

ABSTRACT

Mabi bark, *Colubrina elliptica*, was investigated for compounds of therapeutic interest and bitter substances responsible for its peculiar taste.

Two alkaloids Scutianine B and Scutianine C were isolated and identified, but were not found to be bitter.

Attempts to isolate the saponins were unsuccessful, but ebelin lactone was isolated and identified among the products of acid hydrolysis of the crude saponins.

The saponins appear to be mainly responsible for the bitter taste of mabi.

The phenolic acids ferulic, caffeic and gentisic acids were identified by paper chromatography (PC) and are present in both the bound and free states.

The tannins were identified by PC and spectral data as prodelphinidins and procyanidins. Epicatechin was found to be present in the free state, as identified by 2-D PC.

Total phenols were estimated as 4% of the bark, by the Folin-Denis method, whereas tannins were estimated as 0.15% of the bark as determined by the standard KMnO_4 titration method.

Brine shrimp bioassays of extracts of the bark indicated that the more polar extracts are the most toxic to the brine shrimp.

The results of a broad screening of the leaves of *Colubrina arborescens* for alkaloids, sapogenins, phenolic acids and tannins are also presented.

The bark of *Roupala montana* (bois bandé) was investigated for compounds which may account for its reputed aphrodisiacal activity. A broad screening of the bark indicated the absence of alkaloids and the presence of tannins, identified as prodelphinidins.

From thin layer chromatography (TLC) and capillary gas chromatographic analysis, β -sitosterol was identified as being present in the bound state in the bark. No testosterone was found in the bark.

The aqueous extract of the bark of *R. montana* showed very low toxicity to the brine shrimp.