extracts are more active against Gram positive bacteria than Gram negative bacteria by Vlietinck et al. (1995).

Thus, it is important to know the biochemistry of stem bark in order to isolate and screen the new pharmacological active principals.

**Highlights of the work:**

- Pharmacognostical studies are focused on the identity of herbal drug by various methodologies as Macroscopy and Microscopical examination, ash values, extractive values and moisture content.

- Phytochemical studies investigate the various phytoconstituents such as alkaloids, sterols, flavonoids, carbohydrates, tannins, glycosides, saponins triterpenoids, proteins and amino acids by qualitative chemical analysis and thin layer chromatography.

- The anti-inflammatory and anti-analgesic potency of our drug are valuated by suitable experimental animal models.

- The anti-microbial activity of our medicinal plant *Crataeva religiosa* has been proved by agar diffusion method in various Micro-organisms.

### 8.0 SUMMARY AND CONCLUSION

The quest for good health and immortality has been a continuous human endeavour since the beginning of civilization throughout the World. In all ages and civilizations, man’s dependence on plants for food and medicine was well chronicled. Plants have continued to play a dominant role in the maintenance of human health since ancient times. Human beings are suffering from illness and diseases. The search for relief from ailments prompted them to explore
their surroundings for a remedy. As a result they used various natural agents for their treatment; plants being in the forefront. Majority of plants are harvested from the forests, the principal repositories of herbal plants. The herbal medicines are beginning to find their due place and recognition in society which they rightly deserved. Hence, in the present study the tribe and ethnomedicinal information claims the anti-inflammatory and analgesic activity and anti-microbial activity which could be proved only by the suitable scientific methods. So we tried in our research to valuate all the above said activities through various scientific procedures.

The present study investigate the authenticity of drug analysed through various pharmacognostical experimental procedure like microscopy, macroscopy, ash values, extractive values and moisture content.

Phytochemical analysis reveals the presence of various phytoconstituents like alkaloids, sterols, flavonoids, carbohydrates, tannins, glycosides, saponins triterpenoids, proteins and amino acids.

The pharmacological activity of *Crataeva religiosa* is screened for anti-inflammatory and anti-analgesic activity shows that the ethanolic and aqueous fractions are having more activity than petroleum ether and chloroform extracts.

The anti-microbial pitency of various extracts of *Crataeva religiosa* are screened by using *Enterococcus faecalis*, *Staphylococcus aureus* and *Escherichia coli* by using agar plate diffusion that shows *Enterococcus faecalis* a maximum zone of inhibition than *Staphylococcus aureus* and *Escherichia coli*.

Our research concludes that the pharmacognostical studies support the future identification of *Crataeva religiosa* to experimental purpose. The phytochemical analysis documented as the presence of various phytoconstituents like alkaloids, sterols, flavonoids,
carbohydrates, tannins, glycosides, saponins triterpenoids, proteins and amino acids which could lead the initiation of separation of these phytoconstituents by using various sophisticated instrumental techniques.

The pharmacological potency as in the case of anti-inflammatory and analgesic activity in Crataeva religiosa leads to the bioactivity graded fractionation of phytoconstituents paving way to the introduction of this herbal medicine as pharmaceutical products.

The anti-microbial activity concludes that the plant Crataeva religiosa may be a potential medicine to treat various infections which are caused by the various micro-organisms such as Enterococcus faecalis, Staphylococcus aureus and Escherichia coli. Further studies will also be carried out to viral and fungal infections.

The future research will be focused on the investigation of bioactivity graded separation and the formulation development may be beneficial to human kind.

BIBLIOGRAPHY
