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## Chapter 32

# Mongongo/Manketti (*Schinziophyton rautanenii*) Oil



Natascha Cheikhyoussef, Martha Kandawa-Schulz, Ronnie Böck,  
and Ahmad Cheikhyoussef

**Abstract** *Schinziophyton rautanenii* (Schinz) Radcl.-Sm., formerly known as *Ricinodendron rautanenii* Schinz, is a large spreading dioecious tree, typically 15–20 m in height. The tree commonly grows wild in Angola, Botswana, Namibia, South Africa and Zambia and is known to be an important food source to the inhabitants. It is commonly also known as the Mongongo or Manketti tree. The edible yellow oil extracted from the nut of the egg-shaped fruits, contains the unique conjugated fatty acid,  $\alpha$ -eleostearic acid among others such as linoleic, oleic and linolenic acids. Findings on the physico-chemical characteristics among different extraction methods of the Manketti oil have shown that its utilization into value-added products in the food, health and the cosmetics sector has great economic potential. This chapter aims at collating the information that underpins the potential of this unique oil to encourage further research and the development of innovative applications of the Manketti oil.

**Keywords** *Schinziophyton rautanenii* · Manketti oil ·  $\alpha$ -eleostearic acid · Biodiesel · Phytosterols · Southern Africa · Food

### Abbreviations

CLN	Conjugated linoleic acids
HPLC	High performance liquid chromatography
ITC	International Trade Centre
NCBI	National Center for Biotechnology Information
$\alpha$ -ESA	Alpha eleostearic acid

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