



# SFN 10

AN INNOVATIVE SOLUTION FOR NAIL  
FUNGUS

# NAIL FUNGAL INFECTION

- NAIL FUNGUS IS OFTEN PERCEIVED TO BE A NICHE PROBLEM, AFFECTING FEW PEOPLE
- QUITE THE OPPOSITE. IT IS THE MOST COMMON NAIL DISEASE AFFECTING 10% OF THE POPULATION WORLDWIDE (50% of people over 70 years)

# SYMPTOMS OF NAIL FUNGUS INFECTION

**DISCOLOURATION (yellow, dull)**

**B**

**RITTLE, CRUMBLY or THICKENED**

**Emitting a foul odor**

**Nail loss contact with its bed.  
In severe cases the nail may  
separate from the nail bed**



# IS FUNGAL NAIL INFECTION CONTAGIOUS ?

- FUNGAL NAIL INFECTION IS CONTAGIOUS !
- If it is left untreated , the fungal nail infection will spread to other healthy nails
  - Since fungus thrives in warm and humid conditions, public showers and swimming pool are the hotbed for transmission

# CAUSE OF NAIL FUNGUS INFECTION

- **DERMATOPHYTES** (*Candida* spp and *Tricophyton rubrum*)
- **YEAST**
- **MOULDS**

**NEED OF A WIDE  
SPECTRUM THERAPY**



# SFN10 FORMULA

Ingredients	% w/w	mg/bottle	Function
Ethyl Lactate	84,6 %	2791,8 ml	pH Regulator
Acetic acid	8%	264 ml	pH Regulator
Undecylenic acid	0,2 %	6,6 ml	Preservative
Methylisothiazolinone	0,2 %	6,6 ml	Preservative
Water	7 %	231 ml	Solvent
Total	100%	3300	

# SFN10: MODE OF ACTION

- 1) ETHYL LACTATE CREATE AN HOSTILE ENVIRONMENT FOR THE GROWTH OF MICROORGANISM BY KEEPING AN ACID pH INSIDE THE NAIL. *Trichophyton rubrum* and *Candida albicans* need a pH GREATER OF 4,5 -5,0 . ETHYL LACTATE MAINTAIN THE pH AT BELOW 3,0 BLOCKING THE DEVELOPING OF FUNGUS.
- 2) LOW pH POTENTIATE THE ACTION OF A STRONG MIXTURE OF ANTIFUNGAL COMPONENTS (ACETIC ACID, UNDECYLENIC ACID, METHYLCHLOROISOTHIAZOLINONE)



# WHY SFN10 IS SO EFFECTIVE?

- **ADHERE TO THE TOPICAL INFECTED AREA**
- **WIDE SPECTRUM THERAPY**
- **MINIMIZE THE RISK OF SECONDARY EFFECTS  
RELATED TO SISTEMIC EXPOSURE**
- **MINIMIZE THE RISK OF REISTANCE**



# 1.EFFICACY OF SOLUTION : TEST ON CANDIDA (STUDY 1904.15M00022 ON CANDIDA ALBICANS)

Concentration of product	Time of Contact	% of Reduction
99%	6 H	$\geq 99,9\%$
99%	24 H	$\geq 99,9\%$
99%	48 H	$\geq 99,9\%$

SFN10 at concentration normally used in clinical applications has BEEN TESTED IN CULTURES CANDIDA ALBICANS. The solution was still active reducing completely the growth of fungus after 48 h of contact from application

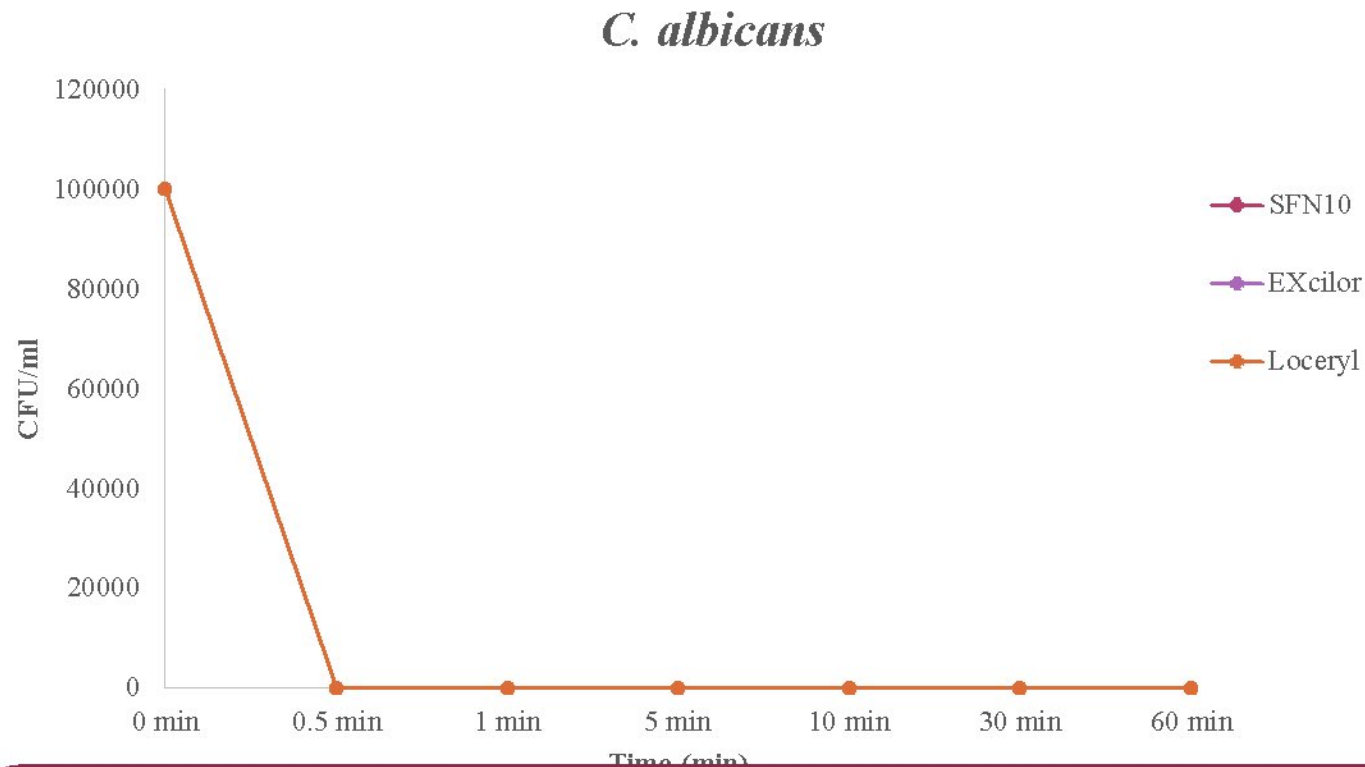
**SFN10 ON C. ALBICANS IS MORE EFFECTIVE THEN  
OTHER TOPICAL ANTIFUNGAL ON MARKET BEING  
ACTIVE AT LOWEST CONCENTRATION (UNIVERSITY OF  
MALAYA STUDY, KUALA LUMPUR)**

Antifungal	MIC <sup>a</sup> /MFC <sup>b</sup>
	candida albicans
SFN10	0.78 % / 3.125 %
EXCILOR	1.56 % / 6.25 %
LOCERYL	6.25 % / 25 %
EMTRIX	6.25 % / 12.5 %
NAILNER	6.25 % / 12.5 %

<sup>a</sup> MIC: Minimum inhibitory concentration.

<sup>b</sup> MFC: Minimum fungicidal concentration

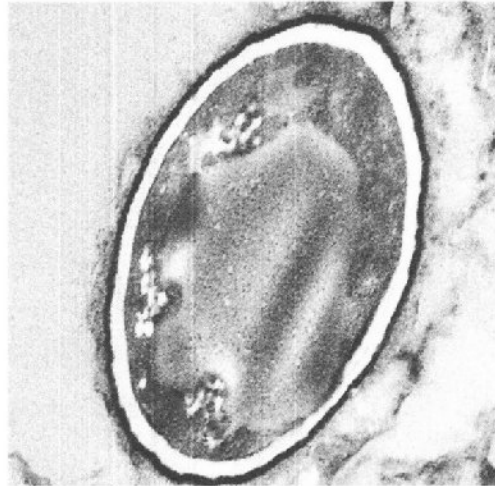
# SFN10 ON *C. ALBICANS* IS MORE ACTIVE THEN OTHER TOPICAL ANTIFUNGAL ON MARKET (UNIVERSITY OF MALAYA STUDY, KUALA LUMPUR)



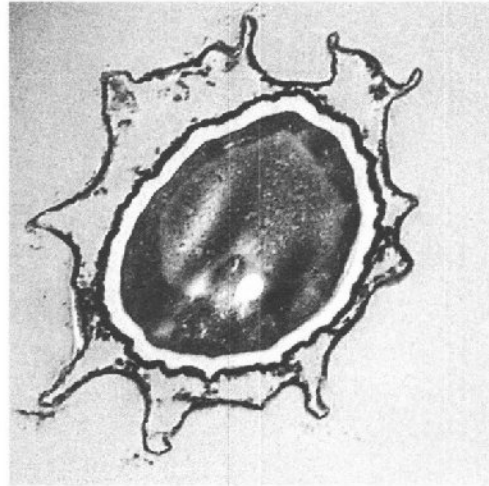
**Figure 1:** Killing kinetics of SFN10, EXCILOR and LOCERYL against *C. albicans*. All three antifungals revealed fast killing kinetics by killing all fungal cells within 1 min of incubation at room temperature.



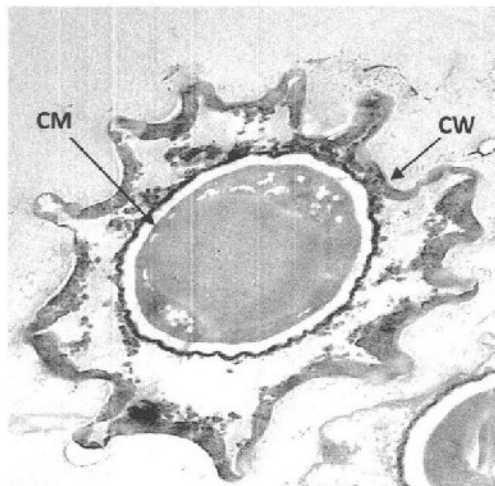
# TEM ON COMPARATIVE EFFECT OF SFN10 VS LOCERYL AND EXCILOR ON *C. ALBICANS* : THE DAMAGE OF SFN10 IS MORE EVIDENT (UNIVERSITY OF MALAYA STUDY, KUALA LUMPUR)



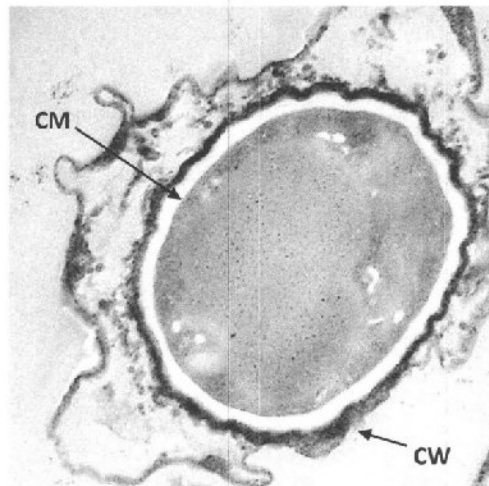
*C. albicans* without treatment



*C. albicans* treated with LOCERYL



*C. albicans* treated with SFN10



*C. albicans* treated EXCILOR

**SFN10 ON A. NIGER IS MORE EFFECTIVE THEN OTHER TOPICAL ANTIFUNGAL ON MARKET BEING ACTIVE AT LOWEST CONCENTRATION (UNIVERSITY OF MALAYA STUDY, KUALA LUMPUR)**

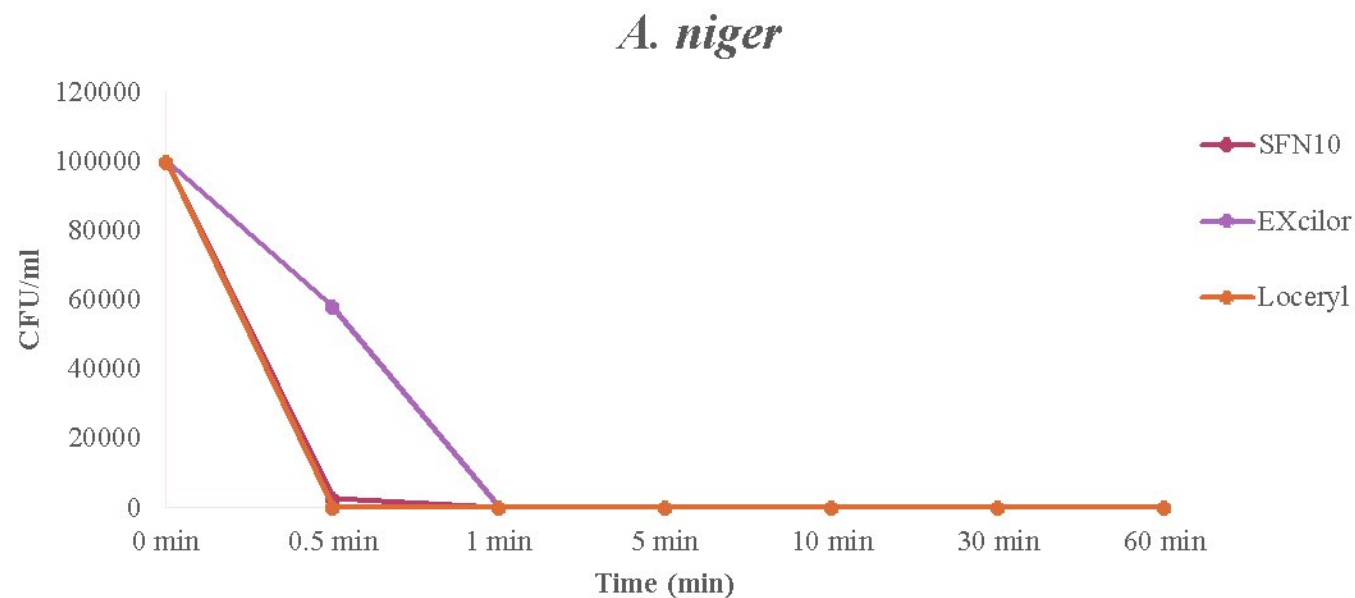
Antifungal	MIC <sup>a</sup> /MFC <sup>b</sup>
	Aspergillus niger
SFN10	1.56 % / 3.125 %
EXCILOR	1.56 % / 12.5 %
LOCERYL	12.5 % / 25 %
EMTRIX	12. 5 % / 25 %
NAILNER	3.125 % / 12.5 %

<sup>a</sup> MIC: Minimum inhibitory concentration.

<sup>b</sup> MFC: Minimum fungicidal concentration.

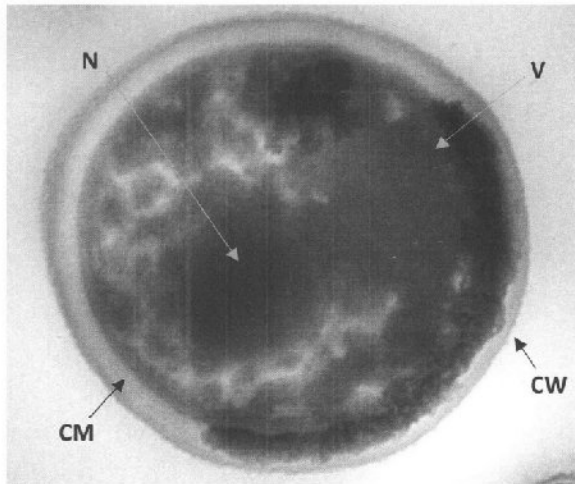


## SFN10 ON *A. NIGER* IS MORE ACTIVE THEN OTHER TOPICAL ANTIFUNGAL ON MARKET, (UNIVERSITY OF MALAYA STUDY. KUALA LUMPUR)

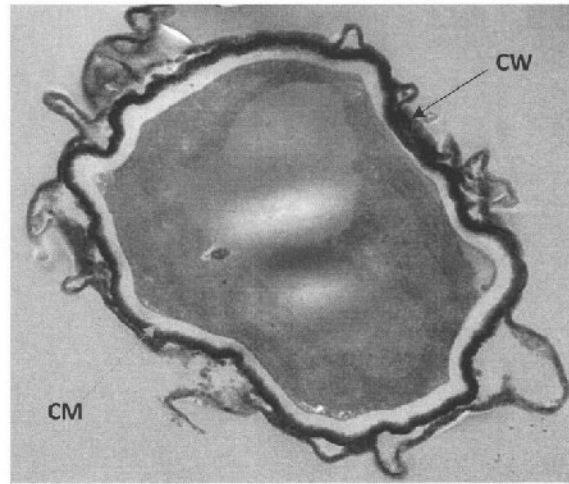


*A. niger*. All three antifungals revealed fast killing kinetics by killing all fungal cells within 1 min of incubation at room temperature.

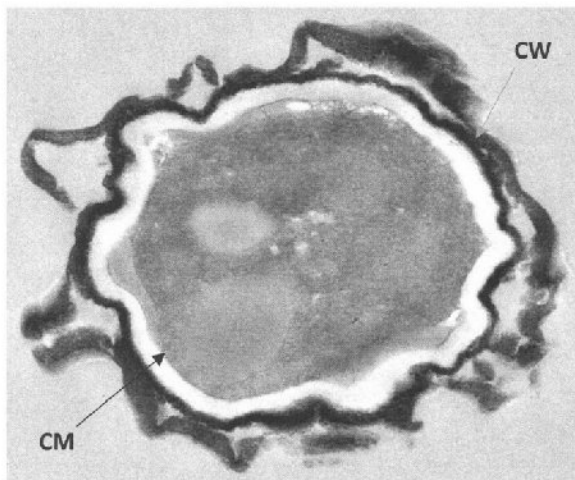
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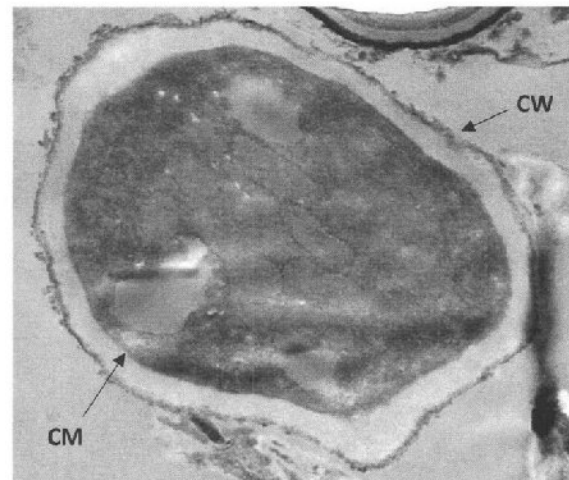
Untreated cells



Cells treated with SFN10



Cells treated with LOCERYL



Cells treated with EXCILOR

# 1.EFFICACY OF SOLUTION : TEST ON TRICOPHYTON RUBRUM (STUDY 1904.15M00026 ON TRICOPHYTUM RUBER (STUDY 1904.15M00022 ON CANDIDA ALBICANS)

Concentration of product	Time of Contact	% of Reduction
99%	6 H	$\geq 99,9\%$
99%	24 H	$\geq 99,9\%$
99%	48 H	$\geq 99,9\%$

SFN10 at concentration normally used in clinical applications has BEEN TESTED IN CULTURES of TRICOPHYTUM RUBER The solution was still active in reducing completely the growth of fungus after 48 h. from application



## SFN10 ON T. RUBRUM IS MORE EFFECTIVE THEN OTHER TOPICAL ANTIFUNGAL ON MARKET BEING ACTIVE AT LOWEST CONCENTRATION (UNIVERSITY OF MALAYA STUDY, KUALA LUMPUR)

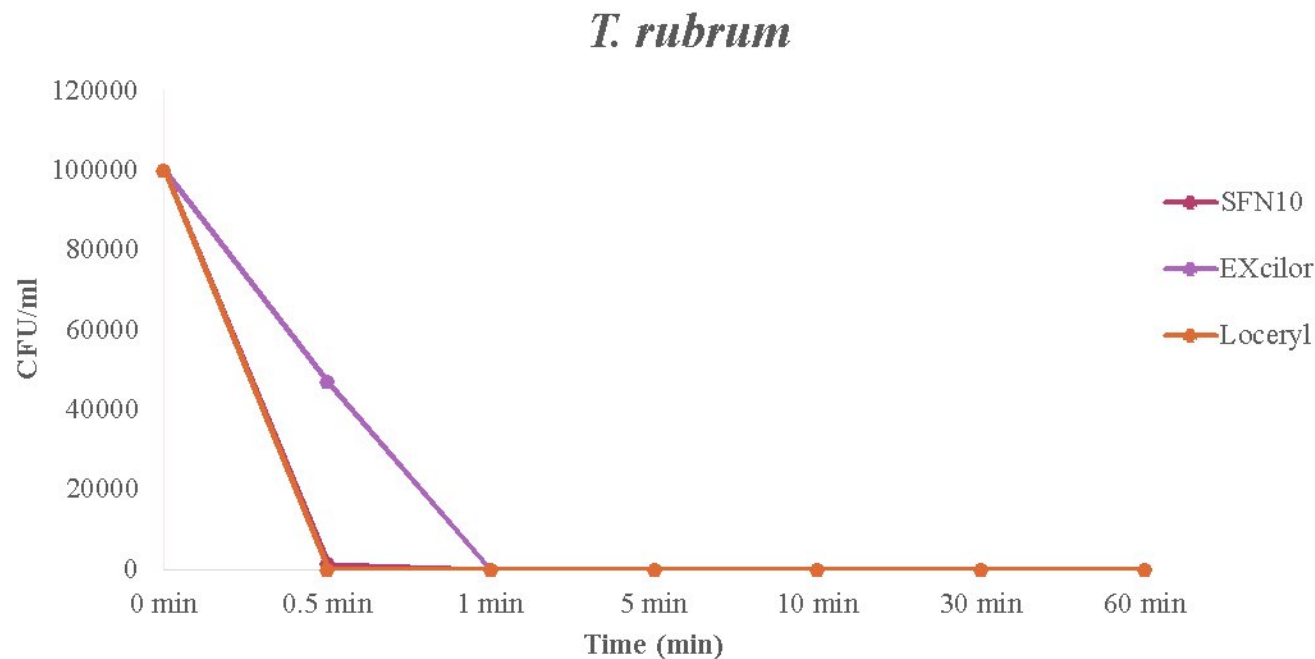
**Table 1:** Minimum inhibitory concentration of five antifungals against *Trichophyton rubrum*.

<sup>a</sup> MIC: Minimum inhibitory concentration.

<sup>b</sup> MFC: Minimum fungicidal concentration.

Antifungal	MIC <sup>a</sup> /MFC <sup>b</sup>
	<i>Trichophyton rubrum</i>
SFN10	0.78 % / 1.56 %
EXCILOR	1.56 % / 6.25 %
LOCERYL	12.5 % / 25 %
EMTRIX	6.25 % / 12. 5 %
NAILNER	3.125 % / 12.5 %

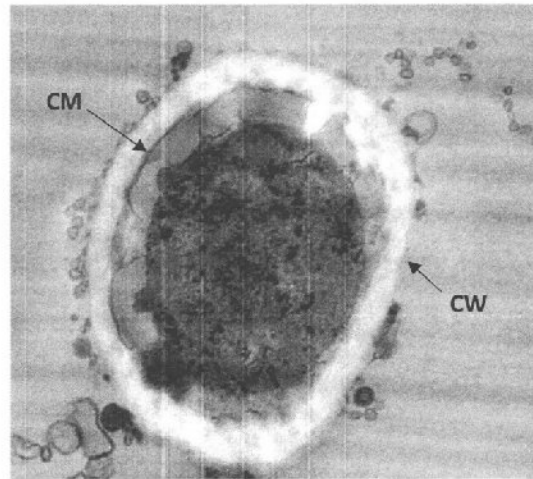
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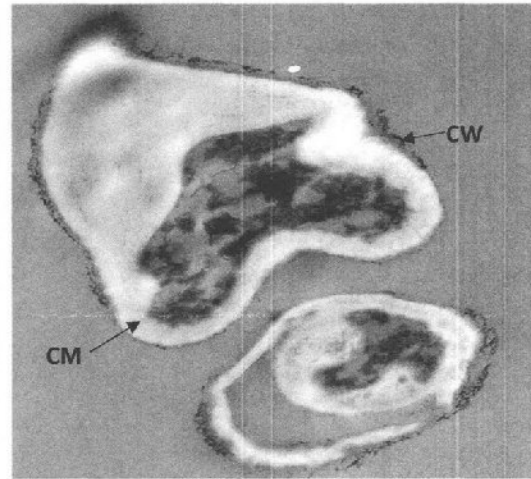
**Figure 1:** Killing kinetics of SFN10, EXCILOR and LOCERYL against *Trichophyton rubrum*. All three antifungals revealed fast killing kinetics by killing all fungal cells within 1 min of incubation at room temperature.



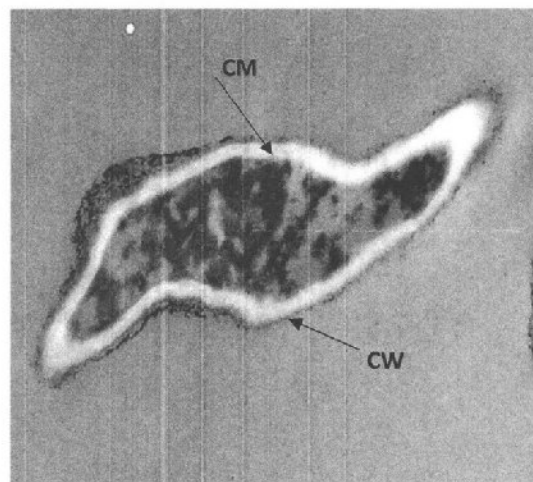
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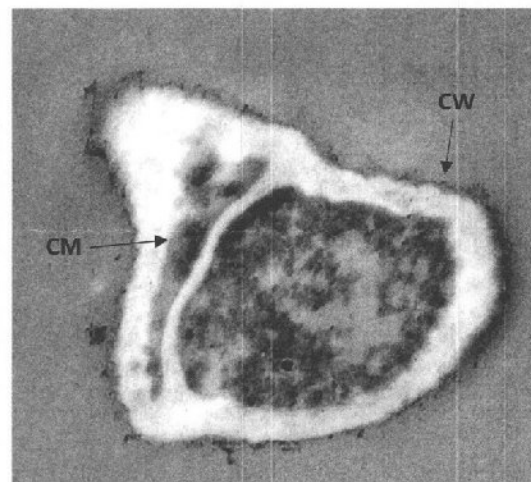
Untreated cells



Cells treated with SFN10



Cells treated with LOCERYL



Cells treated with EXCILOR

ANOTHER STUDY ON SFN10 HAS SHOW THAT AT CONCENTRATION OF 100%; 50% AND 20% HAS THE SAME ACTIVITY OF AMOROLFINE 5%, (LOCERYL) WHICH IS THE STANDARD REFERENCE TOPICAL TREATMENT FOR NAIL MYCOSIS

Fungus	Test Suspension UFC/ml	Exposure time	SFN10 % reduction	Amorolfine 5% (Loceryl)
T. rubrum	1,8 x10 <sup>5</sup> 5,26	6 H	≥99,9%	≥99,9%
		24 H	≥99,9%	≥99,9%
		48 H	≥99,9%	≥99,9%
C. albicans	2,5 x10 <sup>6</sup> 5,40	6 H	≥99,9%	≥99,9%
		24 H	≥99,9%	≥99,9%
		48 H	≥99,9%	≥99,9%

SFN10 HAS THE SAME EFFICACY BUT WHILE LOCERYL COST APROXIMATLY 29,90 €/MONTH, SFN10 HAS A COST OF 13 €/MONTH



## 2. SFN10 A NOVEL APPLICATOR TO PENETRATE INTO THE NAIL



## SFN10 NEW APPLICATOR

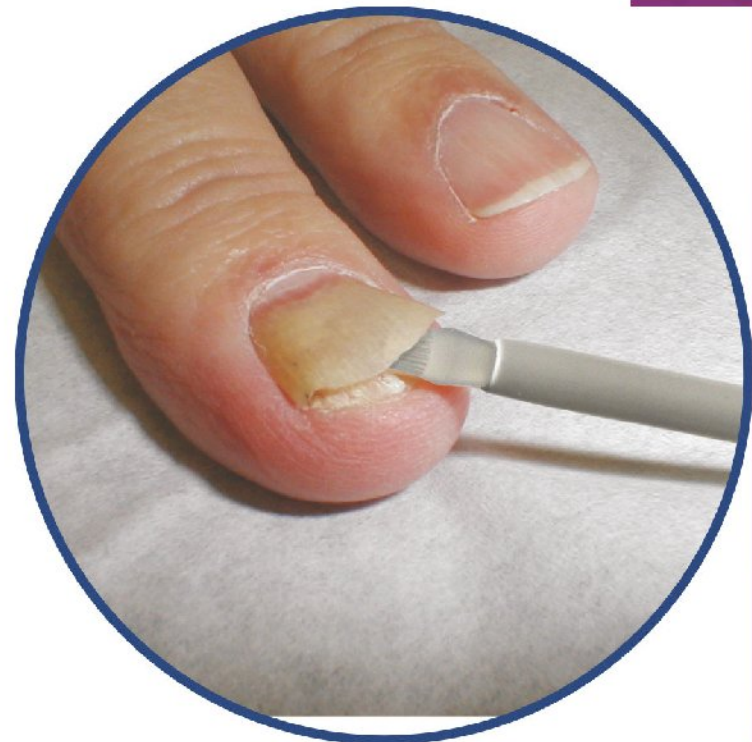
1. IT IS A DOSING MICROBRISTLE WHICH PERMIT THE APPLICATION OF A PRECISE AND COSTANT QUANTITY OF THE SOLUTION
2. THE QUANTITY (200 micr) HAS BEEN TESTED IN SCIENTIFIC TEST.
3. IT IS ABLE TO PENETRATE DEEPLY IN THE NAIL AT CONTACT WITH FUNGUS



## 2. SFN10 NEW APPLICATOR

**Fungus are deep inside the nail.**

**No other applicator in the market can penetrate as deeply into the nails directly at contact with fungus as SFN 10. THIS PERMIT A GREATER EFFICACY**





# SFN10 ON COMPETITORS

- **POINT 1 : MORE EFFECTIVE**
- **Point 2: LONGER ACTION**
- **POINT 3: NOVEL AND INNOVATIVE APPLICATOR**
- **POINT 4: LOWER PRICE**

# SFN10 VS COMPETITORS PRICE

SFN10 IS MORE  
EFFECTIVE AND ITS  
PRICE IS MORE  
COMPETITIVE  
COMPARED TO  
OTHER  
COMPETITORS



RETAILER PRICE OF COMPETITORS ARE BEETWEN 19.90 € TO  
29.90 €