Resistance of Environmental Fungi to Azole Drugs that are Used to Treat Fungal Infections Including Coccidioidomycosis

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APPENDIX

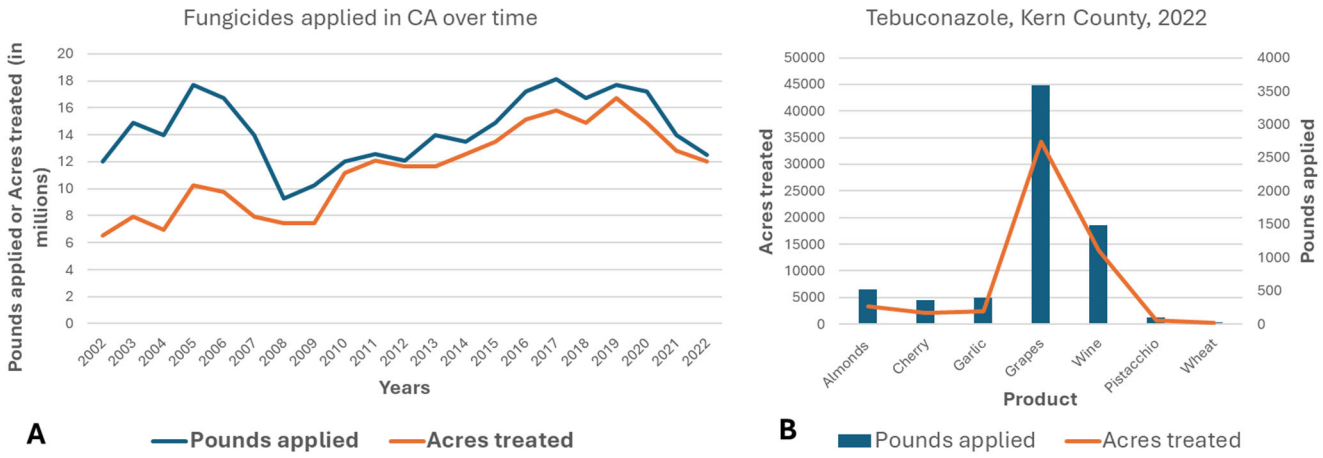

Figure S1. The amount of all fungicides (in million pounds) and acres treated (in millions) between 2002 and 2022 in California.[37] **(A)**Amount of tebuconazole (pounds) and acres treated for various crops in Kern County in 2022**(B)**.[37]

Closest match in GenBank with % Similarity	Family (Order)	n	Plant pathogen	Human pathogen	Biocontrol agent
Alternaria alternata, AF218791, AY154697, LC749799, MT453271	Pleosporaceae (Pleosporales)	9	x[90]	(x)[90]	x[91]
Alternaria infectoria, MK828116, ON074975	Pleosporaceae (Pleosporales)	9	x[92]	(x)[92]	x[93]
Alternaria radicina, AY154704	Pleosporaceae (Pleosporales)	5	x[94]	-	-
Ascochyta medicaginicola, EU167575.1	Didymellaceae (Pleosporales)	1	x[95]	-	-
Aspergillus niger, MT609916, MG675233	Pleosporaceae (Pleosporales)	4	x[96]	(x)[96]	x[97]
Aureobasidium pullulans, KY294714, MT035961, MH931262	Saccotheciaceae (Dothideales)	4	x[98]	(x)[98]	x[98]

Botrytis cinerea, LC750323.1	Sclerotiniaceae (Helotiales)	3	x[99]	-	x[100]
Curvularia chlamydospora, HG779021	Pleosporaceae (Pleosporales)	3	x[101]	(x)[101]	-
Curvularia mebaldsii, MH414902	Pleosporaceae (Pleosporales)	3	x[102]	(x)[102]	-
Epicoccum nigrum, MH931271	Didymellaceae (Pleosporales)	3	x[103]	(x)[104]	x[105]
Cladosporium cladosporioides, GQ458030	Cladosporiaceae (Cladosporiales)	3	x[106]	(x)[107]	x[108]
Cladosporium pseudocladospoirioides, MT582794	Cladosporiaceae (Cladosporiales)	3	x[109]	(x)[110]	x[111]
Fusarium oxysporum KJ082096.1	Nectriaceae (Hypocreales)	2	x[112]	x[112]	x[113]
Neodidymelliopsis ranunculi, OP595984	Didymellaceae (Pleosporales)	1	x[114]	-	-
Microdochium bolleyi, KY305060.1, OL898490.1	Microdochiaceae (Xylariales)	2	x[115]	-	x[116]
Penicillium allii, AF218787	Trichocomaceae (Eurotiales)	3	x[117]	-	-
Stemphylium vesicarium, GG065799	Pleosporaceae (Pleosporales)	3	x[118]	-	-

Table S1. List of most isolated fungal species and their potential as plant pathogen, human pathogen, and biocontrol agent (x; confirmed pathogen; (x): pathogenic only in immune compromised host).

Variable	**W-statistic**	***p*-value**	**Normal**
Fluconazole	0.524	3.15×10^{-18}	No
Itraconazole	0.655	1.15×10^{-15}	No
Posaconazole	0.765	5.49×10^{-12}	No
Voriconazole	0.884	2.70×10^{-8}	No
Aspergillaceae	0.927	1.20×10^{-05}	No
Cladosporiaceae	0.529	1.04×10^{-14}	No
Didymellaceae	0.905	0.00361	No
Microdochiaceae	0.871	0.3	Yes
Mycosphaerellaceae	0.63	0.00124	No
Nectriaceae	0.892	0.0292	No
Pleosporaceae	0.864	1.11×10^{-11}	No
Saccotheciaceae	0.919	0.106	Yes
Sclerotiniaceae	0.681	5.59×10^{-4}	No
Stachybotryaceae	0.737	0.00593	No

Table S2. Full results of Shapiro-Wilk test for normality.