

## Technology for improved defense response and extended shelf life of fruits

New Delhi, Dec 28: Tomato has a relatively poor shelf life and its production is marred by biotic stresses caused by pathogens such as *Pseudomonas syringae* and *Botrytis cinerea*. In a project entitled “Nitric oxide signaling in response to *Botrytis cinerea* infection in Tomato fruits”, the role of phytooglobins in development, fruit ripening and resistance against biotic stresses was investigated. Phytooglobins were found to have a direct role in NO production which in turn affects development, fruit ripening and defense against pathogens in tomatoes.



A Technology has been developed to delay ripening of tomato fruits and is currently being incubated at Foundation for Innovation and Technology Transfer (FITT) towards a start-up establishment and three patents have been filed.

No.	Authors	Title	Year	Patent No./ Country
1.	Gupta KJ, Bulle M, Kumari A	Method for extending shelf-life of agriculture produce:	2020 (filed)	Indian patent application no: 201911009428

2.	Gupta KJ, Bulle M, Kumari A	Method for extending shelf-life of agriculture produce:	2020 (filed)	PCT Application No.: PCT/IN2020/050219
3.	Pathak PK, Raganathan S, Manjunatha G, Gupta KJ	A formulation and method for inducing defense response in plants	2020 (filed)	Provisional application no: 202011019481

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