Supplementary Materials

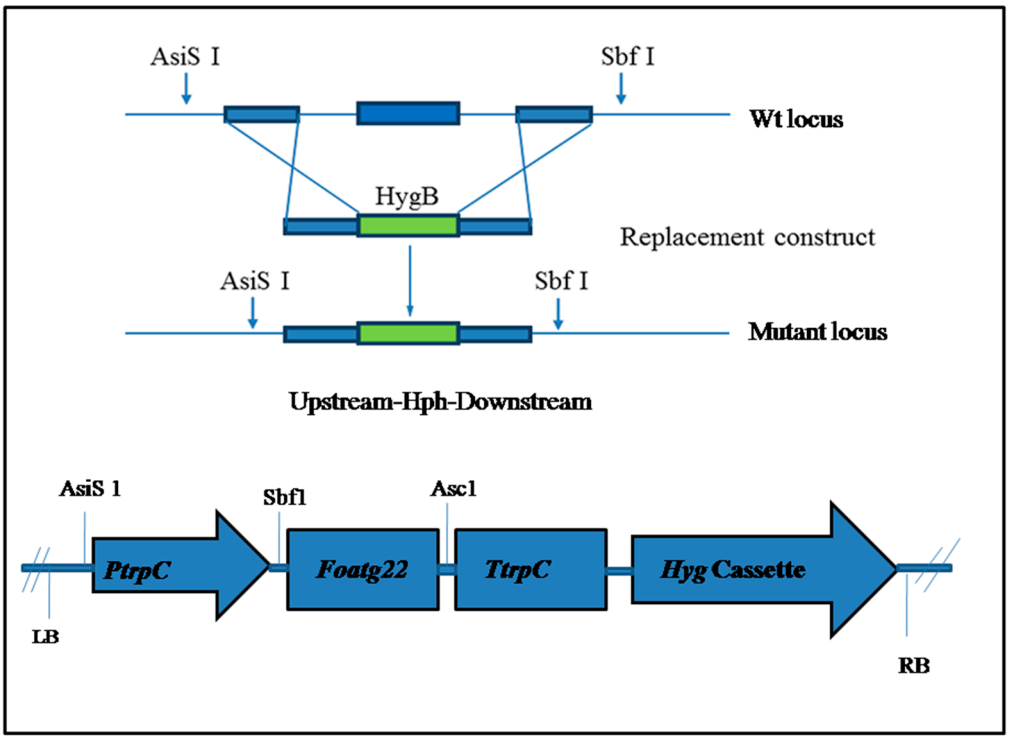


Figure S1. Construction of deletion and overexpressed mutants**.** (A) The *Foatg22* coding region was replaced with the HygB cassette. (B) The *Foatg22* cDNA fragment was amplified with the indicated primers containing Sbf1 and Asc1 restriction sites inserted at 5′ and 3′ end respectively.

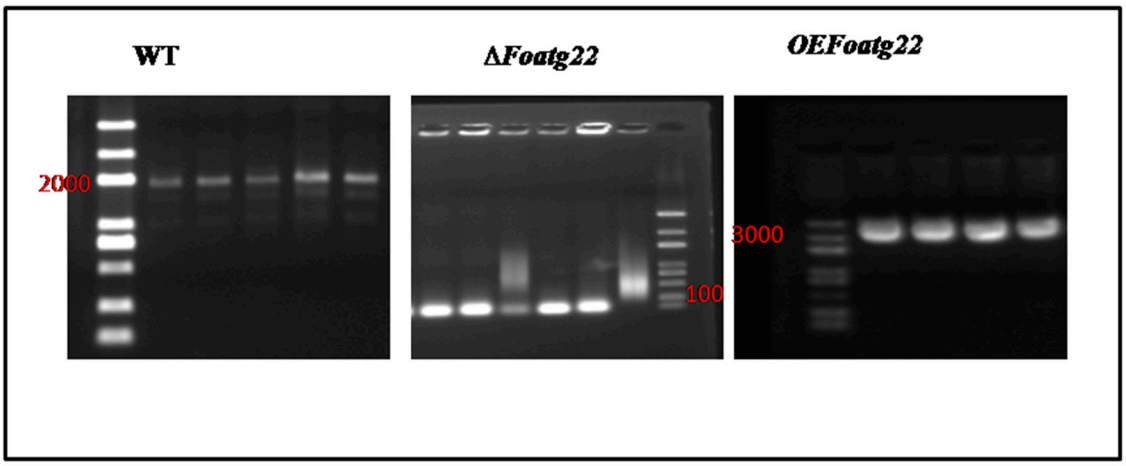


Figure S2. Molecular identification of mutants**.** Image represents the expected shift in deletion (Δ) and over expression of mutants**.** The arrows indicate the target bands.

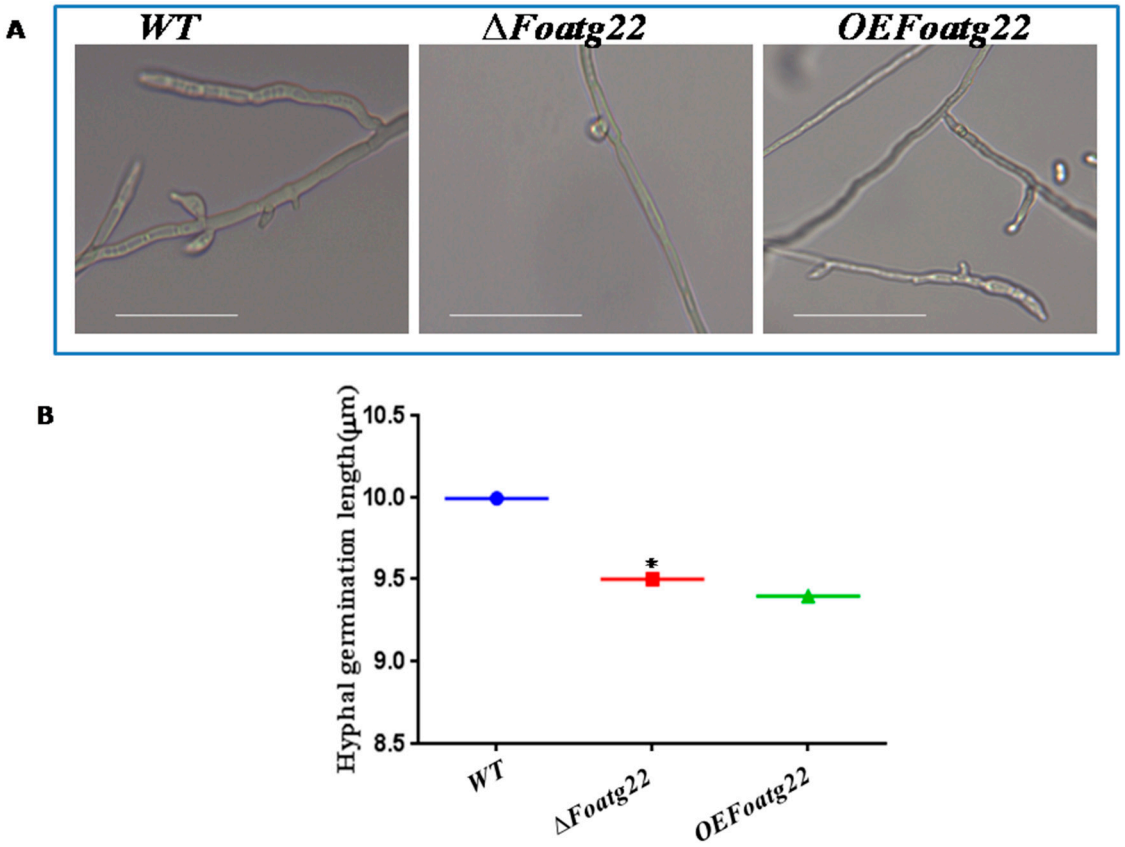
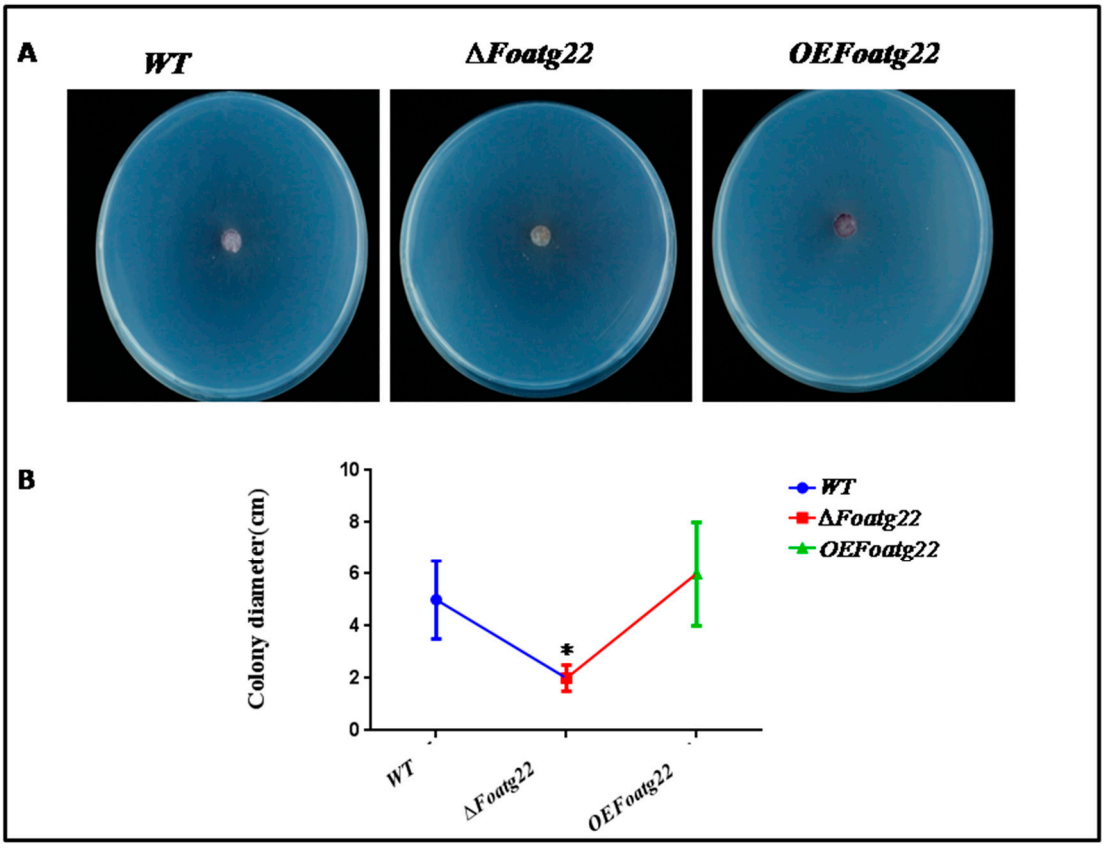


Figure S3. Representative hyphal growth and length of WT, *ΔFoatg22*, Overexpression of *Foatg22*. (A) Indicating the hyphal germination density. (B) Hyphal germination length. (Duncan, $P < 0.05$). Bars= 10μm.



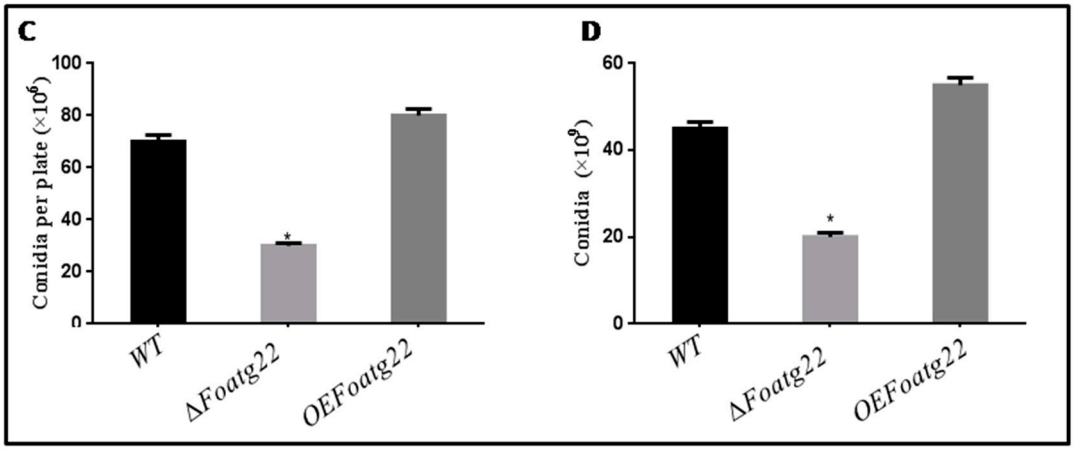


Figure S4. Representative phenotype of WT, *ΔFoatg22* and Overexpression of *Foatg22*. In Δ*FoATG22* mutant conidial formation and hyphal formation was reduced. (**A**) Represents the image of 14 days old strains after inoculation. (**B)** Freshly micro conidia (10^3) were inoculated in to PDA plates and then incubated at 28°C. Colony diameter was measured on daily basis till ten days. Graph represents growth rate of strains. Conidial formation was significantly reduced in *ΔFoatg22* (**C**) After 14 days number of micro conidia recovered from PDA plates which were grown on 28°C. (**D**) Represents the number of recovered micro conidia from 2 days old culture with shaking at 28°C. Conidial formation was reduced significantly in *ΔFoatg22*.Bars indicating slandered error from replications. To perform statistical analysis Duncan post-hoc test was used (Duncan, $P < 0.05$).

Table S1. Primers used in present study**.** Primers used for construction of replacement cassette and genes cloning.

Gene name	Primer name	Primer sequence (5` to 3`)	T °
		Deletion primers	
Foatg22	FoATG22 5′-U F (P1)	GGTACCTGCGTTAACTCACTGAGAAGTAAGCAGAA	80
	FoATG22 5′-U R (P2)	GTTCAGGCTTTTTCATGGTGGCGGCCGCGGCTACAG GTAGCTATGTCG	89.7
	FoATG22-Hph-F(P3)	CGACATAGCTACCTGTAGCCGCGGCCGCCACCATG AAAAAGCCTGAAC	89.7
	FoATG22-Hph-R (P4)	AATCAACAGCCATCTGAGCCTGCAGGCTATTCCTTT GCCCTCGG	87.4
	FoATG22 3′-D F (P5)	CCGAGGGCAAAGGAATAGCCTGCAGGCTCAGATGG CTGTTGATT	81.3
	FoATG22 3′-D R (P6)	GGATCCCGATCTCTTGCGGTTGCTCATTGTG	
		Cloning primers	
Foatg22	FoATG22 F	CCTGCAGG ATGGCGCCAAACCTTCAACCTC	62.6
	FoATG22 R	GGCGCGCC GGGTCTTGCGTGTTCATCGACA	61.8
	PtrpC F	TTAGCAGACAGGAACGAGGACAT	56.7
		qRT-PCR	
Foatg22	RT FoAtg22F	CTCACGGCTCTTTAACCTCC	54.5
	RT FoAtg22R	TATACAGCCGCCAGTGGATA	54.5
	RT FOXG_04522F1	TCTCTACGGCACTTCTCAAT	55.6
	RT FOXG_04522R1	TTGGTCAAGAATAGGCAGGA	55.6