Global interest in Moroccan Argan oil has grown quickly over the past decade resulting in a prospering agroforestry system based on the Argan tree. Will Coetsee and Michel Colson look into the implications of the burgeoning trade in terms of quality, sustainability and efficacy.

The truth about Argan oil

The Argan grove in southwestern Morocco currently occupies less than 0.9 million hectares and the agroforestry system is no longer in equilibrium. A nationwide programme was initiated in the 1980s to rescue the grove as well as the communities that depend on it for survival. The programme was based on the belief that the only chance of success was to increase the monetary value generated by Argan products, which could be shared with the local population.

The exceptional quality of the oil for skin and hair care applications can be attributed to its extraordinarily high levels of vitamin A and vitamin E. It is a highly effective anti-oxidant and neutralises free radicals, making it a popular ingredient for anti-ageing cosmetics. The high proportion of Omega-6 fatty acids promotes the passage of oxygen through cell membranes, which has a regenerative effect on the skin. Argan oil also has an intense smoothing and moisturising effect on the skin, and returns a healthy shine to dry and brittle hair.

Know the quality barometers

The biggest challenge facing the Argan industry is the adulteration of the high quality oil with cheaper, less effective oils. A simple fatty acid analysis alone is not sufficient to guarantee authenticity. It has recently been shown that campesterol, the sterol common in vegetable oils, is absent in Argan oil. Due to the fact that campesterol can easily be detected by gas-chromatography analysis, this provides a method to detect Argan oil adulteration when conducted together with a fatty acid composition analysis.

From a customer’s point of view, the easiest way to identify authentic 100 per cent pure Argan oil is through its characteristic skin-feel, certification and price. The pure oil has a viscous texture and quickly absorbs into the skin with no greasy residue. Due to the limited supply and labour intensive process of producing Argan oil, the price of authentic oil has never been competitive with other oils. The high price of pure Argan oil makes it specifically prone to adulteration. The fact that Argan trees are endemic to southwestern Morocco, means that all producers are required to specify that the oil is ‘100 per cent pure Argan oil from Morocco’ in order to get a production and export permit.

Sustainability and quality are key

Although the future of the Argan grove appears to be secured by the economic success of the industry, efforts are in place in Morocco to certify oil quality, and retain customer confidence. Therefore, it is crucial to develop new product derivatives that will enhance the value of the product and sustain the livelihoods of the oil-producing communities.