ABSTRACT

The purpose of this research was to evaluate the ethnopharmacological and nutraceutical potential of organic and inorganic crude extracts of various plant sections from two important ornamental plants, *Epipremnum pinnatum* (L.) Engl. and *Monstera deliciosa* Liebm. Ethnopharmacological assessments included phytochemistry, which included physicochemical properties, percentage yields, and antibacterial and antioxidant activity. The distilled water extract of *M. deliciosa* root yielded the largest yield (5.97%), whereas the ethanolic extract of leaves yielded the lowest (0.86%). The physical characteristics captured the color, texture, and odor of crude extracts. Secondary metabolites such as phenols, tannins, alkaloids, glycosides, and terpenoids were found in the extracts. In the *Monstera* plant, saponins are found, which are antinutritional but have medicinal value. Antioxidant activity explored by various assays recorded the highest (1128.4 mg/ml) total antioxidant activity in the ethanolic extract of *E. pinnatum* root. Total phenolic content was recorded as highest (538.2) in the ethanolic extract *Epipremnum* leaf, and the highest value of FRAP (1979 eq. of Trolox) was by ethanolic extract *E. pinnatum* leaf. Ethanol and distilled water extract depicted the highest DPPH values, and the highest total flavonoid content value (268.21) represented by the chloroform extract of *Monstera* leaf. The highest % of metal chelating (96.5%) was indicated by distilled water extract of *M. deliciosa* stem. Antimicrobial activity was recorded against bacterial and fungal pathogens, *Escherichia coli*, *Bacillus subtilis*, *Candida albicans*, and *Penicillium commune*. Standard drugs were used as a positive control for the comparison. The maximum zone of inhibition was shown by ethanolic and distilled water extract of both targeted plants. For nutraceutical investigation, nutritional analysis was performed, the highest protein content (15.6%) was recorded by *Epipremnum* leaf, maximum fat content (6.15%) was shown by root part of *E. pinnatum*, dietary fiber (6%) was the highest present in stem part of the same plant whereas, moisture content (28.5%) was recorded maximum in *Monstera* plant of the stem, while Ash value (21.4%) was highest depicted by root part of *E. pinnatum*. The result thus obtained supports the nutraceutical and ethnopharmacological potency of the *Epipremnum pinnatum* plant, whereas ethnomedicinal potential is shown by *Monstera deliciosa*.