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A Project Report
On
"INVITRO EVALUATION OF BOTANICALS AND BIOCONTROL AGENTS AGAINST POMAGRANATE BACTERIAL BLIGHT PATHOGEN"

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ABSTRACT:

Pomegranate (*Punica granatum* L.) is an ancient fruit, belonging to the smallest botanical family punicaceae. The fruit is very much liked for its cool and refreshing juice. Pomegranate is a good source of carbohydrates and minerals such as calcium, iron and sulphur. It is rich in vitamin-C and citric acid is the most predominant organic acid. In India, it is regarded as a “vital cash crop”. Successful cultivation of pomegranate in recent years has met with different traumas such as pest and diseases. Among diseases bacterial blight caused by *Xanthomonas axonopodis* pv. *Punicae* is a major threat. Since 2002, the disease has reached the alarming stage. Investigation was conducted in the laboratory to isolate strains of bacteria responsible for bacterial blight disease of pomegranate, and also to find the efficacy of botanicals (Neem, Tulsi, Ginger and Garlic) and bio control agents (*P.fluroscence, B.subtilis, T.viride*) against the bacterial blight pathogen. The bacteria were isolated from infected pomegranate fruit. The bio chemical characterization confirmed that the isolated bacteria was xanthomonas. Among the botanicals and bio control agents used, the ethanol extracts of *Azadirachta indica (Neem) and bio control agent T.viride* showed significant inhibitory effect. These were applied to the infected plant and were tested.