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## Kinetic study of phytochemical extraction and antioxidant potential of hibiscus cannabinus L. (Article)

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### Abstract

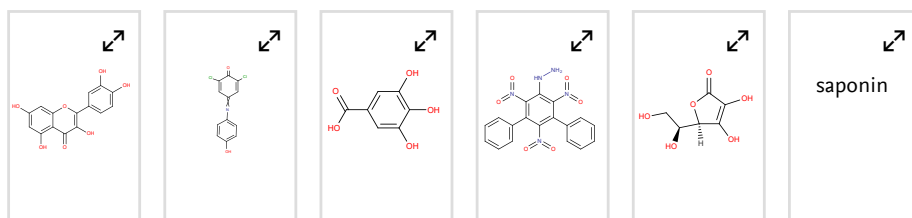
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Kenaf (*Hibiscus cannabinus* L.) is a valuable plant originating from Africa. It has multifunction among the old folk community and recently, it is employed in biochemical for functional food and structural engineering application in biocomposite materials. In Malaysia, kenaf plant is used as a material to the process of obtaining fiber for structural application. It also has excellent medicinal value for treating diseases through biochemical processing, but its profiling is still limited in the literature. This study aimed to (i) screen the secondary metabolite compound, and (ii) investigate the potential of kenaf leaf as a new functional food. The qualitative and quantitative phytochemical screenings of leaf extracts, as per the standard protocols were performed to identify the feasibility of kenaf leaf for use as a functional food. Bioactive compounds were found in both young and old kenaf leaves. In quantitative results, TPC, flavonoid and tannin, estimation of vitamin C, and DPPH test were carried out. This kinetic study showed that old leaf contained higher bioactive compounds than the young one. Kenaf leaf has the potential to be used as promising prototypes sources of functional food, and it is rich in antioxidants and bioactive compounds which are beneficial to human health. © International Research Publication House.

### Chemistry database information ⓘ

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### Author keywords

Antioxidant Hibiscus cannabinus L Kenaf Kinetic study Phytochemical

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