ANTIDIABETIC & ANTICOAGULANT ACTIVITY

INTRODUCTION

- Diabetes is a chronic disease affecting around 2-3% of the population worldwide. Plant materials which are being used as traditional medicine for the treatment of diabetes are considered one of the good sources for a new drug or a lead to make a new drug. Now-a-days more than 400 plants are being used in different forms for Hypoglycemic effects all the claims practitioners or users are neither baseless nor absolutely. Therefore, a proper scientific evaluation of screening plant by pharmacological tests followed by chemical investigations is necessary. Considering this, many investigations have been undertaken to explore the possibilities of using plants available at a hand stretch to treat human ailments such as, diabetes which is a chronic, progressive disease and requires lifelong treatment. The usage of synthetic drugs which are used concomitantly in some individuals may cause drug interactions when used to treat many types of ailments. Hence, taking synthetic- drug interactions into account there is a trend now to look for plants and herbal preparations to be used medically. Though different types of oral hypoglycemic agents are available along with insulin for the treatment of diabetes, there is an increased demand by patients to use natural products with antidiabetic activity, since time immemorial, patients with non-insulin dependent diabetes have been treated orally in folk medicine, with a variety of plant extracts. In India, a number of plants are mentioned in ancient literature (Ayurveda) for the treatment of diabetic conditions. It is necessary to screen the plants which are having antidiabetic activity and available easily to reduce the cost and to reduce the side effects which are generally seen in case of synthetic drugs.

- Anxiety is an unpleasant emotional experience of daily living characterized by a sense of apprehension, uneasiness or impending distress; this feeling is usually associated with changes in the autonomic nervous system and behavior and its affects one-eighth of the total population worldwide and has become a very important area of research interest in psychopharmacology during this decade. Traditional medicinal practices have remained as a component of health care system of many societies in spite of the
availability of well-established alternative \(^6\). Epilepsy is a condition, which causes seizures to occur. It is one of the most common chronic diseases affecting human beings. According to several publications this can amount to 70\% of the people with epilepsies, with a high prevalence of about 0.8\% in children below the age of seven years. These observations have led to a shift in focus to the use of herbal remedies in the management of epileptic seizures, probably because these measures fit into the cultures of people and are not usually as expensive as the more refined orthodox drugs. Besides, these orthodox drugs possess many side effects, contraindications and possible interactions with drugs used simultaneously. The medicinal plants for the study were selected in such a way that their availability is maximized in many parts of the world. The clinical effectiveness, minimal side effect profile and relatively low costs of herbal drugs are the reason for their various applications in traditional medicine. However, only limited efforts have been made to evaluate the potentials of such plants for their use in modern medicine or to scientifically justify their traditional use in the treatment of CNS disorders including epilepsy. The alternative drug therapy for the management of this disease can by the use of medicinal plants and their active principles. Medicinal plants are believed to be an important source of new chemical substances with potential therapeutic effects. Several plants used for treatment of epilepsy in different systems of traditional medicine have