INTRODUCTION

Diabetes is a chronic disease marked by the higher level of blood glucose from defects in insulin production, insulin action or both. Diabetes is fast becoming a leading cause of morbidity, mortality and disability across the world. Diabetes is a global metabolic epidemic affecting essential biochemical activities in almost every age group (Gupta et al., 2008). The prevalence of diabetes has drastically increased in the latter half of the 20th century, largely due to the ready availability of large quantities of calorie rich foods and the technology driven reduction in routine daily exercise. According to International Diabetes Federation, diabetes currently affects 366 million people worldwide and India has the largest number of people with diabetes i.e. 61.3 million. India has been declared as the “Diabetic capital of world”. By 2030 there would be 552 million diabetics throughout the world and 101.2 million diabetics would be in India alone (IDF, 2011). Obesity and physical inactivity independently contribute to the development of type 2 diabetes. However, the magnitude of risk contributed by obesity is much greater than that imparted by lack of physical activity (Rana et al., 2006).

These days great attention is being given to management of diabetes with medicinal plants along with dietary restriction (Thorfeldt, 2005). Being a medicinal plant, Aloe vera L. has been used for many centuries for its curative and therapeutic properties. Aloe vera is a perennial succulent xerophyte, which develops water storage tissue in the leaves to survive in dry areas of low or erratic rainfall. The aloe leaf can be divided into two major parts, namely the outer green rind, including the vascular bundles, and the inner colourless parenchyma containing the aloe gel. The ten main areas of chemical constituents of Aloe vera include: amino acids, anthraquinones,