

Ecklonia Cava

Ecklonia Cava are edible brown algae. They are harvested mainly in the deep oceans around the islands of Jeju Province, South Korea. These algae have a very high polyphenol content and have been tested for their health properties. Since the 11th century, people in Korea and Japan have been convinced that they are responsible for the beauty and growth of hair.



DHT-Inhibitor Ecklonia Cava

Hair is formed from hair follicles embedded in the innermost layer of the skin (dermis). Hair follicles consist of dermal papillary cells. Hair growth is closely linked to the status of dermal papillary cells. Ecklonia Cava triggers several signaling pathways involved in the multiplication of dermal papillary cells, which ultimately leads to hair growth (Kim et al., 2013).

Ecklonia Cava's working mechanisms for hair growth

Ecklonia Cava, more specifically the active component dioxin nodehydroeckol, improves hair shaft elongation, the growth of dermal papilla cells and the release of insulin-like growth factor 1 (IGF-1) (Bak et al., 2013).

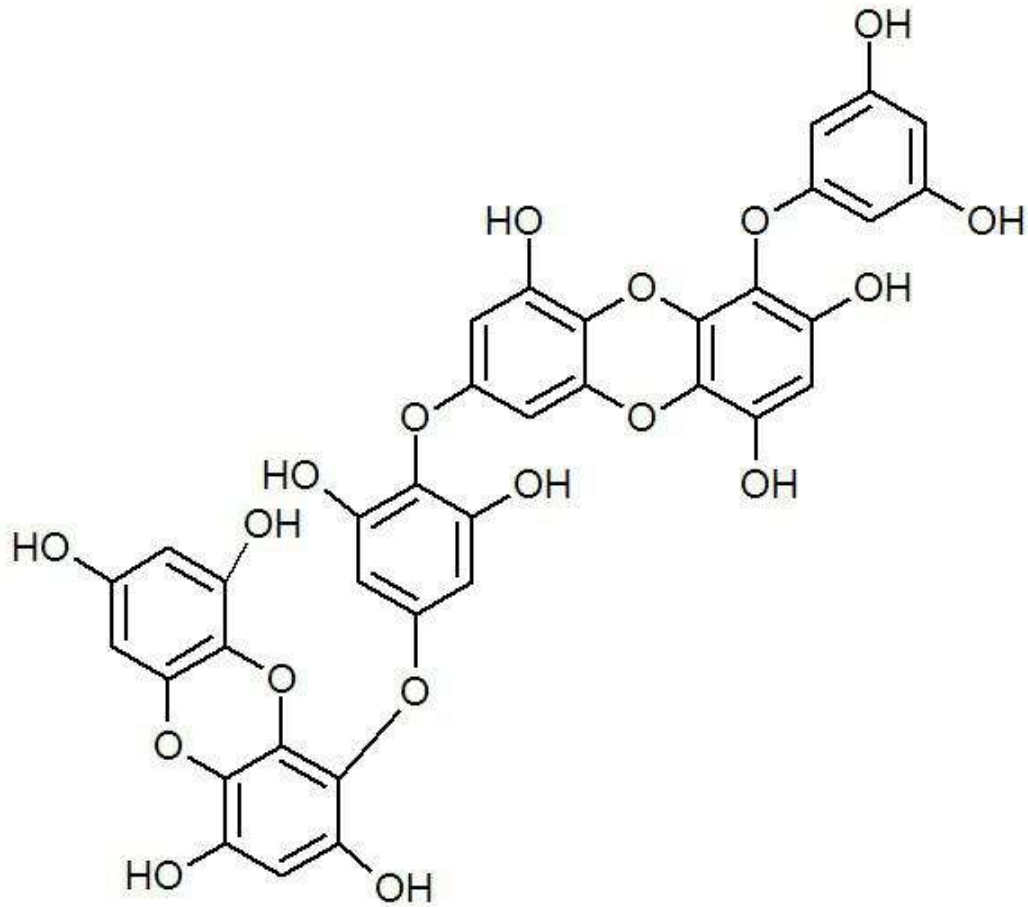
Ecklonia Cava also reduces 5-Alpha reductase activity and therefore reduces the amount of DHT-Inhibitor in the body. Dieckol is the most active component in Ecklonia Cava to reduce 5-Alpha reductase (Kang et al., 2012).

Ecklonia Cava compared to known drugs

Ecklonia Cava was examined for two known drugs for the treatment of hair loss. These products inhibit the activity of 5-Alpha-reductase and promote the growth of dermal papillary cells. Studies have shown that Ecklonia Cava performs both functions.

Compared to Minoxidil, Ecklonia Cava shows that after 37 days of treatment, the size, depth and length of the hair follicles increase. While the hair follicles of the control group were still in the telogen (resting) phase, the groups treated with Ecklonia Cava and Minoxidil are already in the anagen (growing) phase.

Compared to hair follicle lengthening by treatment with Minoxidil and Ecklonia Cava, 1 µg/ml of Ecklonia Cava showed a mean increase in hair follicle length by 12.4% compared to the control group. This is more than the results with 1 µg / ml Minoxidil (+ 10.9%) (Kang et al., 2012).



Conclusion

The referenced studies show that Ecklonia Cava and its active components stimulate hair growth through the growth of dermal papillary cells, inhibition of 5-Alpha reductase activity, hair shaft elongation and the release of IGF-1. These results suggest that Ecklonia Cava Extract is a potential therapeutic compound for treating hair loss and could be used in topical form as a natural alternative to hair growth stimulating drugs.