

Comparative study on beauty effect of fresh and dried *Taraxacum mongolicum*

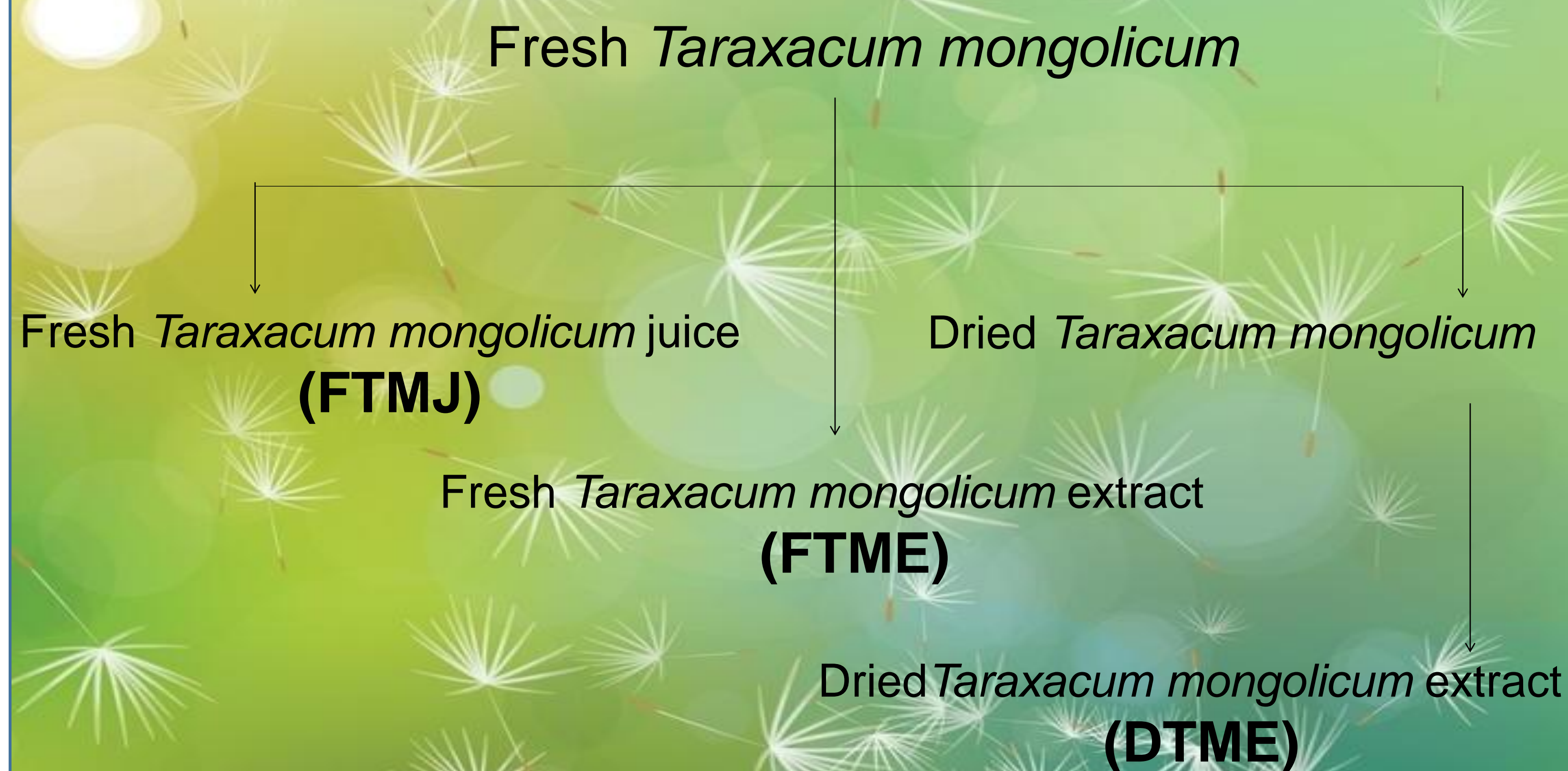
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Introduction:

In this paper, the beauty effects of fresh and dried *Taraxacum mongolicum* were researched, such as moisturizing, skin barrier repair, anti-inflammatory, etc., to provide theoretical basis for the rational development and utilization of fresh and dried *Taraxacum mongolicum* in cosmetics.

Materials & Methods:

Part 1 Preparation of extracts



Part 2 Efficacy test

Moisturizing : Moisture absorption test

Anti-inflammatory :Anti-inflammatory test based on macrophages

Skin barrier repair : Gene changes in HaCaT cells detected by PCR

Part 3 Results analysis

T-test was used for statistical analysis among all groups, the p -values ($p < 0.05$) (“*” or “.”) was represented significant difference, $p < 0.01$ (“**” or “##” or “..”) was represented very significant difference, both of them were considered statistically significant.

Results & Discussion:

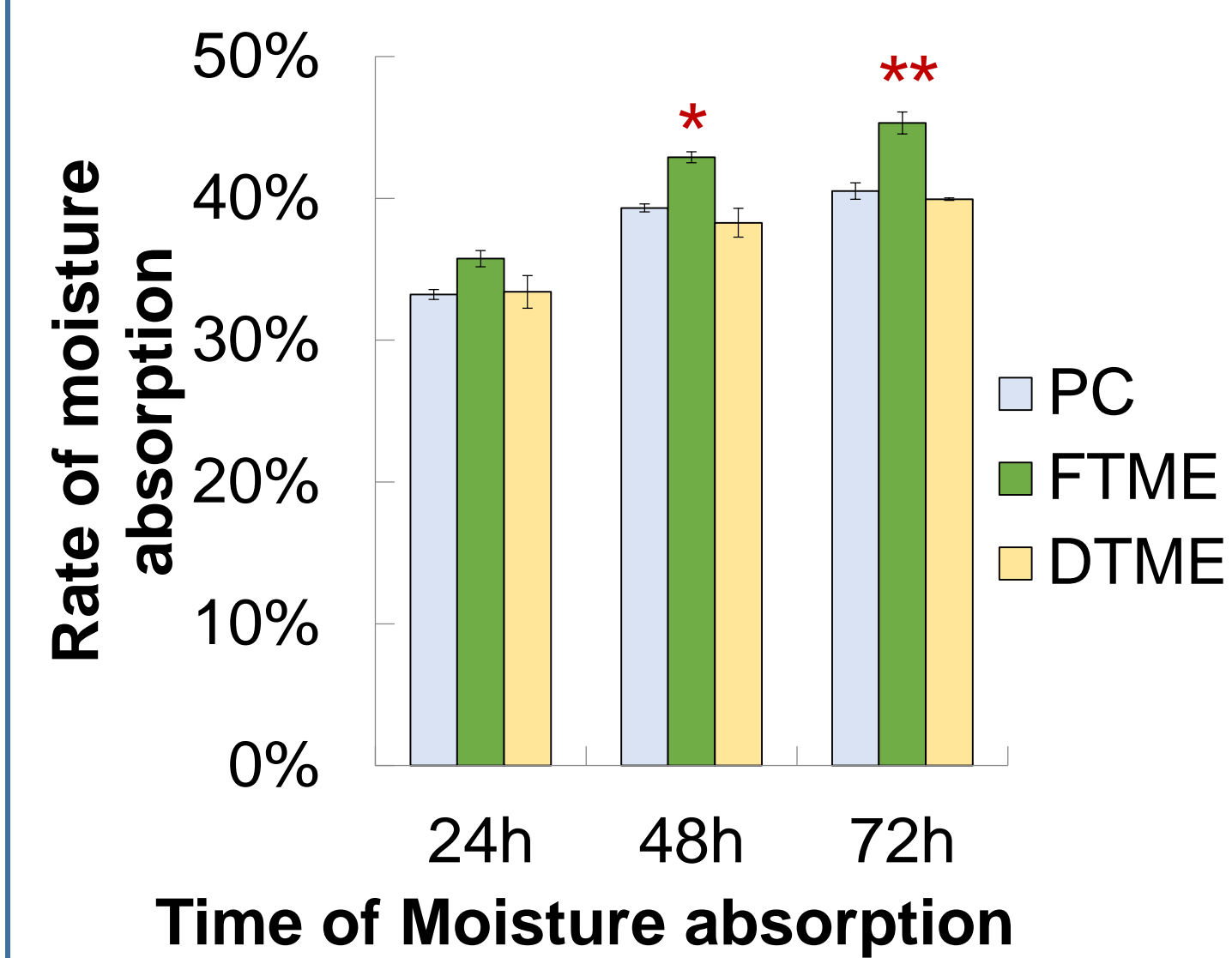


Figure 1. Result of moisture absorption
“*” ,Compared with DTME

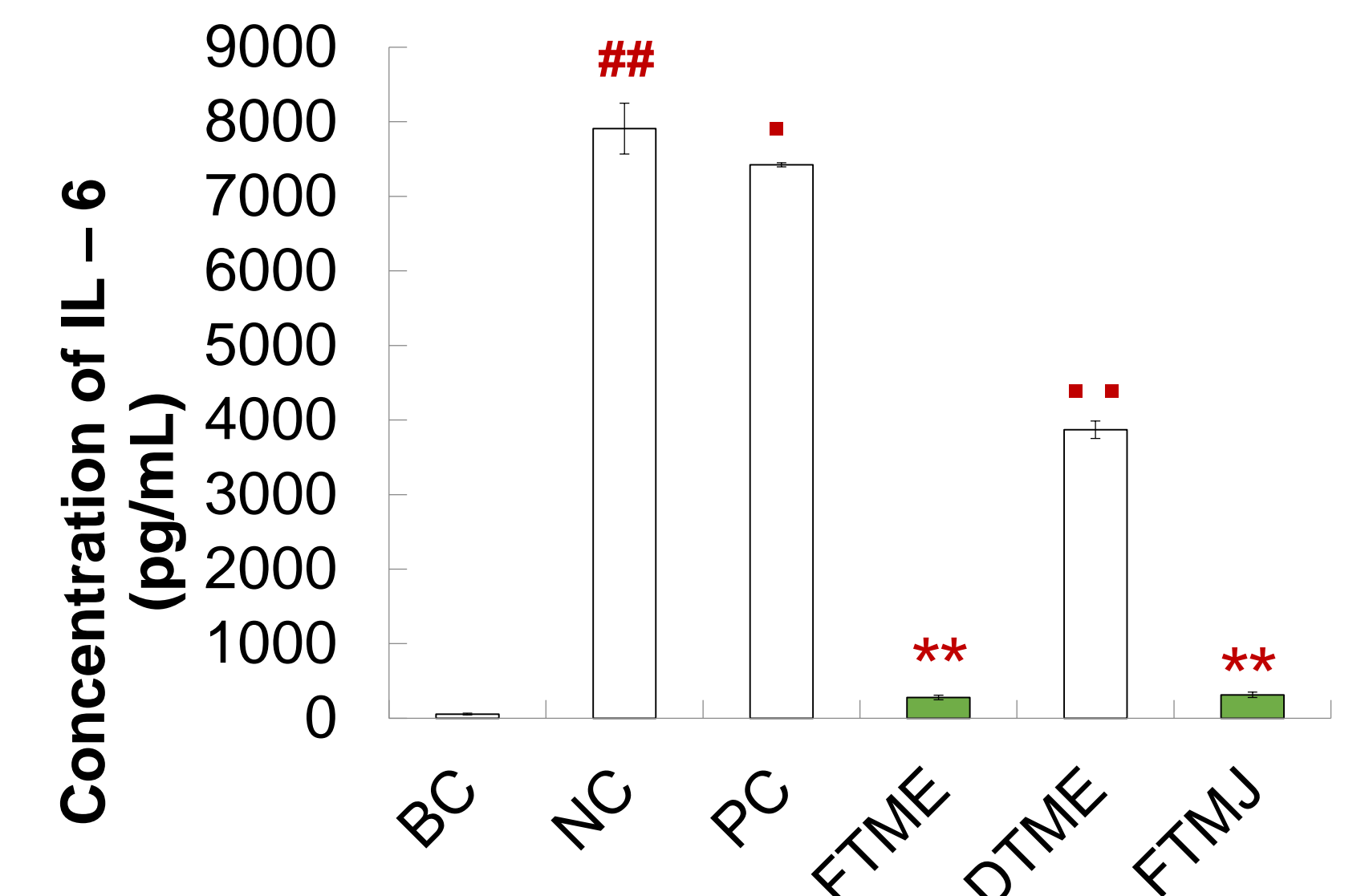


Figure 2. The results of Anti-inflammatory assay based on macrophages

“#”,Compared with BC; “.”, Compared with NC; “**”, Compared with DTME

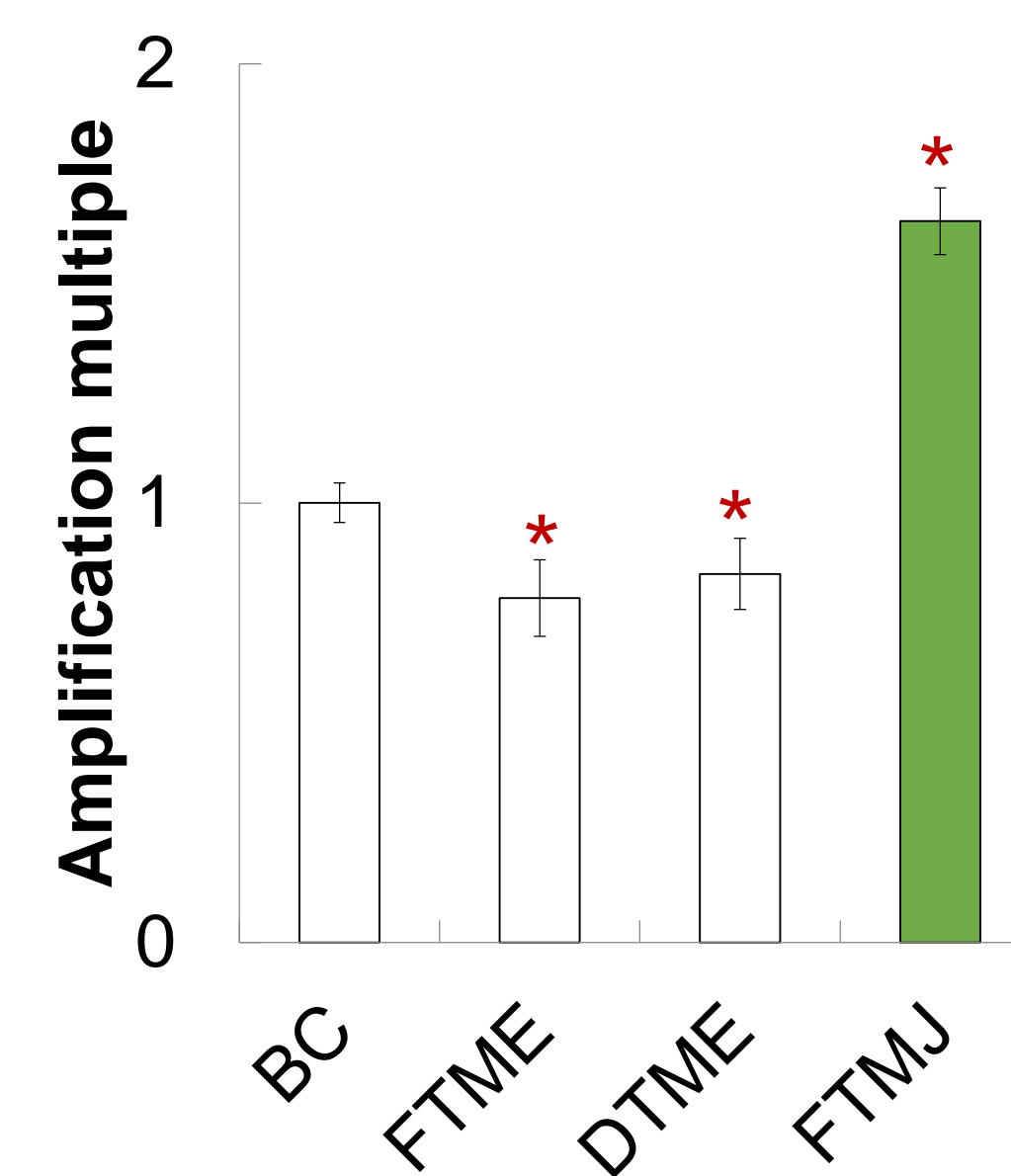


Figure 3. Results of FLG gene expression
“*” ,Compared with BC

FTME is superior to DTME in moisturizing (Fig.1). FTME and FTMJ are superior to DTME in anti-inflammatory (Fig.2). FTMJ is superior to DTME and FTME in skin barrier repairing (Fig.3). It provides theoretical support for the application of fresh *Taraxacum mongolicum* as a moisturizing ingredient, a skin barrier repair agent, an anti-inflammatory ingredient in cosmetics. It also suggests extraction process of Chinese medicines is equally important when added in cosmetics.

Conclusions:

This article found that fresh *Taraxacum mongolicum* is better than dried ones in terms of moisturizing, anti-inflammatory, skin barrier, etc., especially in the form of directly taking fresh juice. It's also consistent that traditional Chinese medicine use fresh products, which mostly take the fresh juice. Certain fresh Chinese medicines have specific effects that are superior to dried ones. The application of fresh Chinese medicines in cosmetics has broad prospect and is worthy of our further exploration.

Aknowledgments:

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