

Appendix 1a

Relative expression of the regulatory gene *aflR* by isolates of *Aspergillus flavus*

	3. Aflatoxigenic isolates		4. Non-aflatoxigenic isolates		
1. Corneal isolates	C1	C4	C2	C7	Fisher `f`value
Relative expression of gene(Mean ± SD)	0.9782±0.0315	1.0986± 0.0771	--- ^{a,b}	0.5691±0.0757 ^{a,b}	232.919
2. Environmental isolates	E1	E8	E2	E9	
Relative expression of gene(Mean ± SD)	0.9495±0.0812	0.9520±0.0516	0.5271±0.0722 ^{c,d}	0.5449±0.0875 ^{c,d}	31.138
Fisher `f`Value	3.686		48.472		

Statistical analysis

A. Comparison of differences between *A. flavus* isolates by one-way analysis of variance (ANOVA):

1. between all corneal isolates (n=4): **statistically significant**
2. between all environmental isolates (n=4): **statistically significant**
3. between all aflatoxigenic isolates (n=4): not statistically significant
4. between all non-aflatoxigenic isolates (n=4): **statistically significant**

B. Post hoc analysis (Tukey's HSD test):

- a- Significantly lower than C1 value
- b- Significantly lower than C4 value
- c- Significantly lower than E1 value
- d- Significantly lower than E8 value

Appendix 1b

Relative expression of the regulatory gene *aflJ* by isolates of *Aspergillus flavus*

	3. Aflatoxigenic isolates		4. Non-aflatoxigenic isolates		
1. Corneal isolates	C1	C4	C2	C7	Fisher `f` value
Relative expression of gene(Mean±SD)	1.0804±0.0890	1.1786±0.0875	1.0386±0.0600	0.6395±0.0720 ^{a,b}	27.669
2. Environmental isolates	E1	E8	E2	E9	
Relative expression of gene(Mean±SD)	1.0381±0.0955	1.0671±0.0921	0.6884±0.0841	0.5857±0.0867 ^{c,d}	22.159
Fisher `f` value	1.345		21.473		

Statistical analysis

A. Comparison of differences between *A. flavus* isolates by one-way analysis of variance (ANOVA):

1. between all corneal isolates (n=4): **statistically significant**
2. between all environmental isolates (n=4): **statistically significant**
3. between all aflatoxigenic isolates (n=4): not statistically significant
4. between all non-aflatoxigenic isolates (n=4): **statistically significant**

B. Post hoc analysis (Tukey's HSD test):

- a- Significantly lower than C1 value
- b- Significantly lower than C4 value
- c- Significantly lower than E1 value
- d- Significantly lower than E8 value

Appendix 1c

Relative expression of the structural gene *norI* by isolates of *Aspergillus flavus*

	3. Aflatoxigenic isolates		4. Non-aflatoxigenic isolates		
1. Corneal isolates	C1	C4	C2	C7	Fisher 'f' value
Relative expression of gene(Mean± SD)	0.8649±0.0310	0.8661±0.0310	0.6397±0.0454 ^{a,b}	0.6596±0.0315 ^{a,b}	73.44*
2. Environmental isolates	E1	E8	E2	E9	
Relative expression of gene(Mean± SD)	0.8511±0.0356	0.8593±0.0381	0.6235±0.0275 ^{c,d}	0.6335±0.0299 ^{c,d}	47.15*
Fisher 'f' value	1.002		0.594		

Statistical analysis

A. Comparison of differences between *A. flavus* isolates by one-way analysis of variance (ANOVA):

1. between all corneal isolates (n=4): **statistically significant**
2. between all environmental isolates (n=4): **statistically significant**
3. between all aflatoxigenic isolates (n=4): not statistically significant
4. between all non-aflatoxigenic isolates (n=4): not statistically significant

B. Post hoc analysis (Tukey's HSD test):

- a- Significantly lower than C1 value
- b- Significantly lower than C4 value
- c- Significantly lower than E1 value
- d- Significantly lower than E8 value

Appendix 1d

Relative expression of the structural gene *pksA* by isolates of *Aspergillus flavus*

	3, Aflatoxigenic isolates		4. Non-aflatoxigenic isolates		
1. Corneal isolates	C1	C4	C2	C7	Fisher 'f' value
Relative expression of gene(Mean± SD)	0.9017±0.0364	0.9344±0.0427	0.6797±0.0348 ^{a,b}	0.6711±0.0422 ^{a,b}	38.75*
2. Environmental isolates	E1	E8	E2	E9	
Relative expression of gene(Mean± SD)	0.8683±0.0334	0.8749±0.0401	0.6598±0.0313 ^{c,d}	0.6758±0.0377 ^{c,d}	32.27*
Fisher 'f' value	1.839		0.349		

Statistical analysis

A. Comparison of differences between *A. flavus* isolates by one-way analysis of variance (ANOVA):

1. between all corneal isolates (n=4): **statistically significant**
2. between all environmental isolates (n=4): **statistically significant**
3. between all aflatoxigenic isolates (n=4): not statistically significant
4. between all non-aflatoxigenic isolates (n=4): not statistically significant

B. Post hoc analysis (Tukey's HSD test):

- e- Significantly lower than C1 value
- f- Significantly lower than C4 value
- g- Significantly lower than E1 value
- h- Significantly lower than E8 value