

Lifestyle Switching Phenomenon of Plant Associated Fungi

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Abstract : Fungi are closely associated with the plants in various types of interactions such as mycorrhizal, parasitic or endophytic. Some of these interactions are beneficial and a few are harmful to the host plants. It has been suggested that these plant-associated fungi are able to change their lifestyle and this means endophyte may become parasite or vice versa. This phenomenon may have profound effect on plant-fungal interactions and various ecological niches. Therefore, it is necessary to identify the factors that trigger the change in fungal lifestyle and understand whether these different lifestyles are interconnected at some points either by physiological, biochemical or molecular routes. This review summarizes the factors affecting plant fungal interactions and discusses the possible mechanisms for lifestyles switching of fungi based on available experimental evidences. Research should be boosted in this direction to fetch more advantages in future and to avoid the severe consequences in agriculture and other related fields.

Keywords : endophytic, lifestyle switching, mycorrhizal, parasitic, plant-fungal interactions

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