

ROLE OF BIOTECHNOLOGY IN THE MANAGEMENT OF PLANT PARASITIC NEMATODES – A REVIEW

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Abstract

Biotechnology can be defined as those biological means used to develop processes and products employing organisms or their components. Plant constituents or organism products may alter nematode behaviour and development, serve as nematicides, disrupt molting, hatching and other hormonally regulated processes. Of these substances, saponins of many legume forage plants, avermectins isolated as fermentation products from soil organism (*Streptomyces avermitilis*), volatile oils of certain medicinal plants and polythinyles isolated from the roots of marigold plants (*Tagetes* spp.). Significant nematode management was obtained by using biocides as sincocin-AG, furfural and margozan. Organic composts supply both major and minor elements for the plant and soil, improve the physical and chemical conditions of the soil and achieve significant reduction in the nematode infestation resulting in better plant growth and fruiting.