

## عنوان مقاله:

Marine endophytic fungi mediated Silver nanoparticles and their application in plant growth promotion in *Vigna radiata* .L

## محل انتشار:

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## خلاصه مقاله:

Seaweeds tend to have the property of acting as a biofertilizer for plants. Endophytes are organisms that are capable of mimicking and producing secondary metabolites similar to the host. In this report, silver nanoparticles (AgNPs) were synthesized from a marine endophytic fungus, *Fusarium equiseti* which was isolated from marine seaweed and identified using ITS sequencing. The synthesized *Fusarium equiseti* nanoparticle (FeNp) was characterized using UV Visible Spectrophotometer and field emission scanning electron microscope (FESEM). Efficacies of these nanoparticles to act as plant growth promoters were tested in laboratory conditions. Two different methods of administrations are nanoprimering (NAP) and hydroprimering (HYP), which were carried out with varying concentration of the FeNp (۱ppm, ۲.۵ppm, ۵ppm and ۱۰ ppm). After comparing both the results, HYP method showed better results by favouring positive effects on wet weight, shoot length, root length, chlorophyll and carotenoid contents even at very low concentration (۵ppm). The current results suggested that there is scope for these nanoparticles to be made into a biofertilizer after performing further toxicity studies under field conditions.

## کلمات کلیدی:

Biofertilizer, Marine Endophytic Fungi, Mycosynthesis, Plant growth, silver nanoparticles

## لینک ثابت مقاله در پایگاه سیویلیکا:

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