

CHAPTER – I

PHYTOCHEMICALS

1.1 Introduction

Medicinal plants are of great importance to the health of individuals and communities. The medicinal value of these plants lies in some chemical substances that produce a definite physiological action on the human body (Edeoga *et al.*, 2005). Phytochemicals defined in the strictest sense, as chemicals produced by plants. However, the term is generally used to describe chemicals from plants that may enhance health status of organisms, but are not essential nutrients (Srivastava *et al.*, 2011). There is ample evidence to support the health benefits of the diet in the form of fruits, vegetable, legumes, whole grains and nuts (Mojab *et al.*, 2003). Because plant based foods are complex mixtures of bioactive compounds, information on the potential health of individual phytochemical is linked to information on the health effects of foods that contain those phytochemicals (Manjula *et al.*, 2009).

The most important of these bioactive constituents of plants are alkaloids, tannins, flavanoids and phenolic compounds (Hill, 1952). Many of the indigenous medicinal plants are used as spices and food plants. They are also sometimes added to food for medicinal purposes for pregnant and nursing mothers (Okwu, 1999 and 2001). More than 2000 phytochemicals have been identified from plants (Taiz and Zeiger, 2006). Over 100 plant species are consumed world wide as vegetables, but of these, only about 20 species are grown globally and account for most of the vegetables produced and consumed (Siemonsma and Kasem, 1996). The phytochemical constituents of the medicinal plants were recorded by a number of workers (Joshi, 2000, Syed and Usha, 2005 and Ramasubbu