

# **Study on Chemical Compositions and Evaluation of Antioxidant Activity of *Cassia alata* L. (Pwe-gaing) Leaves**

**Yin Min Thu<sup>1</sup>, Khin Khin Shwe<sup>2</sup>**

## **Abstract**

Leaves of *C. alata* are consumed as a traditional medicine in Myanmar. This paper attempts to investigate the bioactive chemical compounds in the leaves of *C. alata*. The qualitative elemental analysis was conducted by EDXRF; Ca content was found to be the highest. A compound (terpenoid A) was isolated from the ethyl acetate extract of the leaves sample. The investigation of the antioxidant activity of crude extracts (EtOAc, EtOH, and watery extract) of *C. alata* by the DPPH assay method was also performed. It was found that watery extract showed a more potent antioxidant property. Therefore, Leaves of *C. alata* can be a potential source of natural antioxidants in order to reduce oxidative stress-related diseases.

**Keywords:** DPPH, EDXRF, antioxidant activity

<sup>1</sup>Demonstrator, D, Department of Chemistry, Maubin University

<sup>2</sup>Associate Professor, Dr, Department of Chemistry, Maubin University