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MAJOR PHYTOCONSTITUENTS IN THE AQUEOUS LEAF EXTRACT OF *TITHONIA DIVERSIFOLIA* (*HEMSL. A. GRAY*) INDICATED ANTIMALARIA POTENTIALS

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ABSTRACT

Objective

The aqueous leaf extract of *Tithonia divers folia* **(*Hemsl. A. Gray*)** was screened for Phyto-constituents with anti-malaria potentials.

Methods

The leaf was air-dried in the shade for 15 days, pulverized and extracted with water. The aqueous leaf extract was lyophilised with a yield of (16.89%$^{w}/_{v}$) and subjected to Phytochemicals analyses using standard methods.

Results

The qualitative and quantitative phyto-constituents screening revealed the presences of alkaloids, flavonoids, quinones, gallate, glucosides, peptides, terpenes and xanthones, in which alkaloids (265.00±0.04), flavonoids (64.00±0.05) and quinones (44.02±0.04) were highly concentrated. Further analyses of fractionates of the phyto-constituents in the aqueous leaf extract recorded papaverine (67.32±0.01) and reservarine (21.16±0.01) as the major alkaloids, while glycosylflavonoids (25.13±0.02) was the main flavonoids and quinlenone (25.00±0.01) was the major quinones.

Conclusion

From the foregoing, it can be hypothesised that the aqueous leaf extract of *T. diversifolia* can serve as a good anti-malaria regime, as the active ingredients in most orthodox anti-malaria medicines are derivatives of the phyto-consistuents identified in our study.

KEYWORDS: Aqueous Leaf Extract, *Tithonia Diverifolia*, Phyto-Constituents, Anti-Malaria Potentials, Hypothesised and Good Anti-Malaria Regime