

Supplemental Table S1: Information of *X. fastidiosa* isolates and strains for Cu MIC assessment.

Stains	Cu MIC (μ M)	Subspecies	State	Location	Host	Host detail	Isolate Sources
M23	450	<i>fastidiosa</i>	CA	Kern	Almond	Rosaceae, Prunus dulcis	6
Temecula L	450	<i>fastidiosa</i>	CA	Temecula, Riverside	Grape	Vitaceae, <i>Vitis vinifera</i>	1
WM1-1	400	<i>fastidiosa</i>	GA	Wolf Mountain, Dahlonega	Grape	Mourvedre	1
Je28	350	<i>fastidiosa</i>	CA	Napa, Spring Mountain	Grape	Merlot	2
Je17	350	<i>fastidiosa</i>	CA	Sonoma, Newsome	Grape	Malbec	2
14B5	350	<i>fastidiosa</i>	GA	Blackstock, Dahlonega	Grape	Viognier	1
CCPM1	350	<i>fastidiosa</i>	GA	Cavender Creek, Dahlonega	Grape	Petite Manseng	1
16M3	350	<i>fastidiosa</i>	GA	Montaluce, Dahlonega	Grape	Merlot	1
15M1	350	<i>fastidiosa</i>	GA	Montaluce, Dahlonega	Grape	Montaluce	1
Je22	300	<i>fastidiosa</i>	CA	Napa, Spring Mountain	Grape	Merlot	2
Je95	300	<i>fastidiosa</i>	CA	Sonoma, Rudd	Grape	Chardonnay	2
EB92-1	300	<i>fastidiosa</i>	FL	Leesburg, Lake	Elderberry	Sambucus canadensis	4
R1	300	<i>fastidiosa</i>	GA	Bacon, Blake Williams Farm	Blueberry	Rebel	10
R2	300	<i>fastidiosa</i>	GA	Bacon, Blake Williams Farm	Blueberry	Rebel	10
14B3	300	<i>fastidiosa</i>	GA	Blackstock, Dahlonega	Grape	Cab Sauvignon	1
15B2	300	<i>fastidiosa</i>	GA	Blackstock, Dahlonega	Grape	Chardonnay	1
16B4	300	<i>fastidiosa</i>	GA	Blackstock, Dahlonega	Grape	Chardonnay	1
14B4	300	<i>fastidiosa</i>	GA	Blackstock, Dahlonega	Grape	Chardonnay	1
14B2	300	<i>fastidiosa</i>	GA	Blackstock, Dahlonega	Grape	Mourvedre	1
15B3	300	<i>fastidiosa</i>	GA	Blackstock, Dahlonega	Grape	Viognier	1

16M7	300	<i>fastidiosa</i>	GA	Montaluce, Dahlonge	Grape	Vidal	1
Je63	250	<i>fastidiosa</i>	CA	Bakersfield, Flames	Grape	Flames	2
Je68	250	<i>fastidiosa</i>	CA	Bakersfield, Flames	Grape	Flames	2
Je73	250	<i>fastidiosa</i>	CA	Bakersfield, Red Globe	Grape	Red Globe	2
Je60	250	<i>fastidiosa</i>	CA	Bakersfield, Scarlet Royal	Grape	Scarlet Royal	2
Je51	250	<i>fastidiosa</i>	CA	Napa, Silverado	Grape	Merlot	2
Je43	250	<i>fastidiosa</i>	CA	Napa, Yount Mill	Grape	Cabernet Sauvignon	2
Je1	250	<i>fastidiosa</i>	CA	Santa Barbara	Grape	Chardonnay	2
Je4	250	<i>fastidiosa</i>	CA	Santa Barbara	Grape	Pinot Noir	2
Je92	250	<i>fastidiosa</i>	CA	Sonoma, MacMurray	Grape	Gruner Veltliner	2
Je98	250	<i>fastidiosa</i>	CA	Temecula	Grape	N/A	2
Je100	250	<i>fastidiosa</i>	CA	Temecula	Grape	N/A	2
16B5	250	<i>fastidiosa</i>	GA	Blackstock, Dahlonge	Grape	Chardonnay	1
15B1	250	<i>fastidiosa</i>	GA	Blackstock, Dahlonge	Grape	Merlot	1
16B1	250	<i>fastidiosa</i>	GA	Blackstock, Dahlonge	Grape	Merlot	1
16M5	250	<i>fastidiosa</i>	GA	Montaluce, Dahlonge	Grape	Pinot Noir	1
M1	250	<i>fastidiosa</i>	GA	Pierce, Stevie Yong Farm	Blueberry	Meadowlark	10
VAL VAL 072 Ext	350	<i>multiplex</i>	TX	Del Rio, Val Verde	Giant Ragweed	Ambrosia trifida var. texana	3
BB08-1	300	<i>multiplex</i>	FL	Palatka, Putnam	Blueberry	Star	4
AlmaEM3	300	<i>multiplex</i>	GA	Alma	Blueberry	Emerald	1
S1	300	<i>multiplex</i>	GA	Bacon, Blake Williams Farm	Blueberry	Star	10
S3	300	<i>multiplex</i>	GA	Bacon, Blake Williams Farm	Blueberry	Star	10
BB1-64	300	<i>multiplex</i>	GA	N/A	Blueberry	N/A	5

Georgia Plum	300	<i>multiplex</i>	GA	N/A	Plum	Rosaceae, Prunus sp.	2
GIL GRA 274 Ext	300	<i>multiplex</i>	TX	Willow City, Gillespie	Annual Sunflower	Asteraceae, Helianthus annuus	3
R3	250	<i>multiplex</i>	GA	Bacon, Blake Williams Farm	Blueberry	Rebel	10
S2	250	<i>multiplex</i>	GA	Bacon, Blake Williams Farm	Blueberry	Star	10
M12	200	<i>multiplex</i>	CA	Kern	Almond	Rosaceae, Prunus dulcis	6
ESVL	200	<i>multiplex</i>	Spain	Alicante	Almond	N/A	8
IVIA5901	200	<i>multiplex</i>	Spain	Alicante	Almond	N/A	8
Oak 92-6	100	<i>multiplex</i>	FL	Palm Beach	Oak	Quercus sp.	4
De Donno	350	<i>pauca</i>	Italy	Apulia	Olive	Olea europaea L.	9
Ann-1	800	<i>sandyi</i>	CA	N/A	Oleander	N/A	2
MED PRI 047	400	<i>sandyi</i>	TX	Median	Oleander	N/A	3

N/A = information non-available

Isolate Sources: 1: Leonardo De La Fuente (Auburn University), 2: Rodrigo Almeida (University of California, Berkeley), 3: Mark Black (Texas A&M University), 4: Donald Hopkins (University of Florida), 5: Harald Scherm (University of Georgia), 6: Jianchi Chen (USDA, Parlier, CA), 7: C.J. Chang (University of Georgia), 8: Blanca Landa (CSIC-IAS, Spain), 9. Maria Saponari (CNR, Italy), 10: Jonathan E. Oliver (University of Georgia, Tifton)