AIM AND SCOPE
For prevention, diagnosis and treatment of various disorders regarding living organisms an extensive study and practice are going on using traditional and alternative medicine for the welfare and healthy life of the peoples around the world. In Indian Vedas the information regarding the use of medicinal plants and their uses for the treatment of different disorders were recorded and reference were available in between 3500 BC and 800BC and as well as the WHO (World Health Organization) anticipated that 80% of the population in worldwide were dependent on traditional medicine as their primary health need using plant source. Plants have been used extensively due to their effectiveness, cost and safety (without/minimum side effects) when compared to modern medicines. Crude extracts of local plants, fruit and vegetables are frequently being used by traditional communities like tribes and rural population of India and all over the world. Though, plant extracts are believed to be non-toxic, scientific investigations such as biochemical and clinical and toxicological studies are very much needed to rule out the harmful effects, as several natural products may also contain both useful and as well as harmful ingredients in them as secondary metabolites (Nakamura and Yamamoto, 1982) which may have healing and serious side effects on victims. Plant proteases are one such product of plant extracts which will be used in various industries based upon their biochemical properties.

* * *

_Cucumis sativus* L. belongs to the family called as Cucurbitaceae and commonly known as a Cucumber. In Ayurveda, the leaves, fruit and seeds of cucumber are widely used as medicine for various skin problems including bulge under the eyes, suntan and are believed to promote cooling, healing, soothing, emollient, anti-itching effect to irritated skin, and to treat fever, insomnia, cephalalgia, bronchitis and jaundice and extended its uses in cosmetic industries [Anonymous, 2001].

* * *

Aim and scope
Cucumber contains a variety of phytochemicals like flavonoids, lignans, triterpenes, carbohydrates, lipids, proteins, vitamin C, vitamin A, thiamine, riboflavin, niacin, dietary fibers, and minerals like molybdenum, sodium, calcium, phosphorus, iron, manganese, magnesium and silica. In addition, it contains water (90-96 %) as a major constituent. The enzymes like chitinase, glycine rich proteins, peroxidase, subtilase xylem sap protein-30 and proteases are present in different parts of cucumber plant [Buhtz et al, 2004; Anna Wilimowska-Pelc et al, 1983].

Usually all the parts of cucumber fruit are used for eating and for cosmetics, except the fresh juicy material, the sap which is normally removed before consumption as it is bitter in taste due to the presence of cucurbitacins. However the presences of the proteolytic activity and its beneficial effects on human health (clot dissolving and wound healing properties) have not been studied, hence the main objectives of the current study are:

- Biochemical characterization of the proteolytic activity of *C. sativus* L fruit sap extract.

- Pharmacological characterization of the proteolytic activity of *C. sativus* L fruit sap extract.

- Effect of the proteolytic activity on human blood/plasma coagulation and clot dissolution.

- Effect of the proteolytic activity on human platelets functions.

- Effect of the proteolytic activity on wound healing process.