



NeoPlanta[®] Withania

THE FUSION OF ANCIENT WISDOM
WITH ADVANCED TECHNOLOGY

FROM THE ROOTS OF NATURAL BEAUTY TO HIGH-TECH BIO-TECH INNOVATION

Today we meet a widely-spread trust in traditional cosmetics but also the desire to use modern technology for a better, healthier lifestyle.

That's why we use latest technology to transform the origin of mystical recovery into maximum efficacy.



ADORNED BY MANY NAMES

Withania Somnifera, the queen of herbs, has as many names as facets. It is also known as Ashwagandha, Indian Ginseng or Indian Winter Cherry.

TRADITIONAL AYURVEDIC MEDICINE

In the traditional Ayurvedic knowledge, the plant is used to strengthen the immune system, calm mental processes, support vitality and reduce stress by adapting to the needs of the body.

A POWERFUL, MYSTICAL HERB

Growing in harsh conditions, in hot, dry climates as well as high up in the Himalayas, Withania Somnifera proves strength. It concentrates its healing properties in the roots.

Over

35

constituents are found in the roots of the plants

Since more than

3000

years Withania Somnifera is used extensively in Ayurvedic treatments

Growing

5.500

feet high in the Himalayas, Withania Somnifera proves a lot of strength



GET INSPIRED

The future of renewed beauty lies in ancient secrets from times long past. Withania Somnifera unfolds its effects for thousands of years.

Looking for sustainability, we came across traditional knowledge. With our optimized *in vitro* cultivation of NeoPlanta® Withania, we add even more benefits to the gift of nature. For our product and our environment.

- No pesticides
- Season and weather-independent harvesting
- Enormous savings in water consumption compared to cultivation on the fields
- No social exploitation and depletion of the local environment



Adaptogenic herb
Sense the magic of energizing and calming just when you need it



Ancient soothing
Get soothed by natural relaxing properties



Protective effect
Let anti-oxidant bioactives unfold its defense power

NEOPLANTA® WITHANIA

THE PRODUCT

A biotechnologically optimized extract of traditional Ayurvedic herb Withania Somnifera

INCI: Withania Somnifera Root Extract, Glycerin

PRODUCT FORM

Brownish viscous liquid, preservative-free

RECOMMENDED USE LEVEL

1-2.5%

COMPLIANCE

CFDA

CERTIFICATION

Cosmos-conform, vegan, gluten-free

URBAN SKIN REBALANCING SERUM MM 374/18

PHASE	INGREDIENTS	W/W %
A	TEGO® CARE LTP (Sorbitan laurate; Polyglyceryl-4 Laurate; Dilauryl Citrate)	2.00
	TEGOSOFT® G20 (Octyldodecanol)	4.00
	TEGOSOFT® OS (Ethylhexyl Stearate)	4.00
	TEGOSOFT® CT (Caprylic/Capric Triglyceride)	2.00
	TEGO® CARBOMER 140 (Carbomer)	0.15
B	Keltrol CG-SFT (Xanthan Gum)	0.10
	Glycerin	3.00
	Water	78.90
C	dermosoft® OMP (Methylpropanediol; Caprylyl Glycol, Phenylpropanol)	3.50
	Perfume	0.10
D	Sodium Hydroxide (10%)	0.70
	TEGO® TURMERONE (Curcuma longa (Turmeric) root extract)	0.50
	NeoPlanta® Withania (Withania somnifera root extract, Glycerin)	1.00

PROCESSING

1. Mix ingredients of phase A
2. Combine phases A and B without stirring, i.e. mix phase A with phase B and heat up to 70°C
3. Homogenize, add phases C and D stir well

THE PRECIOUS DIFFERENCE

For NeoPlanta® Withania, the extract is obtained exclusively from the roots of the plant. Combined with our special biotech process, it conjurs a unique molecular composition.



Set-up
Cell free assay



Processing
Neutralization of colored DPPH radical solution



Measurements
Photometrical measurements of absorption

NEOPLANTA® WITHANIA SHOWS HIGH POWER TO SHIELD SKIN FROM OXIDATIVE STRESS

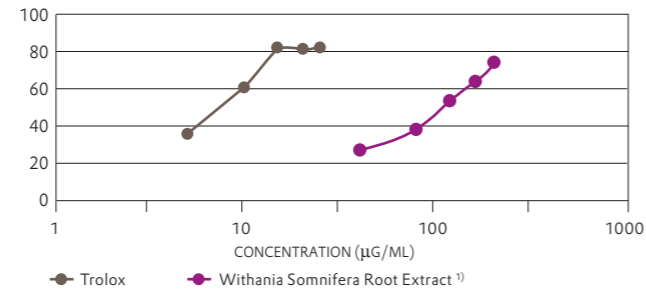
POWER TO FIGHT OXIDATIVE STRESS

DPPH radical solution is deeply violet colored. Neutralization of the radical causes color shift to yellow (reaction can be followed photometrically).

Optical absorption at 520 nm measured for different test concentrations, calculation of inhibition.

EC50 Trolox: 10 µg/ml
EC50 Withania: 115 µg/ml

RADICAL SCAVENGING EFFICACY - DPPH ASSAY [INHIBITION (%)]



DPPH: 2,2-diphenyl-1-picrylhydrazyl, stable free-radical
Trolox: positive control, water-soluble analog of vitamin E



Set-up
Normal human epidermal keratinocytes



Treatment
Treatment with test substance for 24h, UV-irradiation



Measurements
Fluorescence-based assay for ROS detection

NEOPLANTA® WITHANIA DECREASES UV-INDUCED ROS PRODUCTION

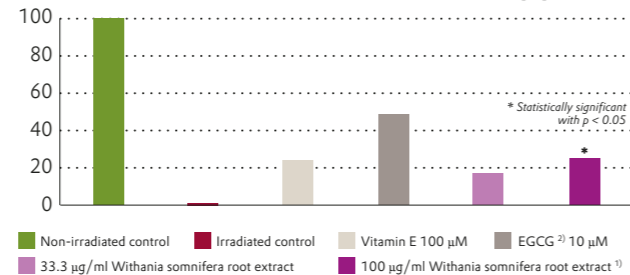
PROTECTIVE EFFECT AGAINST ROS

Normal human epidermal keratinocytes.

Treatment with test substance for 24h, UV-irradiation [100 mJ/cm² UVB (+0.6 J/cm² UVA)].

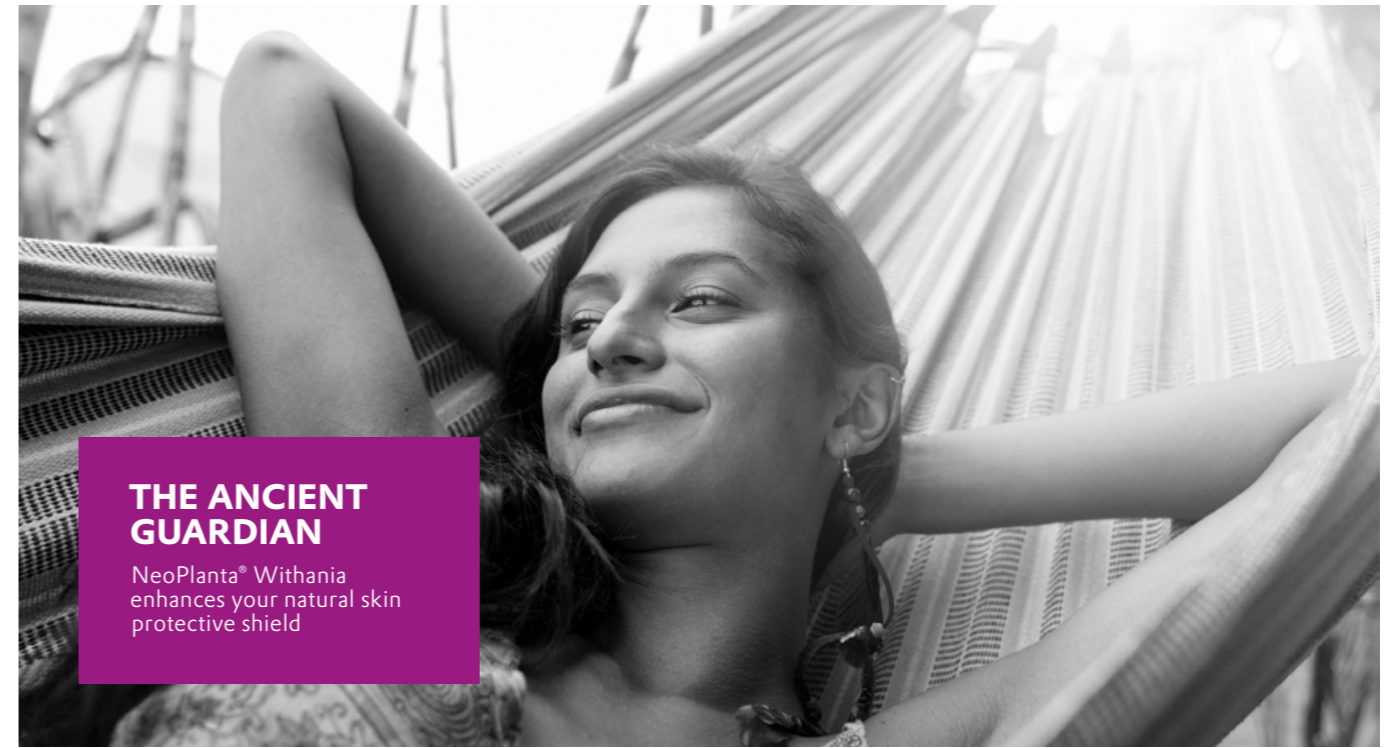
Fluorescence-based assay for ROS detection.

PROTECTION FROM UV-INDUCED REACTIVE OXYGEN SPECIES [%]



¹⁾ Epigallocatechin gallate

* Statistically significant with p < 0.05



THE ANCIENT GUARDIAN

NeoPlanta® Withania enhances your natural skin protective shield



Set-up
Normal human epidermal keratinocytes



Treatment
Treatment with test substance for 24h, UV-irradiation



Measurements
Alkaline comet assay and microscopic observation

NEOPLANTA® WITHANIA PROTECTS AGAINST UV-INDUCED DNA DAMAGE

PROTECTIVE EFFECT AGAINST DNA-DAMAGE

Normal human epidermal keratinocytes.

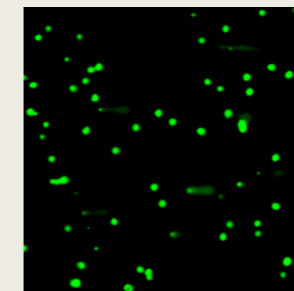
Treatment with test substance for 24h, UV-irradiation [250 mJ/cm² UVB (+1.7 J/cm² UVA)].

Alkaline comet assay and microscopic observation.

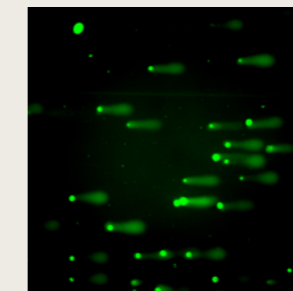
PROTECTION FROM UV-INDUCED DNA-DAMAGE [%]



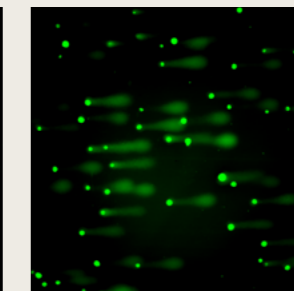
NON IRRADIATED CONTROL



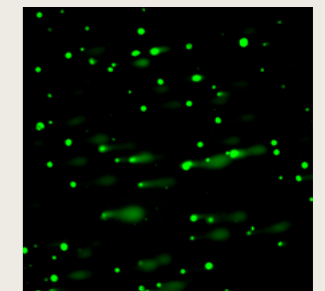
IRRADIATED CONTROL



33,3 µg/ml PURE EXTRACT



100 µg/ml PURE EXTRACT



NEOPLANTA® WITHANIA SUPPORTS THE INNER POWER OF YOUR SKIN

PROTECTIVE EFFECT

Against modern lifestyle
influenced stressfactors

**SECURED
PRODUCTION**

Controlled growth
conditions

HIGHEST PURITY

Free of pesticides,
herbicides, heavy metals

**GLOBALLY
COMPLIANT**

**A NATURAL BEAUTY
BOOSTER FOR YOUR
SKIN'S VITALITY**

**COSMOS ORGANIC
CERTIFIED**

NATURALLY GOOD

Vegan, gluten free, preservative free

**NATURAL SKIN
BEAUTY**



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