

STUDIES ON STORAGE BEHAVIOUR OF RUBBER SEED OIL

A.I. Aigbodion

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Quality assessment of rubber seed oil stored in different types of containers was carried out. Oil samples were stored in metal container with inside coating, plastic container and brown coloured bottle at ordinary atmospheric conditions, for a period of six months. During storage, there was no appreciable increase in free fatty acid and peroxide values at the initial stages until after four weeks. Sample stored in metal container with coating inside showed the lowest values for both free fatty acid and peroxide and the highest for iodine after twenty four weeks of storage.

Key words : Deterioration, Quality, Rubber seed oil, Storage.

A.I. Aigbodion, Rubber Research Institute of Nigeria, P.M.B. 1049, Benin City, Nigeria.

INTRODUCTION

Rubber seed is an important ancillary product of the rubber tree (*Hevea brasiliensis*) having various industrial uses (Joseph and George, 1994). In Nigeria, rubber estates are estimated to have the potential of producing about 42000 metric tonnes of rubber seed oil having resemblance with linseed oil in its physico-chemical properties (Nwankwo *et al.*, 1986). Indeed, studies on practical utilization of rubber seed oil revealed that it has strong potential to substitute linseed oil in alkyd production (Coomarasamy and Fernando, 1976; Nair *et al.*, 1981; Aigbodion, 1991; Aigbodion and Okiemen, 1995, 1996). It is also suitable for production of fat-liquor for leather industry (Bangaruswani and Obonukut, 1986) and in soap making (Haridasan, 1977).

Rubber seed fall is seasonal and collection is possible only once a year during August-September and storage of dry seed is necessary for subsequent processing. Rubber seed is reported to be susceptible to biological deterioration particularly if left on the ground for more than three days before collection and may yield poor quality oil (Nadarajah *et al.*, 1973; UNIDO, 1989; Aigbodion, 1994). The effect of processing techniques on the quality of rubber seed oil has also been reported (Azeemoddin *et al.*, 1975; Azeemoddin and Thirumala Rao, 1962). In order to realize the industrial potentials of rubber seed oil, a proper storage device is required to ensure its availability when necessary and transportation to the point of utilization without any deterioration in quality. In Nigeria, vegetable oils are commonly stored and