## **Unfermented Green Rooibos, the Newest Extract in the Cosmetic Arsenal to Fight Aging**

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## **Abstract**

Rooibos, native to South Africa, has been used for centuries as a tea; known to have excellent healing properties. Scientists have begun to study this interesting extract, found to contain the flavonoid, Aspalathin. At this time, Aspalathin has only been found in Rooibos. The antioxidant and anti-inflammatory properties make Rooibos an attractive new extract to research for use in the cosmetics market. Studies presented evaluate the antioxidant activity of the flavonoids present in Rooibos as well as compare the antioxidant activity of Rooibos to other well accepted antioxidants used in cosmetics including Green Tea.

## Introduction

Over the last 15 years Rooibos tea has received a lot of attention from scientists who have researched the Tea and its beneficial properties. Scientists have discovered that the Rooibos plant (Aspalathus linearis) contains nine types of flavonoids. Four of these flavonoids, specifically quercetin, luteolin, isoquercitrin and rutin are very powerful. Flavonoids like quercetin found in Rooibos have been shown to help neutralize free radicals and in combination with the tea's naturally high Vitamin C content (1.5mg/ml), they can act as anti-oxidant compounds to protect the body against diseases and premature aging.

Currently, there is tremendous interest and research being focused on anti-oxidants and their role in helping to reverse the aging process by preventing free radical damage to the body. Enzymes, the best known being SOD (super-oxide dismutase) and anti-oxidants have been found to protect the body against the harmful effects of free oxygen radicals that can be formed during exposure to UV radiation (sunlight).

Rooibos Extract, derived from the Rooibos plant *Aspalathus linearis* is not only full of antioxidants, it also has anti-bacterial, anti-inflammatory and anti-allergic properties. These properties make Rooibos an excellent ingredient for use in skin care products.

In the area of skincare, Rooibos skincare products have been shown to clean the skin without disturbing the natural pH-balance of the skin. Additionally, Rooibos will help cleanse the pores, get rid of impurities, and help to keep the pores from blocking up again without dehydrating the skin. This property along with the advantage of the antibacterial

property makes Rooibos particularly appealing for use in acne treatment products.

The new unfermented Green Rooibos Extract is a unique natural extract with polyphenol content over 25% and it contains 100 times more anti-oxidants than normal Rooibos tea and 10 times more Aspalathin.

The key word here is *unfermented*. Rooibos extract itself is not new. The plant has been fermented for generations to make Rooibos tea or African Red Tea. The fermentation process gives the beverage its characteristic red color and pleasing aroma. However, fermentation alters and reduces the flavonoid composition hence significantly reducing the anti-oxidant activity. It has been found that as much as 90% of the key antioxidant ingredient, Aspalathin can be lost during the fermentation process. This loss of Aspalathin can account for as much as a 70% loss in actual antioxidant activity.

The antioxidant activity of the Green (unfermented) powdered, water-soluble extract has been found to be similar to Green Tea. Unfermented Green Rooibos is processed to maximize the polyphenol content.

The fermentation process normally starts naturally immediately after the plant is harvested in the warm humid climate of the Cedarburg Mountains in the Western Cape, South Africa. Hence special harvesting and gentle processing techniques are required to guarantee the complete spectrum of active ingredients in our Green Rooibos Extract.

