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PaperTitle **Are South African Oils in line with International Standards**

Main Author **van der Merwe G.H Dr**

Presentor **van der Merwe G.H Dr**

About Oil CC. *About Oil CC Randburg SOUTH AFRICA aboutoil@telkomsa.net*

Co-Authors

ABSTRACT

A potential area of concern has been highlighted in the South African Oilseed Industry. Results of recent tests carried out have shown South African freshly produced oil to be of an inferior quality. Companies intending to export oils (pure and flavoured) to Europe will experience problems meeting the required standards. Local manufacturers that use SA oils in their formulations might not achieve the desired shelf life due to inferior oil quality.

With the above in mind, a project was carried out to assess certain locally produced oils and to determine whether these oils meet quality standards and to look for ways of improving the quality if necessary.

The initial oil quality of various oil types were tested and found to be inferior. The quality of similar oil types from Europe were tested and found to be of far superior quality. All the oils were analysed for free fatty acid (FFA) content, peroxide value (PV), p-anisidine value (AV) and the Rancimat induction period. The recommended quality guidelines as proposed by Codex Alimentarius and recommended values as suggested by Gupta (2000)¹ were used to assess the quality of the oils.

The quality of sunflower oil from 5 different oil processors in SA was then investigated. Samples from 3 different batches of each processor were taken during a 4 month period. The results of the analyses showed that none of the oils assessed from the various processors was of a consistently high quality required for a long term shelf life.

Good quality sunflower oil generally has a shelf life of 12 months. This period was found to be significantly lower, (between 6 and 10 months) in the locally produced oils. Local oils are used in food manufacturing and poor quality oil will affect the taste, quality and shelf life of the final product. The local market can only compete with imported oil (even palm oil) if their oil is of good initial quality.