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TISSUE CULTURE STUDIES IN SOME MEDICINAL PLANTS ASSOCIATED WITH THE TREATMENT OF DIABETES MELLITUS: A SHORT REVIEW

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ABSTRACT

Diabetes mellitus is an important human ailment afflicting a large number of people in India especially in the urban areas. About 60 % of the world population is using medicinal plants for the treatment of many diseases. In Indian and other ancient systems of the world, a large number of plants are used for the treatment of this deadly disease. The present paper reviews the biotechnological approach for the conservation and development of such medicinal plants. *Gymnema sylvestre*, *Ficus bengalensis*, *Momordica charantia*, *Phyllanthus amarus*, *Tinospora cordifolia*, *Trigonella foenum graecum*, *Allium sativum* and *Withania somnifera* are some medicinal plants that have active hypoglycemic principles which seem to act directly on pancreas and stimulate insulin level in blood. Plants showing anti diabetic activities are indiscriminately collected from the wild and their natural population is at great risk. Many medicinal plants are disappearing at an alarming rate. Therefore, there is an urgent need for the conservation of these plants through biotechnological approach like tissue culture. Present paper presents a short review on conservation of some important medicinal plants used in the treatment of diabetes.

Keywords : Medicinal plants, Anti diabetic, plant tissue culture, diabetes mellitus, conservation.

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