

## Extraction, Isolation and Comparative Phytochemical Study of Aegle Marmelos, Calendula Officinalis and Fenugreek

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**Abstract :** Background: - Aegle Marmelos (Bael) leaf extract is taken twice daily to treat ophthalmia, ulcers, and intestinal worms, among other ailments. Poultice made from bael leaf is used in the treatment of eye conditions. The leaf juice has a variety of therapeutic applications, with the most notable being the treatment of diabetes. Fenugreek is used to cure red spots around the eyes, as well as to soften the throat and chest and to give relief from coughing. The use of this plant in the form of infusion, powder, pomade, and decoction has been extremely popular in Iranian traditional medicine. The plant may be used to wash one's vaginal linings. This plant is used as an emollient in the lack of appetite, treatment of pellagra, and gastrointestinal problems, as well as a general tonic. Calendula officinalis leaves are used to treat varicose veins on the outside of the body by infusing them. In Europe, the leaves are diaphoretic and resolvent in nature, while the blooms are employed as an emmenagogue and antispasmodic stimulant in Canada and the United States. The flowers were decocted and served as a posset drink when smallpox and measles were common in England, and the fresh juice was used to treat jaundice. Objective: - This study is done to compare the physicochemical parameter of the alcoholic extract of the leaves of Aegle Marmelos, Calendula Officinalis, and Fenugreek. Materials and Methods: Extraction and Isolation of Aegle Marmelos, Calendula Officinalis, Fenugreek, were done. Preliminary phytochemical study for alkaloids, cardiac glycosides, flavonoids, glycosides, phenols, resins, saponins, steroids, tannins, terpenoids of the extract was done individual by using the standard procedure. Result: - The phytochemical screening of Aegle Marmelos, Calendula Officinalis, and Fenugreek shows the presence of alkaloids, carbohydrates, total phenolics, total flavonoids, tannins, saponins gum. Conclusion: - In this study, we have found that crude aqueous and organic solvent extracts of Aegle Marmelos, Calendula Officinalis, and Fenugreek leaves contain some important bioactive compounds and it justifies their use in the traditional medicines for the treatment of different diseases.

**Keywords :** Aegle Marmelos, Calendula Officinalis, Fenugreek, physicochemical parameter

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