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The potential of *Parkia biglobosa* in agrochemical and allied industries

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Parkia biglobosa commonly called African Locust bean is a perennial deciduous tree that belongs to the family Fabaceae. The plant is widely used in traditional medicine for the treatment of different ailments like diabetes, malaria, female sterility, leprosy, eye sores, tooth aches, fever, hypertensions, snake bites, wounds and ulcers. The seeds which are often fermented or boiled and used as condiment in soup by the natives, could be further exploited in Agrochemical industries given their rich nutrient and anti-nutrient status as revealed in this study. Seeds of *Parkia biglobosa* were analysed for their proximate composition, amino acid level and anti- nutrient factors (polyphenols, phytic acid and oxalate) at three stages of processing namely, raw, boiled and fermented. The highest anti-nutrient factor present in the raw state was oxalate (3,100 mg/100 g dry matter) while phytic acid was the least (60 mg/100 g dry matter). The amino acid levels of the raw seeds were quite high and met the requirement of the World Health Organization (WHO) as a reference standard. Fermentation was more effective in reducing the anti-nutrient status of the plant (77.78%) than boiling (66.67%). On the other hand, boiling enhanced the amino acid composition. These results suggest that both raw and processed seeds of *Parkia biglobosa* could find use in agrochemical and allied industries and the processing method chosen would depend on the needs of the industry.

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