
Abstract No. 77

PaperTitle **Proximate Composition of South African Grown Carob(Ceratonia siliqua)**

Main Author **lipumbu Lukas Mr**

Presentor **lipumbu Lukas Mr**

University of Stellenbosch Dept of Food Science Private Bag X1 Matieland SOUTH AFRICA 14955296@sun.ac.za

Co-Authors

ABSTRACT

Carob (*Ceratonia siliqua*) is an evergreen, drought resistant tree of Mediterranean origin. Carob pods have a long history of use in both human and animal nutrition. Locally, carob trees have been used mainly ornamentally, with minimal use of the pods as a nutritious food source. Five South African grown cultivars (Santa Fe, SFax, Tylliria, Aronshon and one unknown single cultivar) were analysed for proximate composition (moisture, ash, total sugars, protein, total lipids, dietary fibre and polyphenols) as well as mineral, amino acid and fatty acid content. The impact of various roasting times (45, 60 and 75 min) at 150°C, on the composition, were also examined. The average proximate composition range of raw carob pods was 8.17 – 9.87% moisture, 2.17 – 2.69% ash, 40.69 – 54.74% total sugars, 3.07 – 4.42% protein, 0.37 – 0.84% lipids and 2.58 – 3.08% polyphenols. Although roasting reduced the protein, sugar and lipid contents to 3.22 – 3.38%, 32.50 – 40.48% and 0.63 – 0.69% , respectively, the levels in both raw and roasted carob still represent a potentially nutritious food source and alternative to cocoa. This is mainly due to the absence of caffeine, thiobromine & oxalic acid in carob.