

Figure S1. Effect of farnesol concentration on fluconazole resistance.

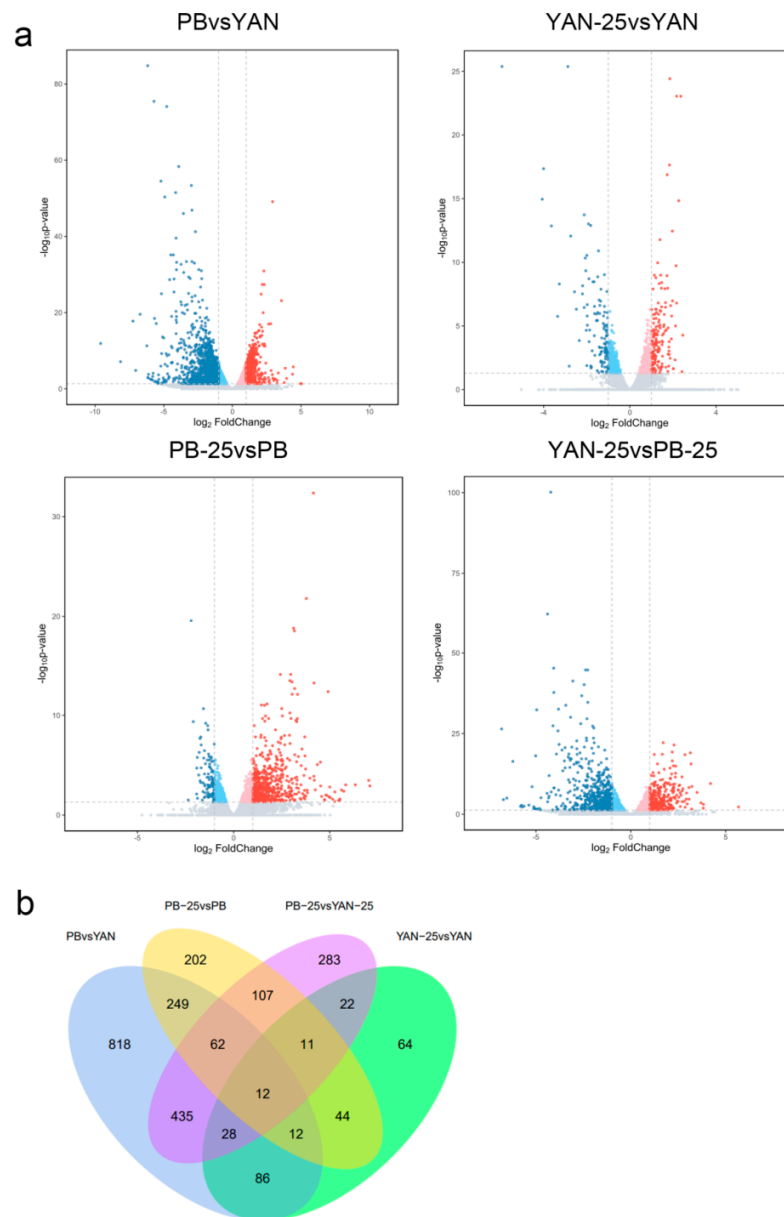


Figure S2. Comparison of DEGs between different pairwise strain combinations. (a) Volcano plots of DEGs among PB vs. YAN, YAN-25 vs. YAN, PB-25 vs. PB, and PB-25 vs. YAN-25. (b) Venn diagram of DEGs among the four pairwise combinations.

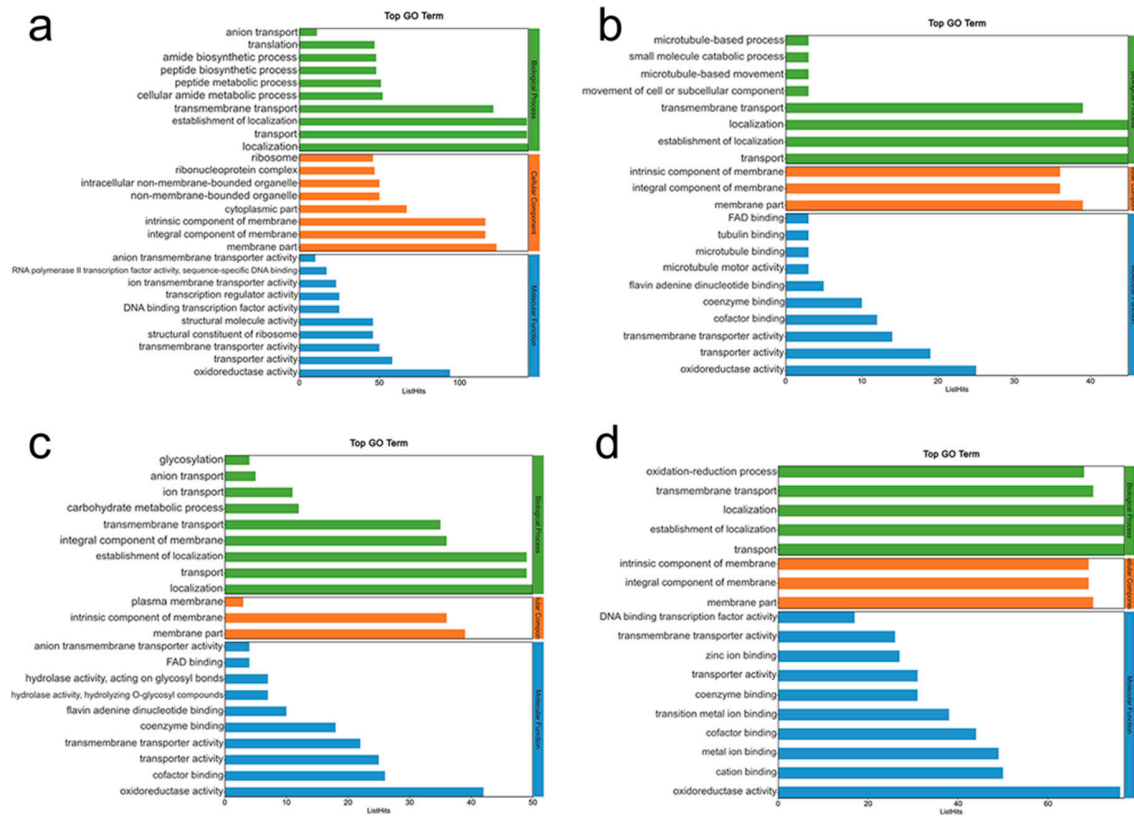


Figure S3. GO classification of DEGs in (a) PB vs. YAN, (b) YAN-25 vs. YAN, (c) PB-25 vs. PB, and (d) PB-25 vs. YAN-25.

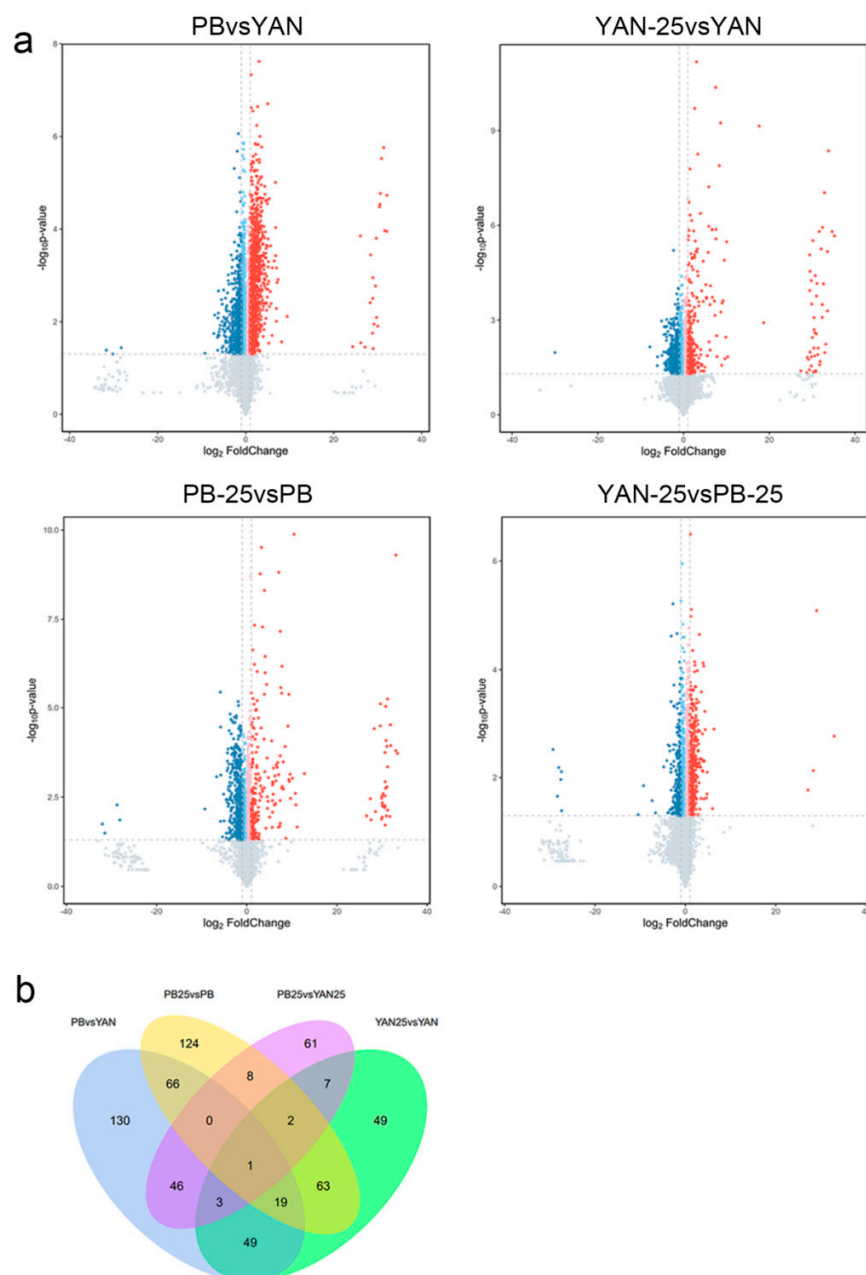


Figure S4. Differentially accumulated metabolites among the three comparisons. (a) Volcano plots of differentially expressed metabolites among PB vs. YAN, YAN-25 vs. YAN, PB-25 vs. PB, and PB-25 vs. YAN-25. (b) Venn diagram of differentially expressed metabolites among PB vs. YAN, YAN-25 vs. YAN, and PB-25 vs. PB.

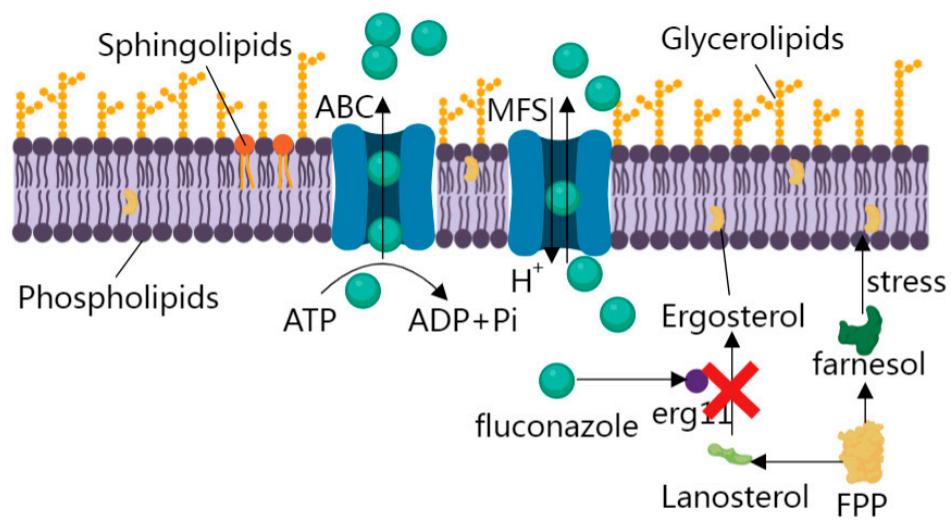


Figure S5. Mechanism underlying membrane lipid and efflux pump regulation that induces fluconazole resistance in fungi.

Table S1. Summary of sequencing reads mapping to the reference genome and quality parameters

sample	library	raw_reads	clean_reads	clean_bases	error_rate	Q20	Q30	GC_pct
YAN_1	FRAS202093395	4487101	42794444	6.42G	0.02	98.19	94.78	62.03
	-1r	2						
YAN_2	FRAS202093397	4406009	41910974	6.29G	0.02	98.33	95.12	61.65
	-1r	0						
YAN_3	FRAS202093398	42742116	40836316	6.13G	0.02	98.32	95.06	61.58
	-1r							
PB_1	FRAS202093399	4664279	45090860	6.76G	0.02	98.24	95.01	62
	-1r	8						
PB_2	FRAS202093400	4159246	40291430	6.04G	0.02	98.18	94.82	62.02
	-1r	0						
PB_3	FRAS202093402	4547081	43387926	6.51G	0.02	98.24	94.97	62.23
	-1r	4						
YAN25_1	FRAS202093403	4166635	40312540	6.05G	0.02	98.16	94.64	62.29
	-1r	8						
YAN25_2	FRAS202093404	5239685	51163252	7.67G	0.02	98.15	94.68	62.24
	-1r	0						
YAN25_3	FRAS202093405	4186016	39508866	5.93G	0.02	98.23	94.95	62.27
	-1r	6						
PB25_1	FRAS202093408	4740169	45605730	6.84G	0.02	98.14	94.78	61.88
	-1r	8						
PB25_2	FRAS202093409	4676964	44507278	6.68G	0.02	98.19	94.91	61.73
	-1r	2						
PB25_3	FRAS202093410	4579023	44563098	6.68G	0.02	98.12	94.72	61.73
	-1r	6						

Table S2. Summary of sequencing reads mapping to the reference genome and quality parameters

sample	total_reads	total_map	unique_map	multi_map	read1_map	read2_map	positive_map	negative_map	splice_map	unsplice_map	proper_map
YA_N_1	4279 4444	3870229 2(90.44%)	3847132 9(89.9%)	23096 3(0.54%)	1927936 9(45.05%)	1919196 0(44.85%)	1915680 8(44.76%)	1931452 1(45.13%)	8434684 (19.71%)	3003664 5(70.19%)	3659977 6(85.52%)
YA_N_2	4191 0974	3785011 1(90.31%)	3765225 2(89.84%)	19785 9(0.47%)	1885200 4(44.98%)	1880024 8(44.86%)	1873726 7(44.71%)	1891498 5(45.13%)	7421896 (17.71%)	3023035 6(72.13%)	3577960 8(85.37%)
YA_N_3	4083 6316	3648979 5(89.36%)	3628586 1(88.86%)	20393 4(0.5%)	1817611 7(44.51%)	1810974 4(44.35%)	1803529 6(44.16%)	1825056 5(44.69%)	7799035 (19.1%)	2848682 6(69.76%)	3479512 2(85.21%)
PB_1	4509 0860	4083803 4(90.57%)	4058029 1(90.0%)	25774 3(0.57%)	2033354 6(45.09%)	2024674 5(44.9%)	2024652 6(44.9%)	2033376 5(45.1%)	9908331 (21.97%)	3067196 0(68.02%)	3876950 4(85.98%)
PB_2	4029 1430	3634838 9(90.21%)	3611438 7(89.63%)	23400 2(0.58%)	1809565 9(44.91%)	1801872 8(44.72%)	1802070 7(44.73%)	1809368 0(44.91%)	8742555 (21.7%)	2737183 2(67.93%)	3448667 0(85.59%)
PB_3	4338 7926	3969761 5(91.49%)	3947235 8(90.98%)	22525 7(0.52%)	1975701 9(45.54%)	1971533 9(45.44%)	1969321 0(45.39%)	1977914 8(45.59%)	9772507 (22.52%)	2969985 1(68.45%)	3790332 0(87.36%)
YA_N25_1	4031 2540	3666368 6(90.95%)	3641283 7(90.33%)	25084 9(0.62%)	1819700 1(45.14%)	1821583 6(45.19%)	1815617 7(45.04%)	1825666 0(45.29%)	8305684 (20.6%)	2810715 3(69.72%)	3488787 4(86.54%)
YA_N25_2	5116 3252	4645840 8(90.8%)	4612186 8(90.15%)	33654 0(0.66%)	2311081 8(45.17%)	2301105 0(44.98%)	2299270 8(44.94%)	2312916 0(45.21%)	1029959 2(20.13%)	3582227 6(70.02%)	4390091 2(85.81%)
YA_N25_3	3950 8866	3586624 5(90.78%)	3561196 3(90.14%)	25428 2(0.64%)	1782848 7(45.13%)	1778347 6(45.01%)	1775435 4(44.94%)	1785760 9(45.2%)	8330195 (21.08%)	2728176 8(69.05%)	3415362 2(86.45%)
PB2_5_1	4560 5730	4129445 1(90.55%)	4097437 7(89.84%)	32007 4(0.7%)	2055064 7(45.06%)	2042373 0(44.78%)	2040814 4(44.75%)	2056623 3(45.1%)	9852696 (21.6%)	3112168 1(68.24%)	3906946 8(85.67%)
PB2_5_2	4450 7278	4007876 4(90.05%)	3977536 8(89.37%)	30339 6(0.68%)	1994208 7(44.81%)	1983328 1(44.56%)	1980244 7(44.49%)	1997292 1(44.88%)	9632438 (21.64%)	3014293 0(67.73%)	3790876 6(85.17%)
PB2_5_3	4456 3098	3975436 9(89.21%)	3936291 7(88.33%)	39145 2(0.88%)	1974326 3(44.3%)	1961965 4(44.03%)	1962066 2(44.03%)	1974225 5(44.3%)	9345783 (20.97%)	3001713 4(67.36%)	3734566 2(83.8%)