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The ancient African plant that captured Giorgio Armani's attention



Prof Jill Farrant

Photo: Supplied

Although it's widely used in African traditional medicine, modern science is only beginning to appreciate the remarkable pharmaceutical and cosmetic applications of the plant *Myrothamnus flabellifolia*. This is why designer, Giorgio Armani, chose it as the main ingredient in his skincare range, Crema Nera.

Known as *Uvukakwabafile* in isiZulu, it is believed to be one of the most ancient plants on planet. Its name in the indigenous languages where it grows translates roughly as "awake from the dead", an appropriate name for a plant that can dry out almost completely and survive.

For Jill Farrant, professor of molecular and cell biology at the University of Cape Town (UCT) and scientific advisor to Giorgio Armani, it is vital that as we learn more about this plant's

valuable properties, we also ensure its harvesting is sustainable and that the communities from where it comes benefit from its use.

Resurrection plants can lose up to 95% of their water and appear completely dead, but bloom back to life in as little as 12 hours after rain.

"What makes resurrection plants in general, and *M. flabellifolia* in particular, so special," she explains, "is the remarkable toolbox of chemicals they use to survive the extreme water loss and heat that would kill any other plant. It is these phytochemicals that serve as powerful antioxidants we can use for pharmaceuticals and cosmetics."

The major antioxidant in *M. flabellifolia* protects cell membranes from damage at the microscopic level – more effectively than vitamin C.

"Antioxidant activation can defend cells against damage caused by pollution, UV rays, dehydration, free radicals and temperature extremes, all of which accelerate skin ageing." *M. flabellifolia* contains the greatest number of antioxidants Farrant has ever seen in a plant, more so than so-called wonder plants like rooibos and aloe vera.

The Armani connection

Giorgio Armani has only one skincare range, the luxury Crema Nera collection. When he began investigating ingredients he was looking for two things. First, a plant with an interesting story. And second, a plant that is on the list of ingredients allowed in skincare products in China. Aware of the importance of skincare in Chinese culture, and of course, the sheer size of the Chinese market, Armani knew he wanted to reach be able to offer his products there.

M. flabellifolia ticked both boxes, and Farrant's name came up as the most prolific researcher in the field. Armani requested Farrant be the scientific advisor on the product "Armani's cosmetics operates through L'Oréal," says Farrant, "and when they reached out to me, I had just found out I was going to win the L'Oréal UNESCO Women in Science Award. The Armani team had no idea, so they were surprised and delighted at the news and it made for great marketing."

Sustainable and ethical sourcing

M. flabellifolia grows on rocks which it breaks down to make soil. And while the species can be grown en masse in greenhouses, studies have shown this changes the composition of the plant. In other words, when it does not need to produce strong antioxidants to survive, it doesn't.

As interest in this plant grows, so too does the risk of extinction if it is harvested unchecked. Farrant is thus working to ensure steps are taken to protect this valuable botanical resource and remunerate the communities living with it.

As yet, South Africa does not export *M. flabellifolia* and Armani sources the plant from Zimbabwe, in large part because that country sells the product internationally at a very reasonable cost. As a condition of her role as scientific advisor, Farrant has requested that the plants are not sourced from South Africa unless there is investment into studies for sustainable harvesting.

Farrant is also working to ensure the farmers who will grow the plant are remunerated in accordance with its value and that royalties are paid to the elders of the communities who first discovered its medicinal properties.

Cosmetics companies other than Armani are also very interested in *M. flabellifolia*, and, says Farrant, these conditions for her potential co-operation will remain in place for all of them.

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