



## **Unique Occurrence of cyclopropenoid fatty acids in *Asparagus racemosus* seed oil: A rich source of oil and its possible industrial application**

**Kariyappa S. Katagi<sup>1\*</sup> and Kallappa M. Hosamani<sup>2</sup>**

1. Department of Chemistry Karnatak University's Science College Dharwad -580 001, **INDIA**

2. P.G. Department of Studies in Chemistry, Karnatak University, Pavate nagar Dharwad-580 003, **INDIA**

Email: [kskatagi@gmail.com](mailto:kskatagi@gmail.com)

Received on 28<sup>th</sup> April and finalized on 3<sup>rd</sup> May 2013.

---

### **ABSTRACT**

*The present investigation reveals the occurrence of cyclopropenoid fatty acids (CPFAs) in the seed oil of Asparagus racemosus (AR). These unusual fatty acids were characterized by GC, IR and NMR studies and supported by chemical degradation methods. The iodine value, saponification value are 79 and 215 respectively. Further, the Durbitaki titration assisted the quantification of CPFAs. The detected CPFAs have been characterized as 7-(2-octacyclopropen-1-yl) heptanoic acid and 8-(2-octacyclopropen-1-yl) octanoic acid which are quantified as 3.2% and 2.8% respectively.*

**Keywords:** *Asparagus racemosus* seed oil, fatty acids, cyclopropenoid fatty acid, industrial application.

---