Composition, nutritional value and uses of Ricinodendron heudelotii, Vitex doniana and Cleome gynandra seeds oil, three indigenous oil species: a review

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Abstract

Ricinodendron heudelotii, Vitex doniana and Cleome gynandra are three indigenous species whose seeds contain oil that can provide interesting alternatives to conventional seed oil species. This review focused on the physicochemical characteristics of their seeds and the nutritional properties of the extracted oils. Scientific articles and reports were collected and needed information was extracted and synthesized. Ricinodendron seed oil is higher (51.83 mg/100 g) than that of Vitex (28.55 mg/100 g) and Cleome (27.35 mg/100 g). The three seed oils are polyunsaturated oils. Ricinodendron seed oil is composed mainly of linoleic acid (28.3-51.1%). Cleome seeds oil is mainly composed of linoleic acid (56.3% -61.1%) and oleic acid (19.6-23.9%). Ricinodendron seed oil can be used for the preparation of fast drying binder and resins. Vitex seed oil can be used for the production of resin, paint and skin cream production. No application of Cleome seed oil has been stated.

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