine, German	Collection, UC Davis		growth	NaCl	-
	cerevisiae race			Viticulture and Enology Yeast				
UCD594	bayanus	wine	Champagne wine, France	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD595	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD603	cerevisiae	wine	Wine	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD604	cerevisiae	wine	Wine	Collection, UC Davis				
	cerevisiae race			Viticulture and Enology Yeast				
UCD609	bayanus	wine	wine	Collection, UC Davis				
				Viticulture and Enology Yeast		improved		
UCD610	sp.	wine	wine	Collection, UC Davis		growth	pH 4	-
				Viticulture and Enology Yeast		improved		
UCD611	cerevisiae	sake	Sake, rice wine	Collection, UC Davis		growth	4-NQO	-
				Viticulture and Enology Yeast				
UCD612	cerevisiae	sake	Sake, rice wine	Collection, UC Davis				
				Viticulture and Enology Yeast		reduced		
UCD613	cerevisiae	sake	Sake, rice wine	Collection, UC Davis		growth	NaCl	-
						improved	4 NOO	
						growth	4-NQO	-

						improved	
						growth	YP-maltose -
				Viticulture and Enology Yeast			
UCD619	cerevisiae	wine	Wine fermentation	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD620	cerevisiae	wine	wine fermentation	Collection, UC Davis			
				Viticulture and Enology Yeast		reduced	
UCD621	cerevisiae	wine	wine fermentation	Collection, UC Davis	[RNQ+]	growth	4-NQO -
				Viticulture and Enology Yeast			
UCD622	cerevisiae	wine	wine fermentation	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD623	cerevisiae	wine	wine fermentation	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD624	cerevisiae	wine	wine fermentation	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD628	kluyveri	wine	wine fermentation	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD629	cerevisiae	wine	wine fermentation	Collection, UC Davis	[RNQ+]		
				Viticulture and Enology Yeast			
UCD632	cerevisiae	grapes/must	must	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD634	cerevisiae	wine	wine fermentation	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD640	cerevisiae	wine	wine fermentation	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD647	cerevisiae	grapes/must	must	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD650	cerevisiae	wine	wine fermentation	Collection, UC Davis			
				Viticulture and Enology Yeast		improved	
UCD653	cerevisiae	wine	commercial wine strain	Collection, UC Davis		growth	YP-maltose -
				Viticulture and Enology Yeast			
UCD656	cerevisiae	sake	Sake, rice wine	Collection, UC Davis			

				Viticulture and Enology Yeast		reduced		
UCD658	sp.	wine	wine, champagne	Collection, UC Davis		growth	Fluconazole	-
						reduced		
						growth	pH 9	-
				Viticulture and Enology Yeast				
UCD659	sp.	wine	wine, champagne	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD660	cerevisiae	baking	commercial bread yeast	Collection, UC Davis	[RNQ+]			
	cerevisiae race			Viticulture and Enology Yeast				
UCD661	bayanus	wine	wine, champagne	Collection, UC Davis				
	cerevisiae race			Viticulture and Enology Yeast				
UCD662	bayanus	wine	wine, champagne	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD664	uvarum	fruit	apple cider, fermentation	Collection, UC Davis	[RNQ+]			
				Viticulture and Enology Yeast		improved		
UCD667	sp.	baking	commercial bread yeast	Collection, UC Davis		growth	Fluconazole	-
						improved		
						growth	YP-maltose	-
				Viticulture and Enology Yeast				
UCD668	sp.	baking	commercial bread yeast	Collection, UC Davis				
				Viticulture and Enology Yeast		improved		
UCD669	sp.	baking	commercial bread yeast	Collection, UC Davis		growth	Fluconazole	-
				Viticulture and Enology Yeast		reduced		
UCD670	sp.	baking	commercial bread yeast	Collection, UC Davis		growth	Ethanol	-
				Viticulture and Enology Yeast		reduced		
UCD671	sp.	baking	commercial bread yeast	Collection, UC Davis	[RNQ+]	growth	Ethanol	-
				Viticulture and Enology Yeast				
UCD672	sp.	baking	commercial bread yeast	Collection, UC Davis	[RNQ+]			
				Viticulture and Enology Yeast				
UCD673	sp.	baking	commercial bread yeast	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD674	sp.	baking	commercial bread yeast	Collection, UC Davis				

				Viticulture and Enology Yeast			
UCD675	sp.	baking	Commercial bread yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD676	sp.	baking	Commercial dry bread yeast	Collection, UC Davis	growth	pH 9	-
				Viticulture and Enology Yeast	improved		
UCD677	sp.	baking	commercial dry bread yeast	Collection, UC Davis	growth	tBOOH	-
				Viticulture and Enology Yeast			
UCD679	cerevisiae	wine	commercial wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD680	cerevisiae	wine	commercial wine yeast	Collection, UC Davis	growth	4-NQO	-
				Viticulture and Enology Yeast	improved		
UCD681	sp.	wine	wine	Collection, UC Davis	growth	NaCl	-
	bayanus/pastor	ri		Viticulture and Enology Yeast			
UCD682	anus	wine	wine	Collection, UC Davis			
	bayanus/pastor			Viticulture and Enology Yeast			
UCD684	anus	wine	wine	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD685	bayanus	wine	wine	Collection, UC Davis	growth	NaCl	-
					reduced		
					growth	рН 4	-
					reduced	_	
					growth	YP-galactose	-
					reduced		
					growth	YP-glycerol	-
					improved		
					growth 	Ethanol	-
					improved		
			W. 4070	var in the last variable	growth	YP-maltose	-
1100.633			Wine, 1979, unioculated UC	Viticulture and Enology Yeast			
UCD690		0 wine	Davis wine	Collection, UC Davis			
1100704			Common Californi	Viticulture and Enology Yeast			
UCD701	cerevisiae	grapes/must	Grapes, California	Collection, UC Davis			

				Viticulture and Enology Yeast		reduced	
UCD702	cn	wine	wine, champagne	Collection, UC Davis		growth	Hydroxyurea -
000702	sp.	WITE	wille, champagne	Viticulture and Enology Yeast		growth	Tiyuroxyurea -
UCD705	cerevisiae	beer	Beer, Germany	Collection, UC Davis			
000703	cerevisiae	beei	beer, dermany	Viticulture and Enology Yeast			
UCD706	caravisiaa	wine	wing Camay	Collection, UC Davis			
000706	cerevisiae	wine	wine, Gamay	Viticulture and Enology Yeast		improved	
LICD713	coroviciao	wing	commercial wine vest	<del></del> -		•	tBOOH -
UCD712	cerevisiae	wine	commercial wine yeast	Collection, UC Davis		growth	IBOOH -
1100743				Viticulture and Enology Yeast			
UCD713	cerevisiae	wine	commercial wine yeast	Collection, UC Davis			
1100745				Viticulture and Enology Yeast		improved	4.1100
UCD715	sp.	wine	commercial wine yeast	Collection, UC Davis		growth	4-NQO -
						improved	N. Cl
						growth	NaCl -
						improved	
				Vitiguiture and France Venet		growth	pH 4 -
1100733		0	Wine Courier of Bloom 1000	Viticulture and Enology Yeast			
UCD723		0 wine	Wine, Sauvignon Blanc, 1980	Collection, UC Davis			
1165724		0	Wine Binet Blane 4000	Viticulture and Enology Yeast			
UCD724		0 wine	Wine, Pinot Blanc, 1980	Collection, UC Davis			
1100725				Viticulture and Enology Yeast			
UCD725	sp.	wine	commercial wine strain	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD726	cerevisiae	wine	wine	Collection, UC Davis			
		_		Viticulture and Enology Yeast			
UCD750	cerevisiae	wine	commercial wine yeast	Collection, UC Davis			
			wine, German? (C.S.OCentro				
			Servizi Ortofrutticoli-Soc.	Viticulture and Enology Yeast			
UCD753	cerevisiae	wine	Coop., Italy)	Collection, UC Davis	[RNQ+]		
			wine, German? (C.S.OCentro				
			Servizi Ortofrutticoli-Soc.	Viticulture and Enology Yeast		improved	
UCD754	cerevisiae	wine	Coop., Italy)	Collection, UC Davis	[RNQ+]	growth	Hydroxyurea -

			wine, German? (C.S.OCentro	
			Servizi Ortofrutticoli-Soc.	Viticulture and Enology Yeast
UCD755	cerevisiae	wine	Coop., Italy)	Collection, UC Davis
002733	cerevisiae	· · · · · · ·	coop., really,	Viticulture and Enology Yeast
UCD756	cerevisiae	wine	commercial wine yeast	Collection, UC Davis
			, , , , , , , , , , , , , , , , , , , ,	Viticulture and Enology Yeast
UCD757	cerevisiae	wine	commercial wine yeast	Collection, UC Davis
		-	, , , , , , , , , , , , , , , , , , , ,	Viticulture and Enology Yeast
UCD758	cerevisiae	wine	Commercial wine yeast	Collection, UC Davis
			,	Viticulture and Enology Yeast
UCD759	cerevisiae	wine	commercial wine yeast	Collection, UC Davis
			•	•
			Originally in Mrak's collection,	
			1948; Jean luc LeGras says it is	
			the same as strain 49 which is	Viticulture and Enology Yeast
UCD76	cerevisiae	fruit	from a citrus fermentation	Collection, UC Davis
				Viticulture and Enology Yeast
UCD760	cerevisiae	wine	wine yeast	Collection, UC Davis
				Viticulture and Enology Yeast
UCD761	cerevisiae	wine	wine yeast	Collection, UC Davis
			Wine yeast, cold tolerant,	Viticulture and Enology Yeast
UCD762	1	<i>0</i> wine	Italy, 1984	Collection, UC Davis
				Viticulture and Enology Yeast
UCD763	cerevisiae	wine	Commercial dry wine yeast	Collection, UC Davis
				Viticulture and Enology Yeast
UCD764	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis
				Viticulture and Enology Yeast
UCD765	cerevisiae	wine	wine yeast	Collection, UC Davis
			Commercial wine yeast from	Viticulture and Enology Yeast
UCD766	cerevisiae	wine	Germany	Collection, UC Davis
	cerevisiae race			Viticulture and Enology Yeast
UCD767	bayanus	wine	wine yeast	Collection, UC Davis

			wine yeast; "from a German	Viticulture and Enology Yeast			
UCD768	cerevisiae	wine	company"	Collection, UC Davis			
000768	cerevisiue	wille	company	•	improved		
LICD760	corouisiaa	wina	commercial wine veset	Viticulture and Enology Yeast	improved	YP-maltose	
UCD769	cerevisiae	wine	commercial wine yeast	Collection, UC Davis	growth	rp-mailose	-
110077				Viticulture and Enology Yeast	reduced		
UCD77	cerevisiae	wine	wine, champagne	Collection, UC Davis	growth	Hydroxyurea	-
				Viticulture and Enology Yeast			
UCD770	cerevisiae	wine	commercial wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast			
UCD771	cerevisiae	wine	wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD772	sp.	wine	commercial wine yeast	Collection, UC Davis	growth	NaCl	-
					improved		
					growth	tBOOH	-
				Viticulture and Enology Yeast	improved		
UCD773	cerevisiae	wine	wine yeast	Collection, UC Davis	growth	Ethanol	-
					improved		
					growth	Hydroxyurea	-
					improved		
					growth	NaCl	-
				Viticulture and Enology Yeast			
UCD774	cerevisiae	wine	wine yeast	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD775	cerevisiae	wine	wine, Champagne	Collection, UC Davis	growth	Ethanol	-
	cerevisiae race			Viticulture and Enology Yeast	reduced		
UCD777	bayanus	wine	commercial wine yeast	Collection, UC Davis	growth	Ethanol	-
					improved		
					growth	tBOOH	-
					improved		
					growth	YP-galactose	-
				Viticulture and Enology Yeast	reduced		
UCD778	cerevisiae	wine	Commercial dry wine yeast	Collection, UC Davis	growth	Ethanol	-

				Viticulture and Enology Yeast	[RNQ+]	reduced		
UCD779	cerevisiae	wine	Commercial dry wine yeast	Collection, UC Davis	[PSI+]	growth	Ethanol	-
				Viticulture and Enology Yeast				
UCD781	kudriavzevii	wine	Commercial dry wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast		improved		
UCD782	cerevisiae	wine	wine yeast	Collection, UC Davis		growth	YP-glycerol	-
				Viticulture and Enology Yeast		improved		
UCD784	cerevisiae	wine	Alcohol tolerant wine yeast	Collection, UC Davis		growth	4-NQO	-
				Viticulture and Enology Yeast		improved		
UCD787	cerevisiae	wine	wine	Collection, UC Davis		growth	pH 4	-
				Viticulture and Enology Yeast				
UCD80	cerevisiae	wine	wine	Collection, UC Davis				
			commercial wine yeast,	Viticulture and Enology Yeast		reduced		
UCD804	sp	wine	champagne	Collection, UC Davis		growth	Ethanol	-
			Contaminant in New York	Viticulture and Enology Yeast				
UCD808	kudriavzevii	unknown	seltzer	Collection, UC Davis				
			From Steiner to Mrak in about					
			1940, another early "lab"	Viticulture and Enology Yeast				
UCD81	cerevisiae	unknown	yeast?	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD810	cerevisiae	wine	commercial wine yeast	Collection, UC Davis				
	cerevisiae race			Viticulture and Enology Yeast		reduced		
UCD811	bayanus	wine	commercial wine yeast	Collection, UC Davis		growth	Ethanol	-
						reduced		
						growth	Hydroxyurea	-
				Viticulture and Enology Yeast		reduced		
UCD812	cerevisiae	wine	commercial wine yeast	Collection, UC Davis		growth	Ethanol	-
						reduced		
						growth	Hydroxyurea	-
				Viticulture and Enology Yeast		reduced		
UCD813	cerevisiae	wine	commercial wine yeast	Collection, UC Davis		growth	4-NQO	-

						reduced growth reduced	Ethanol	-
						growth reduced	pH 9	-
						growth	YP-galactose	-
	cerevisiae race			Viticulture and Enology Yeast		improved		
UCD814	bayanus	wine	commercial wine yeast	Collection, UC Davis		growth	YP-glycerol	-
	cerevisiae race			Viticulture and Enology Yeast				
UCD815	bayanus	wine	commercial wine yeast	Collection, UC Davis				
			Red Star Yeast, Dan Star	Viticulture and Enology Yeast		reduced		
UCD816	cerevisiae	wine	(Copenhagen) DGI-228	Collection, UC Davis		growth	YP-maltose	-
				Viticulture and Enology Yeast				
UCD818	cerevisiae	wine	commercial wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast		reduced		
UCD819	cerevisiae	wine	commercial wine yeast	Collection, UC Davis	[RNQ+]	growth	tBOOH	-
			From Steiner to Mrak in about					
			1940, another early "lab"	Viticulture and Enology Yeast		improved		
UCD82	cerevisiae	unknown	yeast?	Collection, UC Davis		growth	4-NQO	-
				Viticulture and Enology Yeast		improved		
UCD820	cerevisiae	wine	commercial wine yeast	Collection, UC Davis		growth	pH 4	-
				Viticulture and Enology Yeast				
UCD821	cerevisiae	wine	commercial wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD822	cerevisiae	wine	commercial wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast		improved		
UCD823	cerevisiae	wine	commercial wine yeast	Collection, UC Davis		growth	4-NQO	-
				Viticulture and Enology Yeast	[RNQ+]	improved		
UCD824	cerevisiae	wine	commercial wine yeast	Collection, UC Davis	[PSI+]	growth	pH 4	-
			•			improved		
						growth	Fluconazole	-

				we be to we		. ,		
				Viticulture and Enology Yeast		improved	4.1100	
UCD825	cerevisiae 	wine	commercial wine yeast	Collection, UC Davis		growth	4-NQO	-
	cerevisiae race	_		Viticulture and Enology Yeast		reduced		
UCD829	bayanus	wine	commercial wine yeast	Collection, UC Davis		growth	Ethanol	-
			Steiner to Mrak, 1940's,					
			originally may have come from	<b>.</b>		reduced		
UCD83	cerevisiae	unknown	Dekker	Collection, UC Davis		growth	tBOOH	-
				Viticulture and Enology Yeast				
UCD830	cerevisiae	wine	wine yeast	Collection, UC Davis				
			Benda Keller K158 (75-9187),					
			from Benda and Keller					
			(Germany) K158 is probably					
			the strain, the 75-9187 may	Viticulture and Enology Yeast				
UCD839	cerevisiae	unknown	refer to the year 1975.	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD840	cerevisiae	wine	wine strain	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD854	cerevisiae	beer	Ale, England, beer	Collection, UC Davis	[RNQ+]			
				Viticulture and Enology Yeast		reduced		
UCD855	kudriavzevii	wine	wine, champagne, Europe	Collection, UC Davis		growth	pH 4	-
						reduced		
						growth	YP-glycerol	-
				Viticulture and Enology Yeast				
UCD856	cerevisiae	baking	bread yeast	Collection, UC Davis				
				Viticulture and Enology Yeast		improved		
UCD857	cerevisiae	beer	Beechwood chip, beer	Collection, UC Davis		growth	Hydroxyurea	-
						improved		
						growth	NaCl	-
	cerevisiae, race			Viticulture and Enology Yeast		=		
UCD86	bayanus	wine	wine?	Collection, UC Davis				
	•			Viticulture and Enology Yeast		improved		
UCD861	cerevisiae	wine	wine, Cellar experiment	Collection, UC Davis		growth	Hydroxyurea	_
<del></del>		-	-, <del>-</del>	, <del></del>		<b>U</b> =	, : :::, ::: 30	

				wert to the town				
				Viticulture and Enology Yeast		improved		
UCD862	cerevisiae	wine	wine, Cellar experiment	Collection, UC Davis		growth	4-NQO	-
		_		Viticulture and Enology Yeast				
UCD866	cerevisiae	wine	commercial wine yeast, dried	Collection, UC Davis				
				Viticulture and Enology Yeast		reduced		
UCD867	cerevisiae	wine	commercial yeast, wine?	Collection, UC Davis		growth	Fluconazole	-
						improved		
						growth	4-NQO	-
				Viticulture and Enology Yeast				
UCD868	kudriavzevii	wine	commercial wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD869	cerevisiae	wine	Commercial wine yeast	Collection, UC Davis				
			From Carlsberg Lab to Mrak	Viticulture and Enology Yeast				
UCD87	cerevisiae	unknown	1948, Hansen?	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD877	cerevisiae	wine	wine, Czechoslovakia	Collection, UC Davis				
				Viticulture and Enology Yeast		reduced		
UCD878	cerevisiae	wine	wine, Czechoslovakia	Collection, UC Davis		growth	pH 4	-
				Viticulture and Enology Yeast				
UCD879	cerevisiae	wine	wine, Czechoslovakia	Collection, UC Davis				
			From Hennie van Vuuren,					
			South Africa, 1991, K refers to					
			killer factor. He did work on					
			this for use in the wine	Viticulture and Enology Yeast		reduced		
UCD884	sp.	wine	industry.	Collection, UC Davis		growth	Ethanol	-
	·		From Hennie van Vuuren,			_		
			South Africa, 1991, K refers to					
			killer factor. He did work on					
			this for use in the wine	Viticulture and Enology Yeast	[RNQ+]			
UCD885	sp.	wine	industry.	Collection, UC Davis	[PSI+]			
	-1			22200.0, 00 200.0	[. 0]			

			From Hennie van Vuuren, South Africa, 1991, K refers to	0			
			killer factor. He did work on				
			this for use in the wine	Viticulture and Enology Yeast	improved		
UCD886	sp.	wine	industry.	Collection, UC Davis	growth	4-NQO	-
			From Hennie van Vuuren,				
			commercial German yeast	Viticulture and Enology Yeast	improved		
UCD887	sp	wine	from Geisenheim	Collection, UC Davis	growth	YP-maltose	-
				Viticulture and Enology Yeast	improved		
UCD888	sp	wine	wine	Collection, UC Davis	growth	4-NQO	-
			Paolo Guidici DPVA - Italy,				
			from the collection in the Foo	od			
			Science group in Bologna.	Viticulture and Enology Yeast	improved		
UCD889	cerevisiae	unknown	1991	Collection, UC Davis	growth	4-NQO	-
			Scheffer and Mrak used in				
			publicaton in early 1950's,				
	cerevisiae race		something about Rec A in	Viticulture and Enology Yeast			
UCD89	bayanus	unknown	annotation	Collection, UC Davis			
			Paolo Guidici DPVA - Italy,				
			from the collection in the Foo	od			
			Science group in Bologna.	Viticulture and Enology Yeast			
UCD890	cerevisiae	unknown	1991	Collection, UC Davis			
			Paolo Guidici DPVA - Italy,				
			from the collection in the Foo				
			Science group in Bologna.	Viticulture and Enology Yeast			
UCD891	cerevisiae	unknown	1991	Collection, UC Davis			
			Paolo Guidici DPVA - Italy,				
			from the collection in the Foo				
			Science group in Bologna.	Viticulture and Enology Yeast			
UCD892	cerevisiae	unknown	1991	Collection, UC Davis			

			Paolo Guidici DPVA - Italy, from the collection in the Food		ua du sa d		
UCD893	cerevisiae	unknown	Science group in Bologna. 1991	Viticulture and Enology Yeast Collection, UC Davis	reduced	Ethanol	
000693	cerevisiae	ulikilowii	Paolo Guidici DPVA - Italy,	Collection, OC Davis	growth	Ethanor	-
			from the collection in the Food	ı			
			Science group in Bologna.	' Viticulture and Enology Yeast			
UCD894	cerevisiae	unknown	1991	Collection, UC Davis			
002031	cereviolae	G.I.K.IOVII	1331	concension, de bavis			
			Stored for Viticulture and				
			Enology Collection (Mary				
			Miranda), 1991. FST collection				
			was being culled, V&E took	Viticulture and Enology Yeast			
UCD897	cerevisiae	unknown	wine and beer strains.	Collection, UC Davis			
			Paolo Guidici DPVA - Italy,				
			from the collection in the Food	I			
			Science group in Bologna. High	Viticulture and Enology Yeast			
UCD902	cerevisiae	unknown	fusel oil strain. 1996	Collection, UC Davis			
			Paolo Guidici DPVA - Italy,				
			from the collection in the Food	I			
			Science group in Bologna. High	Viticulture and Enology Yeast			
UCD903	cerevisiae	unknown	fusel oil strain. 1996	Collection, UC Davis			
				Viticulture and Enology Yeast	improved		
UCD904	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	Ethanol	-
				Viticulture and Enology Yeast	reduced		
UCD905	cerevisiae	wine	commercial dry wine yeast	Collection, UC Davis	growth	tBOOH	-
					reduced		
					growth	YP-glycerol	-
					improved		
					growth	4-NQO	-

					improved growth improved growth improved growth improved growth	Fluconazole Hydroxyurea NaCl pH 4 pH 9	- - -
UCD906	sp	wine	Commercial, dry wine culture	Viticulture and Enology Yeast Collection, UC Davis	reduced growth	Ethanol	-
UCD907	cerevisiae	wine	Commercial dry wine yeast	Viticulture and Enology Yeast Collection, UC Davis Viticulture and Enology Yeast	reduced growth	рН 9	-
UCD908	cerevisiae	wine	commercial wine yeast	Collection, UC Davis Viticulture and Enology Yeast	reduced		
UCD909	cerevisiae	wine	commercial wine yeast	Collection, UC Davis	growth reduced	4-NQO	-
					growth reduced	Hydroxyurea	-
				Viticulture and Enology Yeast	growth reduced	YP-maltose	-
UCD910	cerevisiae	sake	Sake, rice wine	Collection, UC Davis	growth reduced	Fluconazole	-
					growth reduced	pH 9	-
					growth reduced	YP-glycerol	-
				Viticulture and Enology Yeast	growth reduced	YP-maltose	-
UCD911	sp.	sake	sake, rice wne	Collection, UC Davis	growth	pH 9	-

						reduced	VD malkaga	
				Vitiguiture and Englagy Vesst		growth	YP-maltose	-
UCD912	c n	beer	Beer, lager	Viticulture and Enology Yeast Collection, UC Davis				
0CD912	sp.	beei	beer, lager	Viticulture and Enology Yeast				
UCD913	c n	beer	Ale, beer, California	Collection, UC Davis	[RNQ+]	1		
000913	sp.	beei	Ale, beer, California	Viticulture and Enology Yeast	[KNQ+]	i improved		
UCD914	cn	beer	Ale, beer, USA	Collection, UC Davis		growth	YP-galactose	
000914	sp	beei	Ale, beel, OSA	Viticulture and Enology Yeast		reduced	rr-galactose	-
UCD916	c n	beer	boor Lagar USA	Collection, UC Davis		growth	Fluconazole	_
000916	sp	beei	beer, Lager, USA	Collection, OC Davis		reduced	Flucollazole	-
						growth	Hydroxyurea	
						reduced	пушохушеа	-
						growth	NaCl	
						reduced	Naci	-
						growth	pH 9	_
						reduced	рпэ	_
						growth	YP-glycerol	_
						improved	II -glycelol	
						growth	4-NQO	_
						improved	41100	
						growth	Ethanol	_
				Viticulture and Enology Yeast		reduced	Ethanol	
UCD919	sp.	sake	Sake, Japan, rice wine	Collection, UC Davis		growth	4-NQO	_
000313	<i>3</i> ρ.	Juke	Sake, Japan, Tiec Wille	concenion, de bavis		reduced	4 1100	
						growth	Ethanol	_
						reduced	Ethanol	
						growth	Fluconazole	_
						reduced		
						growth	Hydroxyurea	_
						reduced	, 3, 6	
						growth	NaCl	_
						J		

					reduced growth reduced growth reduced growth reduced growth reduced	pH 4 pH 9 tBOOH YP-galactose	-
			Commercial wine, Active dry	Viticulture and Enology Yeast	growth	YP-maltose	-
UCD924	cerevisiae	wine	yeast	Collection, UC Davis			
	cerevisiae race		Commercial wine, Active Dry	Viticulture and Enology Yeast	reduced		
UCD925	bayanus	wine	Yeast	Collection, UC Davis	growth	4-NQO	-
					reduced		
					growth	Fluconazole	-
					reduced		
					growth	NaCl	-
					reduced growth	pH 9	
			Commercial wine, Active dry	Viticulture and Enology Yeast	reduced	рп Э	-
UCD926	cerevisiae	wine	yeast	Collection, UC Davis	growth	NaCl	_
000010	cerevisiae	······c	y cust	concedion, de Davis	reduced	14401	
					growth	YP-maltose	-
			Commercial wine, Active dry	Viticulture and Enology Yeast	reduced		
UCD927	cerevisiae	wine	yeast	Collection, UC Davis	growth	4-NQO	-
					reduced		
					growth	Hydroxyurea	-
					reduced		
					growth	YP-maltose	-
					improved		
					growth	Ethanol	-

UCD928	cerevisiae	wine	Commercial wine, Active dry yeast	Viticulture and Enology Yeast Collection, UC Davis		reduced growth reduced growth reduced growth reduced	4-NQO Ethanol Hydroxyurea	-
			Commercial wine, Active dry	Viticulture and Enology Yeast		growth reduced	YP-maltose	-
UCD929	cerevisiae	wine	yeast years	Collection, UC Davis		growth reduced	Hydroxyurea	-
				Viticulture and Enology Yeast		growth	pH 4	-
UCD930	sp	wine	wine, commercial	Collection, UC Davis				
			2, 22	Viticulture and Enology Yeast		reduced		
UCD931	sp	wine	wine, commercial	Collection, UC Davis		growth	Ethanol	-
				Viticulture and Enology Yeast				
UCD932	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis				
				Viticulture and Enology Yeast				
UCD933	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis				
LICD034			ananaa siinassand Mals	Viticulture and Enology Yeast		reduced	NaCl	
UCD934	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis Viticulture and Enology Yeast		growth	NaCl	-
UCD935	cerevisiae	granes/must	grapes, vineyard, Italy	Collection, UC Davis				
000333	cerevisiae	Brabes/mase	grupes, vineyara, italy	Viticulture and Enology Yeast				
UCD936	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis				
		<b>J</b> , ,		Viticulture and Enology Yeast				
UCD937	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis				
				Viticulture and Enology Yeast		improved		
UCD938	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis		growth	4-NQO	-
				Viticulture and Enology Yeast	[RNQ+]	improved		
UCD939	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis	[PSI+]	growth	4-NQO	-

				Viticulture and Enology Yeast	improved		
UCD940	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis	growth	4-NQO	-
					improved		
					growth	pH 9	-
					improved		
					growth	YP-maltose	-
				Viticulture and Enology Yeast	improved		
UCD941	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis	growth	4-NQO	-
					improved		
					growth	YP-maltose	-
				Viticulture and Enology Yeast	improved		
UCD942	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis	growth	YP-galactose	-
				Viticulture and Enology Yeast			
UCD943	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis			
				Viticulture and Enology Yeast	reduced		
UCD944	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis	growth	Hydroxyurea	-
				Viticulture and Enology Yeast	reduced		
UCD945	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis	growth	4-NQO	-
					reduced		
					growth	Ethanol	-
					reduced		
					growth	Fluconazole	-
					reduced		
					growth	Hydroxyurea	-
					reduced		
					growth	YP-glycerol	-
				Viticulture and Enology Yeast	improved		
UCD946	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis	growth	YP-galactose	-
				Viticulture and Enology Yeast	reduced		
UCD947	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis	growth	Hydroxyurea	-
				Viticulture and Enology Yeast	reduced		
UCD948	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis	growth	Ethanol	-

			Viticulture and Enology Yeast	reduced		
UCD949	cerevisiae	grapes/must grapes, vineyard, Italy	Collection, UC Davis	growth	Ethanol	-
			Viticulture and Enology Yeast	reduced		
UCD950	cerevisiae	grapes/must grapes, vineyard, Italy	Collection, UC Davis	growth	NaCl	-
			Viticulture and Enology Yeast	reduced		
UCD951	cerevisiae	grapes/must grapes, vineyard, Italy	Collection, UC Davis	growth	Ethanol	-
			Viticulture and Enology Yeast	reduced		
UCD952	cerevisiae	grapes/must grapes, vineyard, Italy	Collection, UC Davis	growth	4-NQO	-
			Viticulture and Enology Yeast	reduced		
UCD953	cerevisiae	grapes/must grapes, vineyard, Italy	Collection, UC Davis	growth	Ethanol	-
				reduced		
				growth	pH 9	-
			Viticulture and Enology Yeast	improved		
UCD954	cerevisiae	grapes/must grapes, vineyard, Italy	Collection, UC Davis	growth	Ethanol	-
				improved		
				growth	NaCl	-
				improved		
				growth	YP-galactose	-
				improved		
				growth	YP-maltose	-
			Viticulture and Enology Yeast			
UCD955	cerevisiae	grapes/must grapes, vineyard, Italy	Collection, UC Davis			
			Viticulture and Enology Yeast	reduced		
UCD956	cerevisiae	grapes/must grapes, vineyard, Italy	Collection, UC Davis	growth	4-NQO	-
				reduced		
				growth	YP-maltose	-
			Viticulture and Enology Yeast	reduced		
UCD957	cerevisiae	grapes/must grapes, vineyard, Italy	Collection, UC Davis	growth	4-NQO	-
				reduced		
				growth	Fluconazole	-
				reduced		
				growth	Hydroxyurea	-

				Viticulture and Enology Yeast	reduced growth reduced	YP-maltose	-
UCD958	cerevisiae	grapes/must	grapes, vineyard, Italy	Collection, UC Davis	growth reduced	4-NQO	-
					growth reduced	Ethanol	-
					growth reduced	Fluconazole	-
					growth reduced	Hydroxyurea	-
				Viticulture and Enology Yeast	growth reduced	YP-glycerol	-
UCD959	cerevisiae	wine	Commercial wine yeast	Collection, UC Davis	growth reduced	Fluconazole	-
				Viticulture and Enology Yeast	growth reduced	Hydroxyurea	-
UCD960	cerevisiae	wine	Commercial wine yeast	Collection, UC Davis	growth reduced	4-NQO	-
					growth reduced	Fluconazole	-
					growth reduced	Hydroxyurea	-
				Viticulture and Enology Yeast	growth reduced	pH 9	-
UCD961	cerevisiae	wine	Commercial wine yeast	Collection, UC Davis	growth reduced	Ethanol	-
					growth reduced	Fluconazole	-
					growth reduced	Hydroxyurea	-
					growth	pH 9	-

				Viticulture and Enology Yeast		reduced		
UCD962	sp.	wine	Commercial wine yeast	Collection, UC Davis		growth	pH 9	-
						reduced		
						growth	YP-glycerol	-
				Viticulture and Enology Yeast		reduced		
UCD963	cerevisiae	wine	Commercial wine yeast	Collection, UC Davis		growth	Ethanol	-
						reduced		
						growth	Fluconazole	-
				Viticulture and Enology Yeast		reduced		
UCD964	cerevisiae	wine	Commercial wine yeast	Collection, UC Davis		growth	Ethanol	-
						reduced		
						growth	Fluconazole	-
				Viticulture and Enology Yeast				
UCD965	sp.	wine	Commercial wine yeast	Collection, UC Davis				
			Commercial wine yeast;	Viticulture and Enology Yeast		reduced		
UCD966	sp.	wine	Danske Spritfabrikker	Collection, UC Davis	[RNQ+]	growth	Fluconazole	-
						improved		
						growth	NaCl	-
						improved		
						growth	YP-galactose	-
				Viticulture and Enology Yeast				
UCD967	cerevisiae	wine	commercial wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast		reduced		
UCD968	cerevisiae	wine	Commercial dry wine yeast	Collection, UC Davis		growth	4-NQO	-
	cerevisiae race			Viticulture and Enology Yeast		reduced		
UCD969	bayanus	wine	commercial dry wine yeast	Collection, UC Davis		growth	pH 4	-
				Viticulture and Enology Yeast				
UCD970	cerevisiae	wine	Commerical dry wine yeast	Collection, UC Davis				
				Viticulture and Enology Yeast		reduced		
UCD971	cerevisiae	wine	Commerical wine yeast	Collection, UC Davis		growth	4-NQO	-
						reduced		
						growth	Fluconazole	-

				Viticulture and Enology Yeast		reduced		
UCD972	sp.	wine	Commercial wine, ADWY	Collection, UC Davis	[RNQ+]	growth	4-NQO	-
						reduced		
						growth	Fluconazole	-
						reduced		
						growth	YP-maltose	-
				Viticulture and Enology Yeast		reduced		
UCD974	cerevisiae	wine	Commercial wine yeast	Collection, UC Davis		growth	4-NQO	-
						reduced		
						growth	Fluconazole	-
						improved		
						growth	YP-maltose	-
				Viticulture and Enology Yeast		reduced		
UCD975	sp.	wine	Commercial wine yeast	Collection, UC Davis		growth	Ethanol	-
						reduced		
						growth	Hydroxyurea	-
						reduced		
						growth	pH 4	-
						improved		
						growth	YP-maltose	-
				Viticulture and Enology Yeast		improved		
UCD976	sp.	wine	Commercial wine yeast	Collection, UC Davis		growth	YP-maltose	-
			commercial dry wine yeast;	Viticulture and Enology Yeast		improved		
UCD977	sp.	wine	Danstar	Collection, UC Davis		growth	YP-maltose	-
			commercial dry wine yeast;	Viticulture and Enology Yeast	[RNQ+]	reduced		
UCD978	sp.	wine	Danstar	Collection, UC Davis	[PSI+]	growth	tBOOH	-
							adhesive	
						trait lost	growth	-
				Viticulture and Enology Yeast		improved		
UCD979	cerevisiae	wine	Commercial wine yeast	Collection, UC Davis	[RNQ+]	growth	Ethanol	-
	cerevisiae race			Viticulture and Enology Yeast		reduced		
UCD980	bayanus	wine	Commercial wine yeast	Collection, UC Davis		growth	YP-maltose	-

			Commercial Ale yeast, from British brewery, National Collection of Yeast Cultures	Viticulture and Enology Yeast		reduced		
UCD981	cerevisiae	beer	strain 1108	Collection, UC Davis	[RNQ+]	growth	4-NQO	-
Urquell								
Pilsner	cerevisiae	beer	brewing	Wyeast				-
WE372	cerevisiae	wine	wine	Leonid Kruglyak		improved growth	YPD	Yes
VVE3/2	cerevisiae	wille	wille	Leoniu Krugiyak		reduced	TPD	165
						growth	pH 9	Yes
Y-10988	cerevisiae	clinical	patient	ARSC			•	
Y-12649	cerevisiae	wine	Umbria must	ARSC				
Y-12657	cerevisiae	fruit	olive	ARSC				
Y-12659	cerevisiae	clinical	patient	ARSC				
					[MOT3			
Y-139	cerevisiae	grapes/must	grape	ARSC	+]			
V 4527				ADCC		improved	<i>f</i> l	
Y-1537	cerevisiae	grapes/must	grapes	ARSC	+]	growth reduced	fluconazole	-
Y-162	cerevisiae	wine	port wine	ARSC	+]	growth	tBOOH	-
-		_			•	reduced		
						growth	YP-galactose	-
						improved		
Y-2034	cerevisiae	wine	wine, California	ARSC		growth	YP-maltose	-
Y-2209	cerevisiae	fruit	Lepidopterus leaves, California	ADCC	[RNQ+]			
Y-2411	cerevisiae	wine	vineyard, Turkey	ARSC	[KNQ+]			
Y-2411 Y-266	cerevisiae	wine	burgundy wine	ARSC				
1-200	CCICVISIAC	WIIIC	bulguildy wille	Alloc	[MOT3			
Y-269	cerevisiae	wine	Tokay wine	ARSC	+]			
			·		-	improved		
Y-27788	cerevisiae	clinical	patient; US. Baltimore	ARSC	[RNQ+]	growth	NaCl	-

						improved		
Y-27806	cerevisiae	clinical	patient	ARSC	[RNQ+]	•	NaCl	Yes
					[MOT3	improved	calcofluor	
Y-35	cerevisiae	fruit	Ilex aquifolium	ARSC	+]	growth	white	-
Y-382	cerevisiae	grain	grain	ARSC				
Y-492	cerevisiae	clinical	patient	ARSC	[RNQ+]			
Y-5511	cerevisiae	fruit	coconut	ARSC				
Y-584	cerevisiae	wine	Moselle wine	ARSC				
Y-7115	cerevisiae	wine	Chablis wine starter	ARSC				
Y-7327	cerevisiae	beer	Tibetan beer starter	ARSC				
						reduced		
Y-7568	cerevisiae	fruit	papaya	ARSC		growth	YP-maltose	-
Y-865	cerevisiae	wine	Bordeaux	ARSC				
Y12	cerevisiae	beer	beer	Leonid Kruglyak				
YB-210	cerevisiae	fruit	banana	ARSC				
						reduced		
YB-3121	cerevisiae	fruit	mimosa	ARSC		growth	Ethanol	-
		_				improved		
YB-399	cerevisiae	fruit	cherries	ARSC	[RNQ+]	growth	39C	Yes
VP 4004		<b>.</b>		ADCC				
YB-4081	cerevisiae 	fruit	guava	ARSC				
YB-4082	cerevisiae	fruit	papaya	ARSC				
YB-432	cerevisiae	fruit	pineapple	ARSC	[RNQ+]			
YB-4449	cerevisiae	fruit	grape vine slime flux	ARSC				
YB-908	cerevisiae	fruit	wild cherry tree gum	ARSC				
YJM326	cerevisiae	clinical	clinical	Leonid Kruglyak				
				<b>0</b> /		improved		
YJM421	cerevisiae	clinical	clinical	Leonid Kruglyak		growth	NaCl	-
						improved		
YJM428	cerevisiae	clinical	clinical	Leonid Kruglyak		growth	NaCl	Yes

					improved	4.110.0	.,	
					growth reduced	4-NQO	Yes	
					growth	YP-maltose	Yes	
					improved			
YJM436	cerevisiae	clinical	clinical	Leonid Kruglyak	growth	YPD	-	
					improved			
YJM653	cerevisiae	clinical	clinical	Leonid Kruglyak	growth	NaCl	Yes	

**Supplementary Table 2.** Polymorphisms at the *SUP35* locus of wild [*PSI*<sup>†</sup>] strains, from – 338 to +1102. The PrD of Sup35 encompasses AA 1-114 (nt 1-342). \*UCD978 is heterozygous for *SUP35*.

	Nucleotide position relative to S288C SUP35 start									
	-144	197	325	484	506	550	555	616	653	672
S288C	-	C	Α	G	Т	Α	C	С	Т	C
UCD587										
UCD779				Α						
UCD824				Α						
UCD978*				Α						
UCD939				Α		G				
5672	Т			Α				Α		
UCD978*	Т	T	G	Α	Α		G		С	G
AA change	-	-	N→S	G→D	D→E	K→R	$P \rightarrow A$	-	-	H→D

**Supplementary Table 3.** Doubling times of wild [*PSI*<sup>†</sup>] strains conditions used for their brief laboratory culture (Yeast potato dextrose, YM broth, FM broth, wort agar, Wallerstein nutrient agar).

	YM medium	YPD	FM medium	Yeast potato dextrose	WLN medium	Wort medium	MMM
UCD521	150	150	140	230	190	280	260
UCD521 cured	150	150	140	150	150	200	300
UCD587	75	80	110	340	80	130	120
UCD587 cured	75	80	110	310	80	130	120
UCD779	55	60	90	260	65	90	120
UCD779 cured	55	60	90	260	65	75	130
UCD824	65	70	900	1500	70	115	105
UCD824 cured	65	70	200	380	70	85	130
UCD939	60	65	255	475	750	85	115
UCD939 cured	60	65	130	400	75	85	115
UCD978	75	115	690	>1000	90	95	120
UCD978 cured	75	85	590	>1000	90	95	120
UCD2534	70	80	130	640	75	170	125
UCD2534 cured	70	65	80	640	75	170	120
5672	135	150	225	320	200	445	255
5672 cured	85	130	225	315	200	440	>2000