

ABSTRACT

Certain phenolic and nitrogenous constituents of Acalypha wilkesiana Muell, Arg. ("Carpet") and Warszewiczia coccinea Klotzsch ("Chaconia") were studied using chromatographic, hydrolytic and spectral methods of analysis.

The only anthocyanin pigment identified in both the leaves and flowers of A. wilkesiana (Euphorbiaceae) was cyanidin-3-glucoside; but other flavonoids were also found in the plant based on the aglycone quercetin. Galloyl esters and certain phenolic acids were also present. The brown leaf pigments of this plant seemed to consist of condensation products such as leucoanthocyanins and gallotannins. Nine free amino acids were identified in A. wilkesiana. Negligible amounts of alkaloidal material were found in the leaves.

Cyanidin-3-glucoside was also found in W. coccinea (Rubiaceae), as well as a leucocyanidin and a leucodelphinidin which yielded cyanidin and delphinidin respectively on hot acid treatment. Thirteen free amino acids were detected in the leaves of this plant. Of special interest, a significant amount (about 0.5% content of fresh leaves) of tyramine was found in the "double chaconia" while only traces of tyramine were present in the "single chaconia". Neither the "double" nor the "single" chaconia yielded measurable quantities of alkaloidal substances.

No significant amounts of cyanogenetic substances were found in either A. wilkesiana or W. coccinea when they were subjected to the hydrolytic methods which are known to liberate hydrogen cyanide.

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