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***Piper nigrum* L. as a natural biopesticide: A field experiment on growth, yield and diseases of *Solanum melongena* L.**

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Piper nigrum L. is considered the king of spices of family piperaceae throughout the world due to its pungent principle piperine. Different parts of *Piper nigrum* L. including secondary metabolites are also used as drug, preservative, insecticidal and larvicidal control agents. Biologically *Piper nigrum* L. is very important species. The biological role of this specie is explained in different experiments that peppercorn and secondary metabolites of *Piper nigrum* L. can be used as antiapoptotic, antibacterial, anti-colon toxin, antidepressant, antifungal, anti-diarrheal, anti-inflammatory, antimutagenic, anti-metastatic activity, antioxidative, anti-pyretic, antispasmodic, anti-spermatogenic, antitumor, antithyroid, Ciprofloxacin potentiator, cold extremities, gastric ailments, hepatoprotective, insecticidal activity, intermittent fever and larvicidal activity. The current investigation was to assess the effects of water leaf extract of *Piper nigrum* L. plant on growth parameters and diseases like Wilt, leaf spot in *Solanum melongena* L. To understand the mechanism, the phytochemical analysis of plants and its effect on bacteria and fungi were studied. The *Piper nigrum* L. treatment showed significant increase in number of flowers, buds, leaves, fruits on 10 to 70 days observation over untreated control at various significant levels and a very much effective in reducing growth of leaf spot and Wilt diseases on all days of observations. This approach can contribute in reducing the amount applied of fungicides and subsequently minimize its hazards to the environment and human health. Work in this regard should continue other invasive species on isolating antifungal compounds and on field trials with promising extracts or compounds. Also, further research is needed to obtain information regarding the practical effectiveness of essential oils to protect the plants or the plant products without toxic effects.

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