

## **P-010: ANTIOXIDANT CONSTITUENTS FROM *RHEEDIA EDULIS* FRUITS**

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In our ongoing studies of antioxidants from edible fruits, we have examined a number of Clusiaceae species, including *Rheedia edulis*. This tree, native to Central America, has yellow latex and bears small smooth yellow fruits. The heartwood is immune to insects, and thus valued for construction. The fruits of *R. edulis* were screened for antioxidant constituents using the 1,1-diphenyl-2-picrylhydrazyl (DPPH) assay. The rind, pulp, and seed of *R. edulis* fruits were each extracted with MeOH, and partitioned sequentially with CHCl<sub>3</sub>, EtOAc, and BuOH. The CHCl<sub>3</sub> partition of the rind displayed potent antioxidant activity (IC<sub>50</sub> = 26.0 µg/mL). Guttiferone A was isolated from the rind using Sephadex LH-20 and reversed-phase column chromatographies. Guttiferone A has a molecular weight of *m/z* 602 and UV<sub>max</sub> of 233 and 279 nm. The antioxidant activity of guttiferone A (IC<sub>50</sub> = 46.0 µM) is comparable to gallic acid (IC<sub>50</sub> = 35.4 µM). The biflavonoids fukugetin and volkensiflavone have also been identified from *R. edulis*. Currently, additional benzophenones are being isolated from the CHCl<sub>3</sub> partition of the seed using chromatographic techniques similar to guttiferone A.

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