

PHYTO OV PLUS / A /

biogründl

RELIEF CREAM SOOTHE AND REDUCE REDNESS

INCI Name: VITIS VINIFERA SEED OIL, OLEA EUROPAEA FRUIT OIL, OLEA EUROPAEA LEAF EXTRACT, VITIS VINIFERA SEED EXTRACT, TOCOPHEROL.

Appearance: clear to slightly opalescent liquid.



OVERVIEW:

BIOGRÜNDL, S.L., after a long series of research, introduces PHYTO OV PLUS, an active that offers very remarkable properties regarding protective and anti-aging actions, as well as, skin treatment power. Said characteristics are superior to that shown by squalanes from the market, both vegetable or animal origin.

PHYTO OV PLUS is a new conception product, a derivative from two typical Mediterranean vegetables: olive and vine. It contains the following active substances:

A) GRAPE-SEED OILY EXTRACT

It is obtained by extraction with grape-seed oil. The resulting extract contains the following ingredients:

1) GRAPE-SEED OIL, is the ester of the glycerin of the following fatty acids:

Saturated fatty acids

Palmitic acid 9

Stearic acid 3

Unsaturated fatty acids

Oleic Acid 22

Linoleic Acid 65

Linolenic acid 1

2) POLYPHENOLS

Polyphenols are phytochemical components which are found in high concentration in wine, grapes and wide variety of plants. Natural polyphenols can be from simple molecules to highly polymerized compounds.

The differences in the chemical structure of polyphenols give origin to variations in the biological properties. The main characteristic of polyphenols is the anti-oxidant power. They act synergistically with other skin anti-oxidants, such as A, C, E vitamins and beta-carotene, which are capable of offer an anti-oxidant efficient system.

Grape-seed polyphenols, also, have the skill to bind to collagen and elastin, promoting cellular health, elasticity and flexibility of the skin.

3) OLIGOMERIC PROANTHOCYANIDINES (OPC)

They are bioflavonoids compounds which act as a powerful free radical neutralizer: twenty times more efficient than C vitamin and fifty times more than E vitamin. They have polymerization degree between 2 and 7. The generic structure of the anthocyanidine monomer is as follows.

4) TRANS-RESVERATROL

This is a phytoestrogen which appears in the seeds of the grape in trans-3, 5, 4'-trihydroxystilbene.

Physiological benefits of this phytoestrogen are very extensive. Its anti-oxidant effect provides some degree of protection against oxidative stress. On the other hand, trans-resveratrol is largely responsible for protective effects on blood vessels (P vitamin effect).

B) OLIVE LEAF OILY EXTRACT

It is obtained by extraction with virgin olive oil. The resulting extract contains the following substances:

1) VIRGIN OLIVE OIL

It is obtained from the fruits of the *Olea Europaea* tree. It is the glyceric ester of the following fatty acids:

Saturated fatty acids

Palmitic acid 12.0

Stearic Acid 3.0

Arachidic acid 0.4

Unsaturated fatty acids

Palmitoleic acid 1.0

Oleic acid 74.0

Linoleic Acid 9.6

2) OLEUROPEIN

It is a bitter substance contained in the fruits and leaves from the olive tree (Figure 4.). It is a vasodilator and hypotensive agent. It increases the metabolism of the skin and has a noticeable anti-aging effect.

C) PHYTOSTEROLS

They are the unsaponifiable part of the active. They are sitosterol, campesterol and stigmasterol. They have protective and regenerative actions on the skin.

D) VITAMINS

Especially E vitamin. It has anti-oxidant properties.

PROPERTIES

The most important properties of PHYTO OV PLUS by BIOGRÜNDL, S.L. are:

- Decongestant, anti-inflammatory and vulnerary properties.
- Prevention and control of sun damage on the skin. Anti-erythema and vasoprotective properties.
- Lipid peroxides and free-radical neutralizer.
- Anti-aging. It inhibits hyaluronidase, elastase and collagenase, which can degrade the connective tissue structures of the skin.
- Hair protection.

USE AND DOSAGE

The most important uses of PHYTO OV PLUS by BIOGRÜNDL, S.L. are in the following products:

- Anti-aging lotions and creams.
- Anti-wrinkle oils and emulsions.
- Mixed with other anti-oxidants (A, C, E vitamins, beta-carotene, selenium, zinc) that help to reinforce its action.
- Decongestive, anti-inflammatory and anti-edema treatments.
- Vasoprotective and anti-redness products.
- Care for sensitive, dry and toneless skin.
- Prevention and control of actinic and physiological aging, added to sunscreen creams and oils.
- Makeup products and lip protectors.
- Preparations for hair care.

DERMATOLOGY INNOCUOUSNESS

It was performed by the patch test (Patch test) on 10 volunteers. To this purpose, 15% PHYTO OV PLUS by BIOGRÜNDL, S.L., was added to an O/W emulsion; 0,5g. of this emulsion was poured over the patch and attached on the forearm. It is thus maintained for 24, 48 and 72 hours, after which, the given reaction was evaluated, according to the following table of values:

1. No erythema
2. Slight erythema
3. Well defined erythema
4. Severe erythema

The result was absence of erythema on the 10 volunteers.

On the recommended concentrations, the product is skin innocuous.

EFFECTIVENESS TESTS

Assay: Double blind spot trial and subsequent cosmetic evaluation.

Assayed parameters: Anti-wrinkle action.

N (volunteers): 30 (20 ♀ and 10 ♂).

Age (volunteers): 41 - 67 years old.

Left side part to be treated: Placebo, 30 volunteers, suitable cosmetic base.

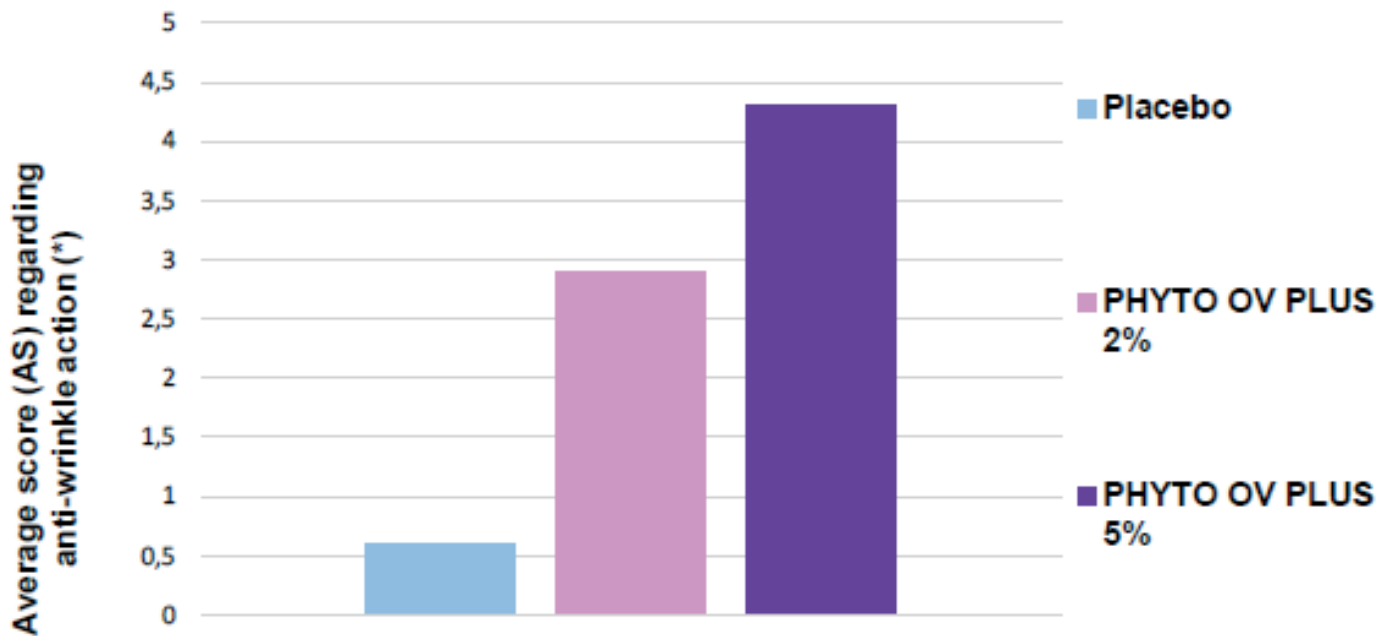
Right side part to be treated: PHYTO OV PLUS 2%, 15 volunteers, suitable cosmetic base.

Right side part to be treated: PHYTO OV PLUS 5%, 15 volunteers, suitable cosmetic base.

Assayed parameters:

| | Assay | N (volunteers) | Age (volunteers) | Placebo | PHYTO OV PLUS 2% | PHYTO OV PLUS 5% | Assay performed (Days) | Results measured (Days) |
|---------------------|---|---------------------|------------------|----------------|-----------------------------------|------------------------------------|------------------------|-------------------------|
| Anti-wrinkle action | Double blind spot trial and subsequent cosmetic evaluation. | N = 30 20 ♀ 10 ♂ | 41 - 67 | Left side part | Right side part 15 volunteers. | Right side part. 15 volunteers. | D = 30 | D' = 1 |

SKIN CONDITION EVALUATION AFTER 30 DAYS



*) Anti-wrinkle action was determined by augmented vision of depth and length of furrows, wrinkles and expression lines from volunteers.

Total number of days in which the assay was performed (treatment was applied):

D = 30 days (every day during the effectiveness test).

Total number of days in which the results were measured:

D' = 1 day (effectiveness test last day).

Average score:

Worst result: Zero limit value is assigned.

Best result: Five limit value is assigned.

Score is assigned to obtained results between the two limit values.

Average computation for each obtained results group is done:

Placebo, 2% PHYTO OV PLUS by BIOGRÜNDL, S.L., 5% PHYTO OV PLUS by BIOGRÜNDL, S.L..

Results meaning:

AS rank between 0 - 1: No significant changes.

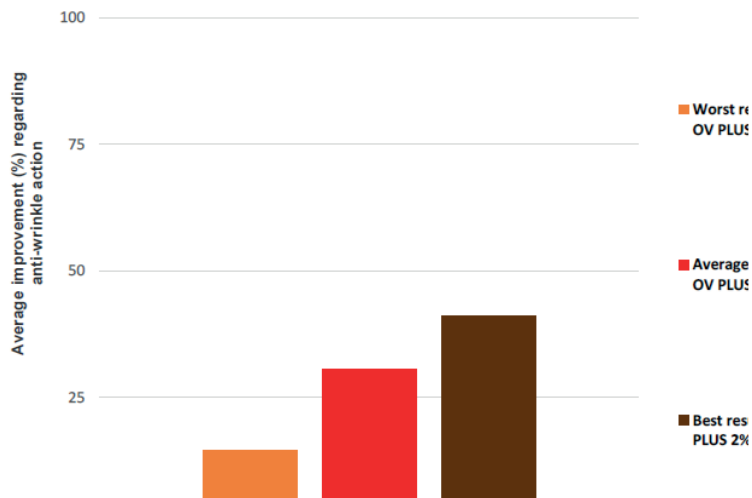
AS rank between 1 - 2: Slight improvement regarding placebo.

AS rank between 2 - 3: Appreciable improvement regarding placebo.

AS rank between 3 - 4: Great improvement regarding placebo.

AS rank between 4 - 5: Excellent cosmetic result.

PHYTO OV PLUS 2%



Results:

Worst result PHYTO OV PLUS 2%: **14,5%**

Average result PHYTO OV PLUS 2%: **30,5%**

Best result PHYTO OV PLUS 2%: **41%**

Results meaning:

AI rank between < 20%: No significant changes.

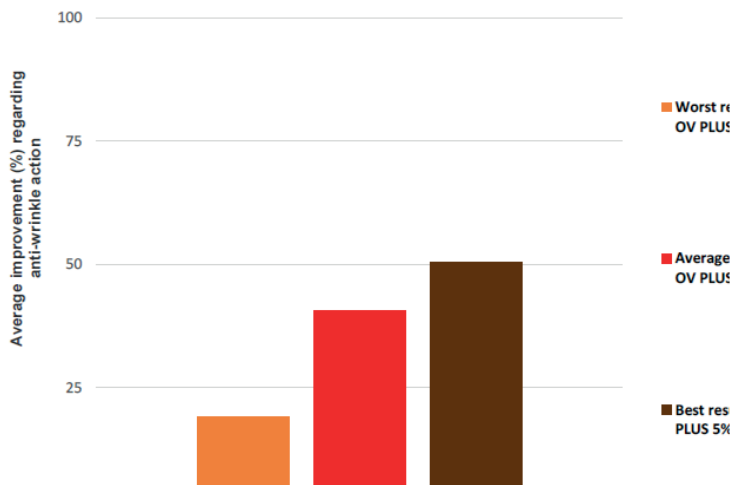
AI rank between 21 – 40%: Slight improvement regarding placebo.

AI rank between 41 – 60%: Appreciable improvement regarding placebo.

AI rank between 61 – 80%: Great improvement regarding placebo.

AI rank between > 81%: Excellent cosmetic result

PHYTO OV PLUS 5%



Results:

Worst result PHYTO OV PLUS 5%: **19%**

Average result PHYTO OV PLUS 5%: **40,5%**

Best result PHYTO OV PLUS 5%: **50,5%**

Results meaning:

AI rank between < 20%: No significant changes.

AI rank between 21 - 40%: Slight improvement regarding placebo.

AI rank between 41 - 60%: Appreciable improvement regarding placebo.

AI rank between 61 - 80%: Great improvement regarding placebo.

AI rank between > 81%: Excellent cosmetic result.