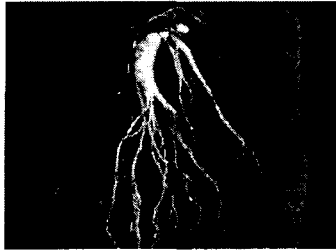


Study on the Korean wild ginseng(SANSAM) in cosmetics

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Korean wild ginseng(SANSAM)

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*Immunological effect, Anti-itching effect,
Improvement of the skin condition*

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ABSTRACT

Korean Ginseng is a medicinal herb which grows naturally in Korea, an ancient country situated in north-eastern Asia. Its medical use was already well known to herb doctors in this region about five thousand years ago since the effectiveness of Korean ginseng has been recognized through practical use for a long time. Korean Ginseng has always been regarded as a divine cure.

The name "Ginseng" can be found in various medicinal books, many of which were written as early as B.C. 100. In the records of many Chinese medical books, dating from the inception of publishing, it was noted that Korean Ginseng was of the highest level of quality.

Korean Ginseng originally grew in the mountains of Korea. However, this wild Korean Ginseng (is called SANSAM) could not meet the ever-increasing demands, and from the 16th century, it has been cultivated on farms for mass processing and supplying in Korea (is called INSAM).

It was already recognized in Korea a long time ago (B.C. 57 - A.D. 668) that Korean Ginseng possessed the qualities of panacea, tonic and rejuvenator, and had other medicinal properties as well. The effectiveness of Korean Ginseng is widely recognized among south-eastern Asians as well as Chinese.

As its effect has been proved scientifically, Korean Ginseng is now becoming the ginseng for all human beings in the world.

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Korean ginseng is differently called according to processing method. Dried thing is Insam(white ginseng), boiled or steamed is Hongsam(red ginseng).

長腦參(long headed ginseng) is artificially grown in the mountain no in field for a long time. So the body is thin and some long, but ingredients are concentrated.

Korean wild ginseng(SANSAM) is rare in these days but we developed cosmetic ingredient.

The scientific name of Korean Ginseng is Panax Ginseng. It has acknowledge as a natural mysterious cure among the notheastern peoples, because of its broad medicinal application.

The origin of the word " Panax" derived from panacea, a Greek word meaning cure-all. According to the classification method of herb medicines in the Chinese medicinal book, "God-Farmer Materia Medica(A.D. 483-496) korean Ginseng was described as the superlative drug : panacea, tonic and rejuvenator.

We studied skin immunological effect, collagen synthesis, cell growth and whitening effect of SANSAM extract. IN cosmetics,, SANSAM extract had skin fibroblast cell growth effect, recover damaged skin in the sun and protect fine wrinkle. Also, In hair product,, inhibits hairless, white hair.

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Collagen synthesis of SANSAM extract

Sample conc.(%)	Collagen synthesis(%)	
	ginseng ext	SANSAM ext.
1×10^{-7}	5	6
1×10^{-6}	7	19
1×10^{-5}	10	25
1×10^{-4}	14	33
1×10^{-3}	18	39
1×10^{-2}	22	44
1×10^{-1}	25	49

Collagen DPM

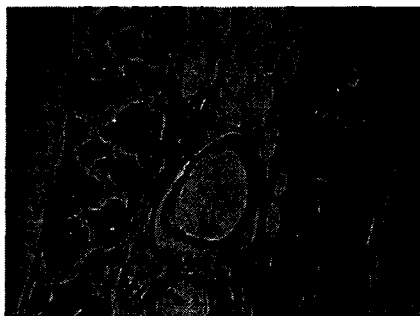
$$RCB = \frac{\text{Collagen DPM}}{(\text{Total collagen DPM} - \text{Collagen DPM}) \times 5.4 + \text{Collagen DPM}} \times 100$$

RCB : relative collagen biosynthesis, DPM : decay per minute

After samples were treated in human fibroblast incubation for 3 days, measured the result by scintillation count. SANSAM ext. was above twice as ginseng ext.

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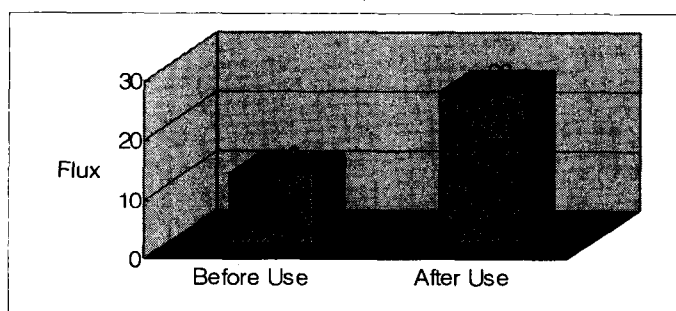
Dermis change of SANSAM extract



After SANSAM ext. was applied on the back of mouse three times a day for 30 days. the change of dermis was checked with microscope(aeosin stain). Blue is dermis. Left is 6 weeks mouse with loose tissue but right is well arranged dermis after 35-day treating with SANSAM ext.

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Blood circulation Up-effect



After SANSAM ext. was treated on the face for 5 minutes, measured blood flow with blood flowmeter(mode, moorLAB).

Comparing with before use, was increased above 130%.

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Melanin deminish effect in Human keratinocyte



Before treatment

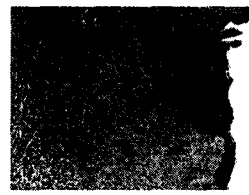
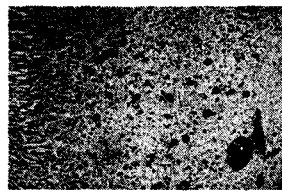
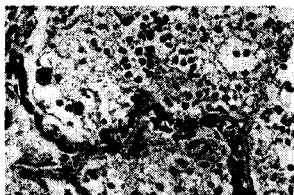


After treatment

Melanin pigmentation on the face makes countenance darken and untidy. In this study, After human keratinocytes incubating for 3 days, checked the melanin change. SANSAM ext. was very effective to diminish melanin.

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Wound healing effect of SANSAM ext.



Ti ssue of mouse back in 2 hours after wounding(left)

Vasodilation (appearance blood flow up with redness and fever around inflammation) appears. Fibrin liquid immerses into alveolar spaces.

Ti ssue of mouse back in 7 days after wounding (middle and right)

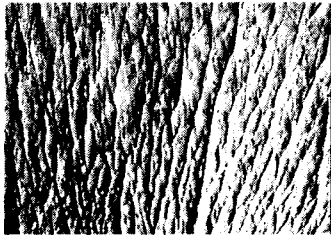
Fibroblast and formation of microfilament are activated during wound healing. This forms granular tissue.

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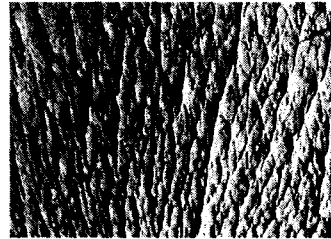
Evaluation of Wrinkle decrease after using cream with SANSAM ext.

Before use(Placebo)

7 weeks use



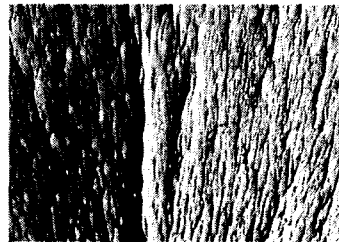
20 ages



Wrinkle decreases above 35%



30 ages



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DISSCUSION

1. SANSAM is korean wild ginseng.
2. SANSAM extract has a unique and mysterious efficacy.
3. SANSAM extract has skin immune effect.
4. SANSAM extract synthesizes collagen in dermis.
5. SANSAM extract has wound healing effect.
6. SANSAM extract stimulates blood flow in skin
7. Cosmetic products with SANSAM extract improve skin conditions, melanin deminish, wrinkle decrease.

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