

A natural approach to managing sebum

An oily scalp is caused by over-reactive sebaceous glands. To address this concern, Mibelle Biochemistry has developed AstraForce, which is proven to rebalance excessive sebum production on the scalp.

Sebum is one of the scalp's most important weapons to protect it from dehydration and to keep the lipid barrier intact. The production of sebum is primarily governed by sebocytes. These specialised cells in the sebaceous glands are associated with the hair follicles. As soon as sebum is excreted from the pilo-sebaceous duct, it naturally spreads over the scalp of the surface and later migrates onto the surface of the hair shaft by capillary forces.

While sebum is generally beneficial to hair and influences various processes ranging from epidermal differentiation to skin-specific hormonal signalling, excessive sebum production is the cause of oily scalp and hair. It makes hairs become greasy at the roots and as they stick together, they trap dust and pollution particles. Mibelle Biochemistry's active ingredient AstraForce (INCI: Astragalus Membranaceus Root Extract (and) Dipropylene Glycol (and) Glycerin (and) Lecithin (and) Phenoxyethanol (and) Aqua/Water), is ideally suited to rebalance sebum production on oily scalp and hair. AstraForce is a liposomal preparation of the traditional Chinese herb *Astragalus membranaceus*.

VALIDATED SEBUM REDUCTION

In vitro studies show that AstraForce decreases the lipid droplet formation in sebocytes, efficiently reducing sebum production. Additionally, AstraForce prevents hair follicle inflammation by reducing the activity of the enzyme lipase, which breaks down sebum into free fatty

acids. These foster the growth of the skin bacterium *Cutibacterium acnes* and act as inflammatory mediators.

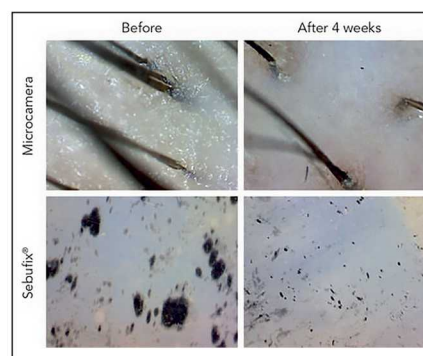
In a clinical study involving 60 volunteers with oily scalp and hair, AstraForce reduced the amount of sebum observed on the scalp by up to 38.4% after only 28 days. The volunteers confirmed the sebum-reducing efficacy of the active ingredient on the scalp, by self-evaluation. The score given by the volunteers was significantly higher compared to initial conditions and to the treatment with a placebo product.

Trans-epidermal water loss was significantly reduced upon treatment with AstraForce, further proving the barrier-enhancing activity of the active, despite reduced sebum content.

A WIDE RANGE OF APPLICATIONS

AstraForce is ideally suited for incorporation into the whole hair care regimen. It can be formulated in traditional shampoos and is suitable for trending formulations such as scalp serums and scrubs or dry shampoos.

With its positive effect on scalp biology, the active ingredient is also ideal for use in hair conditioning products and provides added benefits in products for oily and grease-prone



Visible reduction of scalp sebum after four weeks of treatment with AstraForce

hair. AstraForce can support the feeling of cleanness of the hair while reducing the production of excess sebum without impairing the barrier-function of the scalp.

AstraForce and other active ingredients from Mibelle Biochemistry are available in South Africa from Carst & Walker. ■

Carst & Walker – www.carst.co.za
Mibelle Biochemistry
– www.mibellebiochemistry.com

A MAJOR MEDICINAL HERB

Astragalus membranaceus is capable of growing in extreme habitats. Its roots strengthen the immune system and stimulate metabolism. This sweet tonic herb is known to be an adaptogen because it helps the body cope with stress and to maintain optimal homeostasis. It also has anti-bacterial, anti-inflammatory and antiviral effects – these properties make it one of the most frequently used medicinal herbs in nutritional supplements and remedies.



Astragalus membranaceus