

3rd International Conference on **Virology, Infectious Diseases and COVID-19**

October 24-25, 2022/ Holiday Inn Express Dubai - Safa Park, an IHG Hotel



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Cecidological and Pharmacognostical Study of Ficus Species Galls

Cecidological and pharmacognostical parameters for the galls of three *Ficus* species were studied with the aim of drawing the standards. The cecidology, macroscopy, microscopy, powder characteristics, physical standards, thin layer chromatographic studies of *Ficus racemosa*, *Ficus benghalensis*, and *Ficus religiosa* galls included in research work. The study also deals with the phytochemical screening of various extracts. Here non structural total phenolic content (TPC) determined by Folin-Ciocalteu reagent and flavonoid content (TFC) was determined by aluminum chloride colorimetric method. In addition, total tannin content (TTC) determined by back titration with potassium permanganate also carried out. During the cecidologic study it has been observed that, *Ficus* species galls have three stages; development, maturation and senescence stage. Microscopically the galls show variation in their growing stages. Commonly cuticle, lignified cells, cortex, starch grains, nutritive tissue and larval chamber were identified during microscopy of galls. The results showed that the moderate presence of terpenes, flavonoid, steroids, phenols and tannins. In study TPC, TFC and TTC are significant and prove that, galls are rich in estimated phytoconstituents and may have pharmacological importance. The cecidological and pharmacognostical standardization studies have been reported for the *Ficus racemosa*, *Ficus benghalensis*, and *Ficus religiosa* galls first time together.

Keywords: *Ficus racemosa*, *Ficus benghalensis*, *Ficus religiosa*, galls, terpenes, flavonoid, and steroids.