

AC Royal Jelly Extract

Moisturizing + Conditioning + Anti-Aging



Tomorrow's Vision... *Today!*[®]

AC Royal Jelly Extract



Technical Information:

Product Code: 20478

INCI Name: Butylene Glycol & 10-Hydroxydecanoic Acid & Sebacic Acid & 1,10-Decanediol

INCI Status: Conforms

Suggested Use Level: 1.0 – 10.0%

Suggested Applications: Moisturizing, Conditioning, Anti-Aging

Royal Jelly



- Secretion of worker bees' salivary glands
- Serves as food for all bee larvae during first 3 days of life
 - Drones: male bees
 - Workers: sterile female bees
 - Queens: fertile female bees
- Queen bees continue to be fed the jelly beyond the third day
 - How "royal" jelly got its name
- Royal jelly is packed with amino acids, fatty acids, vitamins, and minerals allowing queen bees to grow larger and live longer
- Acts as an antibiotic, immunizing bees to illness- increasing longevity

Royal Jelly

- Vitamin B and C content led humans to use royal jelly as an immune system and energy supplement



Vitamins	Mg/100g	Vitamins	Mg/100g	Vitamins	Mg/100g
Vitamin A	1.10	Vitamin B1	2.06	Vitamin B9	0.40
Vitamin C	2.00	Vitamin B2	2.77	Vitamin B12	0.15
Vitamin D	0.20	Vitamin B5	52.8	Inositol	42.0
Vitamin E	5.00	Vitamin B6	11.9	Niacin	0.40

Table 1. Typical vitamin composition of Royal Jelly Extracts.

- Vitamin A, B, & C clear free radicals from the skin
- B Vitamins are essential for energy metabolism within cells and work to prevent oil build up

Royal Jelly

When Used on Skin:



- Promotes cell and tissue repair while enhancing collagen production^{1,2}
- Vitamins and minerals help to keep the skin hydrated and moisturized
 - Essential to fighting wrinkles and appearance of aged skin
- Contains royalactin, a powerful antibacterial protein, which can help to repair damaged skin, clear up infections, and keep skin looking healthy²
- **AC Royal Jelly Extract** can be beneficial in rejuvenating our skin and keeping its healthy glow

References:

- 1) Koya-Miyata S, Okamoto I, Ushio S, Iwaki K, Ikeda M, Kurimoto M. Bioscience, Biotechnology, Biochemistry. 2004 Apr;68(4):767-73.
- 2) Park HM, Hwang E, Lee KG, Han SM, Cho Y, Kim SY. Journal of Medicinal Food. 2011 Sep;14(9):899-906.

AC Royal Jelly Extract

Benefits:

- ✓ Antioxidant
- ✓ Anti-Aging
- ✓ Conditions
- ✓ Moisturizes
- ✓ Energizes



AC Royal Jelly Extract

Moisturization Assay



Average Moisturization

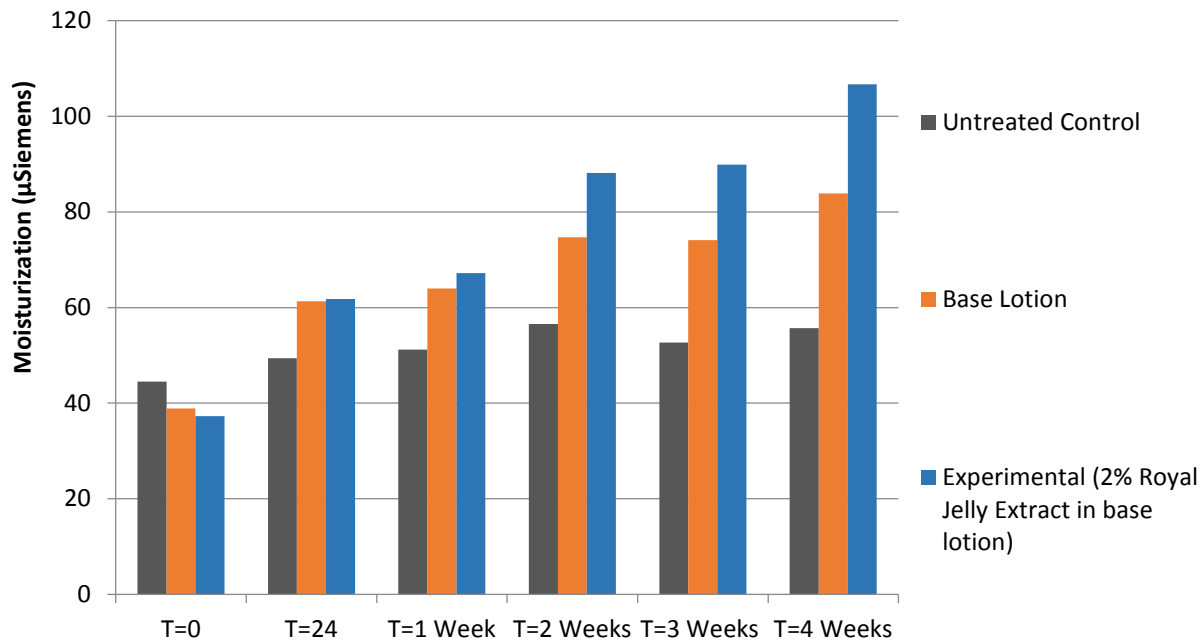


Figure 1. Moisturization Results.

Protocol

- Equipment: DermaLab Skin Combo
- 10 volunteers M/F
- 2 mg of each test material on their volar forearms
- Concentration: 2.0%
- Moisture levels were improved by 24.08% after 24 hours and by 50.69% after 4 weeks when compared to the untreated control

AC Royal Jelly Extract

Moisturization Assay



Comparative Moisturization

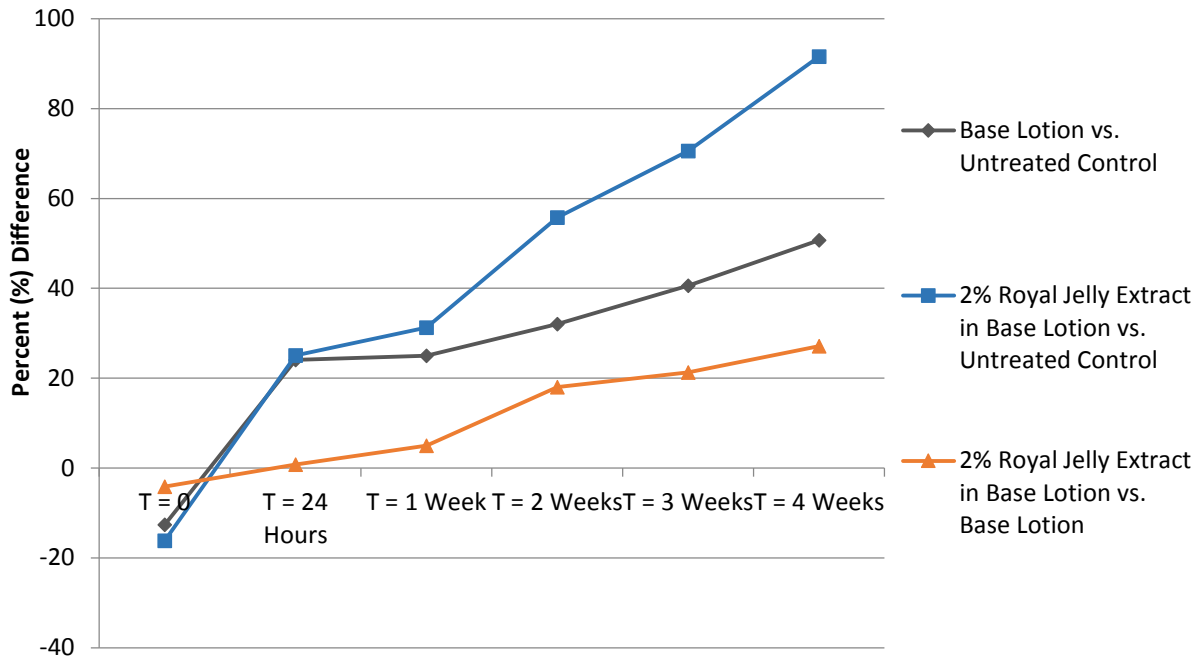


Figure 2. Comparative Moisturization Results.

Protocol

- Equipment: DermaLab Skin Combo
- 10 volunteers M/F
- 2 mg of each test material on their volar forearms
- Concentration: 2.0%
- Results indicate that **AC Royal Jelly Extract** is capable of increasing moisturization when compared to both the untreated control as well as the base lotion

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TEWL Assay



Comparative Transepidermal Water Loss

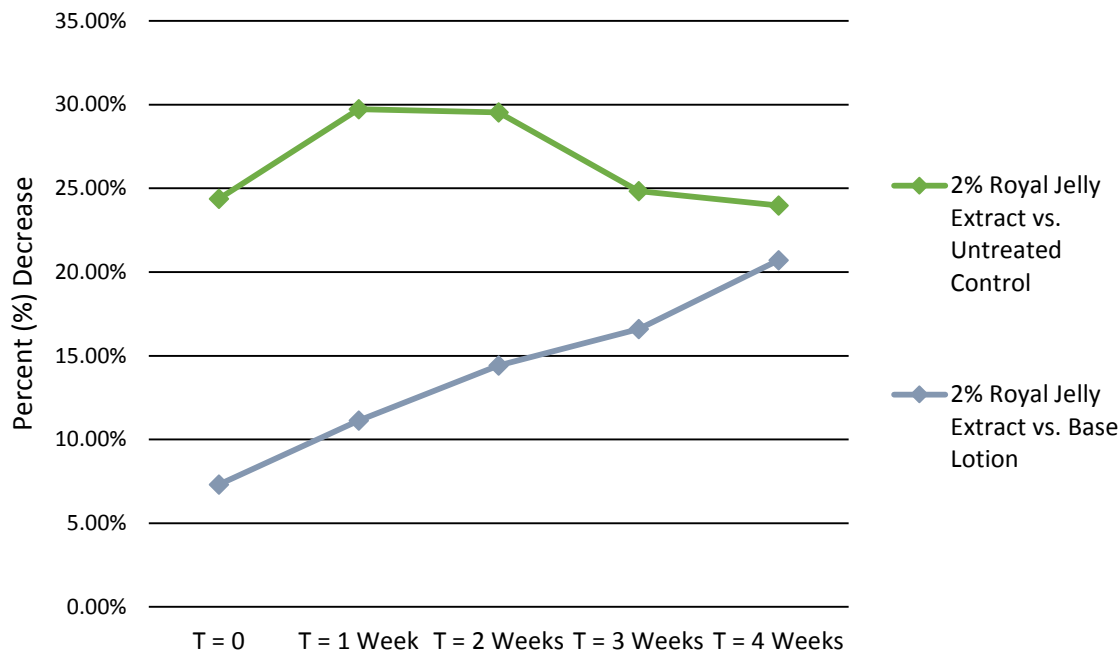


Figure 3. Improvements in barrier function following application of the test materials after a period of 4 weeks.

Protocol

- Equipment: DermaLab Skin Combo
- 10 volunteers M/F
- 5 mg of each test material on their volar forearms
- Concentration: 2.0%
- Results indicate continuous improvements in the barrier of the skin throughout the 4-week test period
- **AC Royal Jelly Extract** decreased TEWL 11% more effectively than the base lotion alone

AC Royal Jelly Extract

High Resolution Ultrasound Skin Imaging



Comparative Analysis of Skin Density

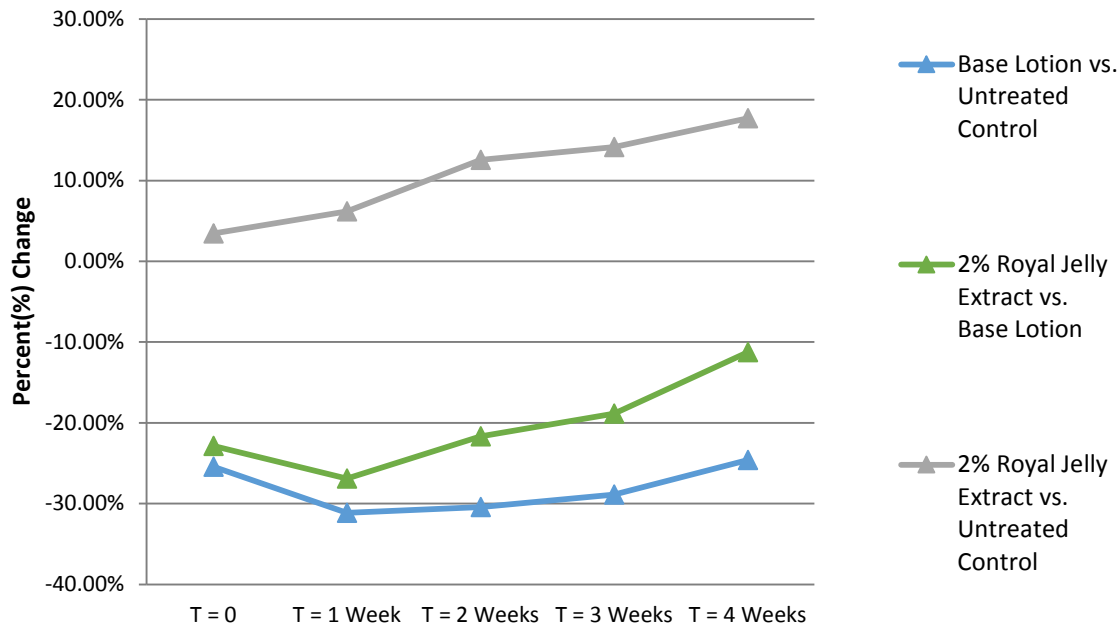


Figure 4. Percent difference in skin density recordings between test materials.

Protocol

- Equipment: DermaLab Skin Combo
- 10 volunteers M/F
- Determine the skin density of the subject's volar forearms
- Concentration: 2.0%
- Skin density was improved by 6.16% after 1 week and by 17.69% after 4 weeks when compared to the untreated control

AC Royal Jelly Extract

ORAC Assay

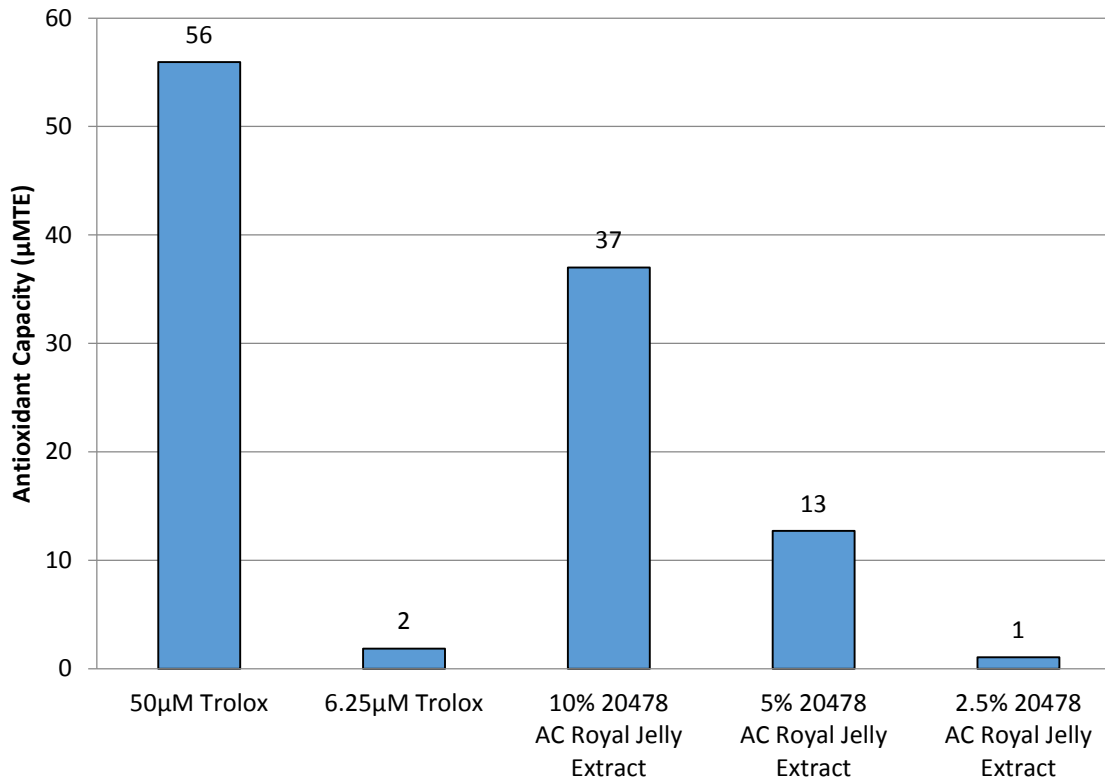


Figure 5. Antioxidant capacities.



Protocol

- Assay was conducted to assess the antioxidant capacity
- **AC Royal Jelly Extract** and Trolox[®] (positive control) were prepared in 75mM potassium phosphate buffer
- Materials were prepared at three different concentrations/dilutions
- Concentration: 2.5%, 5.0%, 10.0%
- **AC Royal Jelly Extract** exhibited antioxidant activity comparable to 50µM Trolox[®]

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ACTIVE CONCEPTS LLC



THANK YOU

Please visit and register to use our new website at

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When you register, you will have access to the complete product documentation available.