ABSTRACT

*Stereospermum colais* (Yellow Snake Tree) is a 15–20 m large tree used as a medicinal plant for treatment of many ailments such as heart disease, anti-inflammatory, anti-diabetic, anti-asthmatic etc. Numerous therapeutically critical mixes have been accounted for from distinctive parts, for example, two new guanine subsidiaries named as 3,7-dimethylguanin-1/3-ium, 1,3,7-trimethylguanin-1/3-iumsone newsphenolic longschain ester, 2-(4-hydroxyphenyl) sethyl hentrisacontanoate. Referred to disconnected mixes were identified as ursolic corrosive, atranorin, ellagic corrosive, eutigoside A, tyrosol, verminoside, specioside, norviburtinal, syringaldehyde, psilalic corrosive, caffeic corrosive, methyl caffeate, p-coumaric corrosive, zenkequinones A-B, and so forth. Isolated compounds were evaluated against urease α-chymotrypsin enzymes. Norviburtinal, ellagic acid ursolic acid have reported first time from *Stereospermum* genus. Present study is taking into account pharmacognostical, phytochemical pharmacological investigation on root leaves of *Stereospermum colais* Buch. Pharmacognostical examination incorporates morphology; microscopy physicochemical study on root leaves of plant. Phytochemical examination incorporates extraction, recognizable proof portrayal of dynamic mixes from root takes off. In present study compounds like beta sitesterol, lupeol, quercetin kempferol have been identified from root leaves respectively. For isolation each identified compound preparative TLC was employed. Chosen root leaves were extracted with diverse dissolvable, for example, petroleum ether, chloroform methanol. Methanol extract was further utilized for identification, isolation pharmacological investigation. Compounds isolated by preparative TLC were characterized by spectroscopic techniques like Mass, IR, NMR, etc. Pharmacological investigation includes anti-cancer, anti-oxidant anti-microbial effect of methanolic extract of both root leaves It showed some significant results. Further study can be done for isolation of other important active phytoconstituents from selected parts as well as other parts such as flower, stem etc of *stereospermum colais* Buch.