



## MAMAKU – BLACK FERN

An iconic symbol of New Zealand's native flora

Mamaku, also known as Black Fern (*Cyathea medullaris*), is New Zealand's largest fern species and is endemic to the country. It thrives in the water-drenched and humid lowland forests.

The meristems / embryonic stage of leaves contain *a novel polysaccharide* essential for skin hydration, vitality and regeneration.

## THE ORIGIN AND COMPOSITION

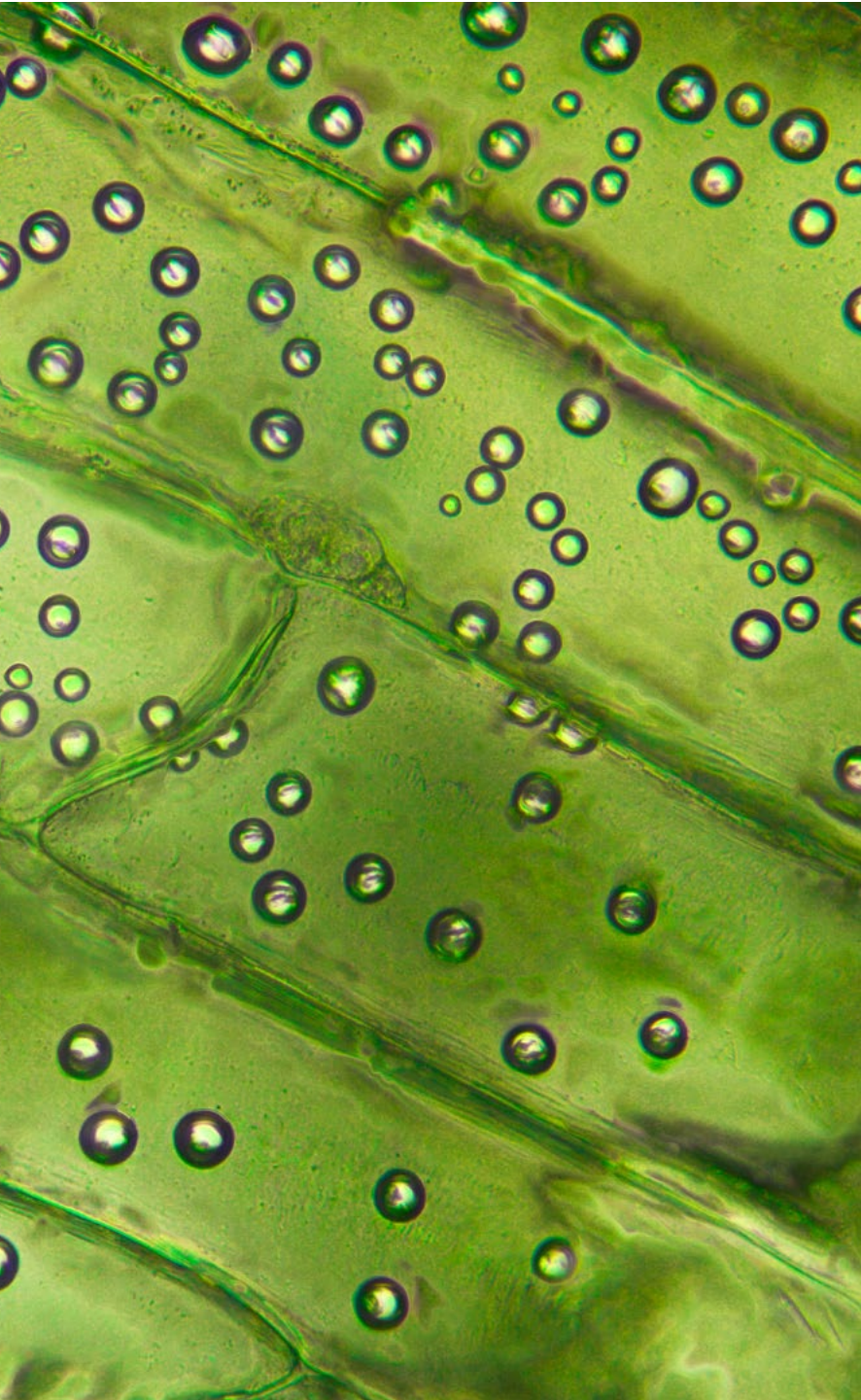
- THE SCIENTIFIC NAME: *Cyathea Medullaris*
- BOTANICAL NAME: Black fern
- TRADITIONAL NAME: Mamaku
- COUNTRY OF ORIGIN: Endemic to New Zealand

# MAMAKU IN TRADITIONAL MĀORI HEALING

For centuries Māori people of New Zealand have used Mamaku for therapeutic purposes to treat the skin

- A poultice made from mamaku was applied to *wounds and infections*
- Young shoots were utilised to treat *boils*
- The bruised pith (soft inner part of the plant stem) was used as a dressing for *sore eyes*





## NOVEL TO SCIENCE

- Mamaku meristem contains a unique, water soluble, high molecular weight, viscoelastic **3-Dimensional polysaccharide** that exhibits unique and complex rheological properties, uncommon in natural polymers
- About **80% of Mamaku frond's mucilage** are essential polysaccharides, mainly Glucuronic Acid, Galactose, Mannose, Xylose and Rhamnose
- This unique biodynamic network provides a vibrant, **multifunctional viscoelastic matrix** able to shield the skin against trans epidermal water loss and contributes to immediate lifting and firming benefits.