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Oleo Chemistry of Seed Oils of *Sida Cordifolia* and *Ervatamia Coronaria:* Assessment For Their Biodiesel Profile

Kariyappa S Katagi[1]*, Mahesh Akki[2], Mohankumar H.B[2], Vinayak K. Bangari[2] Siddhaling B. Shiradoni[2] and Ravindra S. Munnoli[3]

1. Department of Chemistry, Karnatak University's, Karnatak Science College, Dharwad - 580 001, **INDIA**
2. Post Graduate Department of Studies in Chemistry, Karnatak Science College, Dharwad -580 001, **INDIA**
3. Department of Chemistry, VDR Institute of Technology Haliyal-581 329, **INDIA**

Email: kskatagi@gmail.com

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ABSTRACT

In this work new feedstock for biodiesel production has been screened. Non edible seed oil species like Sida cordifolia (SC) and Ervatamia coronaria (EC) plant species which yields 30.7% and 41.6% seed oil respectively. The molecular weight (MW) of oil is calculated based on the percentage component fatty acids of the seed oils. The prominent parameters of bio-diesel such as cetane number (CN), lower heating value (LHV) and higher heating value (HHV) of these Fatty Acid Methyl Esters (FAMEs) are empirically determined. The bio-diesel property of FAMEs of these seed oils is compared with existing bio-diesels. This confirmed the suitability of these seed oils for the generation of biodiesel. The seed oils selected in this investigation convene the major specification of biodiesel standards organizations like American (ASTM), Germany (DIN) and European (EN). This work reports the suitability of these candidates for the bio-diesel productivity.

Keywords: *Sida cordifolia, Eravatamia coronaria,* unusual fatty acids, industrial utilization, biodiesel.