

Patent N° WO 99/50897

BACOCALMINE™



Bacopa Monniera

Function :

Reduces irritation and inflammation
Protects skin from free radicals and attack from oxidizing agents

Properties:

Cutaneous anti-stress

Definition:

Extract of *Bacopa monniera* in a glycolic vehicle

Characteristics:

Bacocalmine is titrated in bacosides, precursors of saponosides

Particular signs:

Bacopa monniera is one of the primary anti-stress herbs of the Ayurvedic healing system

Origin:

India and Pakistan

INCI name:

Bacopa monniera extract
- Aqua (water) - PEG 8
- Hydroxyethylcellulose

Applications:

Protective day creams, sun care products, shower gels, body care, scalp care
Products with "Zen" concept

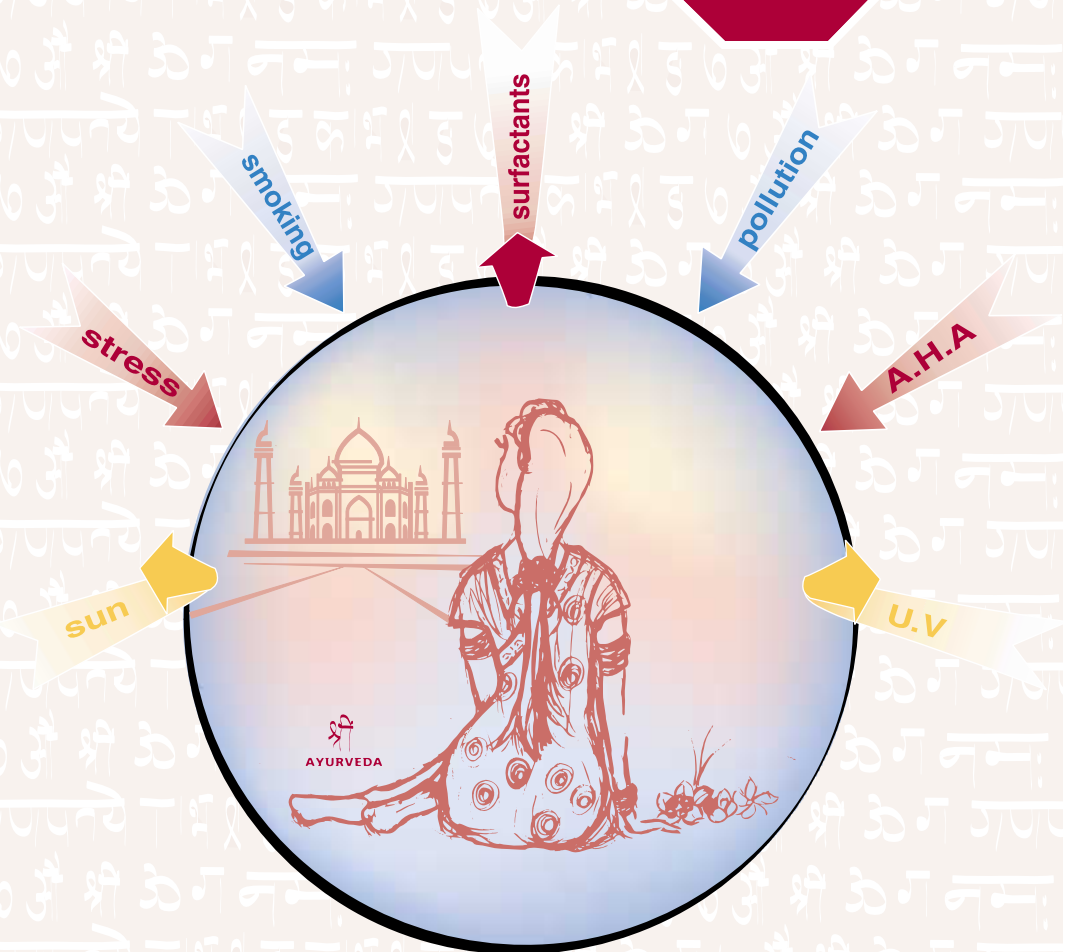
Formulation:

Stabilize with Xanthan Gum
Recommended pH < 6

Recommended use level:

3 to 5%

Daily aggressions.. **STOP**



60%
in decrease
cutaneous sensitivity



In vitro tests

Free radical scavenger effect

Test with DPPH*

Cell protection

Inhibition of lipidic peroxidation

Ex vivo test

Protection against oxidation

Test with Singlet Oxygen

In vivo tests

10 volunteer women (between 21 and 48 years old)

● Anti-irritant properties

Twice daily applications on half-face during 15 days of a gel containing 3% Bacocalmine™ versus placebo.

After treatment, application of a hydroalcoholic solution containing 7.5% α -hydroxy-acids.

60% decrease in skin sensitivity versus placebo

● Anti-inflammatory properties

Twice daily applications on the forearm during 15 days of a gel containing 3% Bacocalmine™ versus placebo.

After treatment, application of an occlusive patch containing 5% SDS during 4 hours.

24% decrease in intensity of inflammatory reaction versus placebo

In vitro

● **80%** with 1% Bacocalmine™

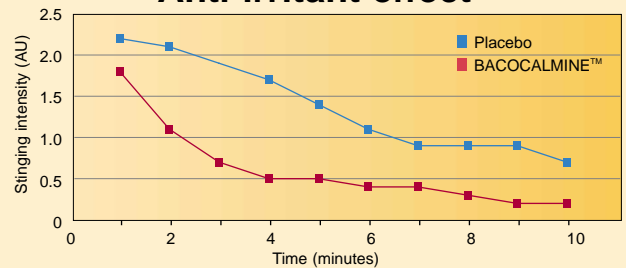
● **50%** with 0.5% Bacocalmine™

Ex vivo

● **20%** with 3% Bacocalmine™

In vivo

Anti-irritant effect



Anti-inflammatory effect

Placebo site



Bacocalmine site



Formulation

Part	Ingredient	%
Part A	Nipastat (Mixed Parabens)	0.20
	Butylene Glycol	6.00
	Water deionised	qsp 100
Part B	Potassium sorbate	0.10
	Sodium hydroxide 30%	0.80
	Xanthan Gum	0.60
Part C	Crodamol IPM (Isopropyl Myristate, Croda)	7.00
	Crodafos MCA (Cetyl Phosphate, Croda)	2.00
	Volpo S2 (Ceteareth 2, Croda)	1.00
	Cithrol GMS AS (Glyceryl Stearate and PEG 100 Stearate, Croda)	1.50
	DC 345 (Cyclomethicone, Dow Corning)	2.00

Protective day cream with Bacocalmine™

Tested formula ref: SED0008089A

DC 200 (Dimethicone, Dow Corning)	4.00
Stearic acid	2.50
Part E	%
BACOCALMINE™ (Sederma)	3.00
Part F	%
Fragrance	0.10

Protocol

Homogenize Part A, then heat to 70°C. Heat Part B to 60°C. Add Part C to Part B and let swell for 15 minutes. Add Part A to Part (B + C), then heat to 75°C. Heat Part D to 75°C. Add Part D to Part (A + B + C) with stirring. At 35°C, add Part E and Part F.

Non-guarantee

This formulation has been subjected to limited stability tests and has been shown to perform well. However formulators adopting this approach should ensure to their own satisfaction long term stability and functionality. It is good practice to conduct safety tests on all final formulations prior to marketing. Suggested uses should not be taken as an inducement to infringe any existing patents.