Nanotechnology for controlling mango malformation: a promising approach

ABSTRACT

Mango (Mangifera indica L.) is one of the most important fruit crops in the world with yields of approximately 40 million tons annually and its production continues to decrease every year as a result of the attack of certain pathogens i.e. Colletotrichum gloeosporioides, Erythricium salmonicolor, Amritodus atkinsoni, Idioscopus clypealis, Idioscopus nitidulus, Bactrocera obliqua, Bactrocera frauenfeldi, Xanthomonas campestris, and Fusarium mangiferae. So F. mangiferae is the most harmful pathogen that causes mango malformation disease in mango which decreases its 90% yield. Nanotechnology is an eco-friendly and has a promising effect over traditional methods to cure fungal diseases. Different nanoparticles possess antifungal potential in terms of controlling the fungal diseases in plants but applications of nanotechnology in plant disease managements is minimal. The main focus of this review is to highlight the previous and current strategies to control mango malformation. Hence, the present review aims to provide brief information on the disease and effective management strategies.