

BRING YOUR FEET BACK TO LIFE WITH nailKALM[®]

Feet are the foundation for the well-being of your entire body
If your feet are healthy, you feel balanced and healthy too



Amycot 8% (69.6 mg/g *Arthrospira maxima* powder)

HEALTHY NAILS & HAPPY FEET



Clinically proven, developed and made in Australia with AMYCOT®, a unique, 100% organic, non-toxic active ingredient

Specifically formulated to penetrate the nail to get to the fungal problem – no need to file the nail

RRP
\$59.95

nailKALM[®]:
Clinically proven
to provide
effective results
in 90 days*



*Freeman AM and Freeman MG. Nailkalm (*Arthrospira maxima*) for the treatment of dermatophyte nail infections. *Australasian Journal of Dermatology* 2011;52 Suppl 1: 25

AMYCOT® An optimal fusion of science and nature.

AMYCOT® is a powerful bioactive discovered in a microorganism (biosource) which is a Cyanobacterium, one of the earliest forms of life on the planet. It has an in-built defense mechanism against fungi and other microbes with no toxicity to humans.

AMYCOT® is a 100% natural and biological-based active with no toxicity reported to humans.

The biosource is a food substance that has been used for hundreds of years as a very nutritious food item and is still used today as a dietary supplement worldwide. There are no reported cases of contraindications or side effects from its use as a food source.

- Using a patented technology that is registered across the globe, AMYCOT® is a unique scientific formulation derived from blue-green algae (Cyanobacterium)
- All KALM® products contain the unique anti-microbial extract AMYCOT®, specifically designed to deliver a highly efficacious and potent anti-fungal action
- KALM® with its pharmaceutical grade and clinically proven ingredient, holds an Australian Therapeutic Goods Administration (TGA) listing for the effective treatment of fungal infections
- AMYCOT®'s efficacy has been validated in multiple clinical trials
- All KALM® products are 100% Australian-made

PROOF OF EFFICACY

Efficacious anti-fungal activity

An in vitro efficacy trial was undertaken by an independent TGA licensed testing laboratory, ConMac Laboratory Services, Queensland in 2003 to compare the efficacy of AMYCOT® with established proprietary products containing various actives.

The trials confirmed that preparations containing AMYCOT show comparable efficacy with proprietary products and actives tested against test fungi and yeasts in vitro. It should be noted that in vitro results do not always translate to clinical results.

In addition to biochemical techniques, Scanning Electron Microscopy ("SEM") was employed to investigate the mode of action of the bioactive against common dermatophytes that cause fungal conditions in humans, using in vitro and in vivo models.

A lawn of *Trichoderma viride*, a vigorous predator of Ascomycete fungi that preys on other fungi, was grown then sprayed with AMYCOT®. SEM photos (Figures 1-3) taken before spraying and at 1-day and 5-day intervals following application demonstrate graphic evidence of the rapid and complete destruction of fungi by AMYCOT®.

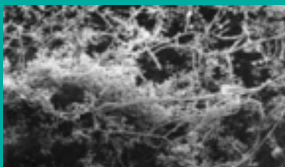


Figure 1: Photo showing normal growth morphology of *Trichoderma Viride*.



Figure 2: AMYCOT® digestion of *Trichoderma Viride* after 24 hours showing complete digestion of the fungal cell wall leading to the formation of inert protoplasts.



Figure 3: AMYCOT® digestion of *Trichoderma Viride* after 5 days showing that all that is left is a mass of dry cytoplasmic matter.

The discovery of AMYCOT®

The discovery of AMYCOT® was the result of a New Zealand scientist's long term interest and work with bioactives. These are compounds produced by living organisms that have an effect on other organisms. Penicillin, the original antibiotic, is an example of such a compound.

As part of this interest he sought to develop a protective mechanism for solid-state fermentation systems, as used in the mushroom and other industries. These are subject to contamination by invading microorganisms, particularly fungi.

AMYCOT® is an antimicrobial extract derived from the microorganism *Arthrospira maxima*. AMYCOT® has a number of activities including:

- Anti-fungal – fungicidal mode of action; directly kills fungi
- Anti-bacterial
- Anti-inflammatory
- Skin repair

The main aim of the research was to find a natural alternative to chemical treatments.

The scientist commenced his research with a small range of algae and Cyanobacteria, but soon stumbled across one species that proved very effective.

It was a ubiquitous group of Cyanobacteria that lives in fresh, brackish or saline water. However, not all strains were equally effective - only one seemed to exert a powerful effect on fungi.

Human trials

- **Investigator-initiated clinical trial (NY-based podiatrist, USA 2006)**
- Proven efficacy with 50 patient trial (including 15 patients with Type 2 diabetes) who had tinea and onychomycosis in a 90-day trial. The ages of the patients ranged from 21 to 72 years of age. The subjects were treated over a period of 90 days with 8% AMYCOT® lotion (equivalent to the current dose in nailKALM®). In all classes studied, an average of 80% of the fungal nails applied with 8% Amycot lotion demonstrated an improvement of one full class. An average of 15% demonstrated an improvement of two full classes. A remainder of 5% demonstrated either full recovery or remained unchanged.¹
- **Investigator-initiated clinical trials (Drs. MG & AM Freeman, Australia, 2011, Australian College of Dermatology)**
- Cured 7 out of 10 Onychomycosis subjects, with NailKALM® after 3 month treatment and an additional subject after 6 months.²
- **Phase II Clinical Trial (ACUNOVA India 2010/12)**
- A randomised, double-blind, placebo controlled, parallel, single centre, efficacy and safety study on 28 subjects with tinea (14) and onychomycosis (10) showing significant efficacy over placebo with overall mycological cure rate of 92% against combined tinea/onychomycosis infections (severe to very severe). Onychomycosis subjects (5/5) treated with nailKALM® had 100% mycological and clinical cure rates while none of the subjects receiving placebo were cured (0/5) after 3 months treatment and another 3 months follow-up.³

Patient results achieved in 90 days

Before topical treatment twice daily with AMYCOT® lotion (8% active w/w) the fungal infection covered two thirds of the nail. Four weeks after the start of the treatment, a scraping was taken and no live fungi were present.

Two months after treatment ceased, the damaged nail had grown out and had been replaced with a new, healthy nail.⁴



Before treatment

Two months after treatment

Footnote:

1. Data in file.
2. Freeman AM and Freeman MG. Nailkalm (*Arthrospira maxima*) for the treatment of dermatophyte nail infections. *Australasian Journal of Dermatology* 2011; 52 Suppl 1: 25.
3. Data in file. This trial has been registered with the clinical trial registry - India (CTRI; registration number: CTRI/2012/03/002522). Manuscript in preparation.
4. Data in file.

To order nailKALM® or to
receive further information

nailkalm.com



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