

# ***Research on Product Design and Development of Preserved Fresh Flower Based on Color Analysis***

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**Abstract:** Preserved fresh flower products are the darling of the flower market in China in recent years. After deep processing, it has a fresh-keeping period of about 3 years, and can be artistically processed and designed. From the perspective of design, color is the core competitiveness of preserved fresh flower product development, and preserved fresh flower product design based on color analysis needs to meet people's aesthetic pursuit, people's requirements for their own quality of life and the concept of green environmental protection advocated in recent years. It is obvious that preserved fresh flower products have broad development prospects.

## **1. Introduction**

The new flower art based on the concept of preserved fresh flowers has been widely praised by consumers in recent years. Most of the preserved fresh products in the flower market are only simple "combinations" and lack color analysis, but they are still widely welcomed because their strong self-value makes up for the short shelf life and single product phase of flowers. They have good development prospects in the newly emerging flower industry in China. The "preserved fresh flower" originated from Germany, known as the "never-withering flower". Due to the small supply in the market, there is still a lack of better product development of preserved fresh flower. For example, preserved fresh flower can be made into frame painting, so as to present richer artistic expression, realize functional breakthrough, endow the product with multiple cultural connotations and realize the added value of the product.

In the 1990s, preserved fresh flower products appeared in Germany. Because of their distinctive characteristics, although they were expensive at the beginning, they were still sought after by the upper class and white-collar class in western countries. The Japanese also carried forward preserved fresh flower. It can be said that the Japanese pursued the delicacy of preserved fresh flower to the extreme. Since 2012, the annual demand for preserved fresh flowers in Japanese market has exceeded 100 million. Preserved fresh flower is a fresh flower, but it is also not a fresh flower. Strictly speaking, it is a protected flower. Some people call it an ecological flower, and it is also called "immortal flower" in western countries<sup>[1]</sup>. It can be seen that people's pursuit of preserved fresh flowers has reached the extreme. Preserved fresh flowers are basically made of roses,

carnations, Phalaenopsis and silk ribbon hydrangea. They are dried flowers processed through a series of complex processes such as dehydration, decolorization, drying and dyeing. With the follow-up of art design, preserved fresh flower more reflects its aesthetic value. No matter the color, shape and implication, preserved fresh flower is greater than common flower. It not only maintains the fresh characteristics of flower, but also enriches the color, and it can achieve more uses in modeling. The biggest highlight is that it can be preserved for more than 3 years. Thus, it can become an ideal deep-processing product of flower art for flower design, interior decoration, home layout, celebration exhibition and theme activities.

## **2. Significance of Color Analysis for the Design and Development of Preserved Fresh Flower Products**

From the perspective of color psychology, it takes only 90 seconds for customers to form an impression and view on a new product, and 90% of the time is disturbed or affected by color. It can be seen that color is the core content output for the design of any product, so color becomes one of the core instrumental means of designers. It is true that preserved fresh flower has reflected its great value, but the product design and development is endless for designers. Similarly, based on color analysis, it covers color psychology, aesthetics, art modeling, Sinology thought and even western aesthetic ideas. Meanwhile, color is a language of communication. It can not only express its own aesthetic value, but also explain its profound meaning to people and transfer the energy of this color to customers, which is the value of color. Through the analysis of color, the designers realize the support for a group based on each color value. Therefore, the design also reflects the expression of users' emotion and the core elements affecting cognition represented by preserved fresh flowers. From the value of color analysis, color is one of the most easily remembered elements. This colored light from nature is transmitted to people's eyes through the reflection of different objects, forming information of different wavelengths but representing different colors. The information is the value realization of the process of colored light acting on people's eyes. It is also sublimated into a kind of energy with the perception of color and emotional experience. Therefore, it is of great significance in the design and development of preserved fresh flower products.

## **3. Analysis of Product Design and Development of Preserved Fresh Flower Based on Color**

The design and development of preserved fresh flower products based on color needs to start from three directions: different value output expressed by colors, functional development that still needs to be improved, the perspective of culture or the integration of Chinese traditional culture.

### **3.1 Different Colors Express Different Value Outputs**

From the color scope of Kandinsky's research, it can be divided into two dimensions: direct psychological induction and indirect psychological induction of color. It is actually the value output expressed by color. The former is an objective presentation with intuitive effect, and is the inherent emotional language of color. The latter transforms a certain preference into a medium through color association and imagination, so as to show a high emotional experience. From the perspective of the realization path of both, they are the impact on people. Because from the perspective of products, the influencing factors are based on people's psychological dynamics and the influence of products, and they often exist at the same time. Therefore, color has a high sense of space, emotional attachment and content expression, and their relationship is complementary. From the perspective of the physical induction of color (hue, lightness and saturation), color can develop into a psychological experience, or can be understood as the kinetic energy of direct psychological

induction. Therefore, the pure psychological induction brought by the attribute of color itself is caused by the inherent attribute of color. This direct emotional correspondence is the accumulation of survival experience and development power of human beings in the whole evolution and the development process of human society. For example, red has a special position in Chinese culture, and it is also the longest in terms of light wave, easy to attract people's attention and cause different emotional changes such as excitement and tension. In particular, red visually gives people a sense of urgency and expansion. It is called "forward color" in the aesthetic circle. Red also represents another color symbol, which is gorgeous, fragrant, passionate, young and vivid, and also implies a full, mature, festive and energetic impression in Chinese culture. For example, the red presented on Wang Laoji's packaging can especially express the value of this national product and is deeply rooted in the hearts of the people <sup>[2]</sup>. At the same time, red symbolizes danger, so most warning signs (traffic lights, no parking) and fire control buttons adopt red. Therefore, from this point of view, the application of color needs to follow its own cultural symbols. Yellow also has a special meaning and representative in Chinese culture, and the wavelength of yellow is moderate. It is the brightest color among all colors. Therefore, it gives people the impression of brightness, high esteem, brilliance, nobility, kindness and softness. Meanwhile, this warm color is easy to cause people's sense of security and focus. Similarly, in food, yellow gives people a sense of sweetness and crispness, which is reflected in many desserts. Like red, yellow also represents a dangerous warning, but it is not as strong as red. Therefore, in many UI, yellow appears as a warning color one level lower than red. Green, compared with red and yellow, the wavelength of green light is just in the middle, giving people visual comfort and calm, so the green light response is the most flat, and the eyes are most suitable for the stimulation of green light. From the feeling of light, it can also be concluded that green represents health, life, environmental protection, youth and nature. At the same time, it represents tranquility, peace, safety and stillness in many places. From the perspective of color application, the calmness of green is not exactly the same as that of blue. It absorbs some yellow vitality and blue calmness. Therefore, green can better represent the symbolic meaning of health, passing and completion. Globally, green is a representative color of human security, stability and environmental protection and ecology.

### **3.2 The Functionality of Preserved Fresh Flower Products Needs to Be Developed**

Through market research, most of the preserved fresh flower products in the market today have only one function, that is, decoration. After consumers buy them, they can't play any practical function except viewing and collection. Over time, the products will become idle products, which will cause some trouble for most consumers. From the aesthetic point of view of color presentation, diversity and diversified product design can be the eternal theme of preserved fresh flowers. For example, preserved fresh flowers can be used to make frame paintings, so as to further enhance the value of preserved fresh flowers from collection to artistic value. Therefore, enhancing its functionality is an essential link in the development of preserved fresh flowers.

### **3.3 Cultural Characteristics of Preserved Fresh Flower Products**

Preserved fresh flower has a wonderful love story in the west, which shows unswerving, lasting and eternal love. So far, in Europe, as long as boys and girls fall in love, they will retain a handful of roses, or put the petals in the Bible to make preserved fresh flower that will never wither. From the perspective of customers in China, it is worth considering whether we can integrate this kind of classic love story that represents love and beauty with our country. Nowadays, the cultural characteristics of preserved fresh flower products are obviously insufficient. For the design of preserved fresh flower products in our country, we must have our own cultural concept and put the

cultural concept into the products, make the brand preserved fresh flowers look particularly different, and customers can also be attracted by this beautiful culture. Therefore, it is of great significance for the branding of preserved fresh flower products. A good culture is the best way to retain the hearts of consumers.

#### **4. Development Strategies of Preserved Fresh Flower Products Based on Color Analysis**

The product development of preserved fresh flower based on color is to find a way out from the current shortcomings. At the same time, we should pay attention to the cultural basis and consumer psychology of preserved fresh flower product development in China. How to carry out in-depth processing is inseparable from the value mining of color.

##### **4.1 Highlight the Chinese Attribute and Cultural Value of Products through Color**

At present, the raw materials of preserved fresh flowers in China mainly come from Yunnan. Yunnan is also the source of raw materials for Japan and other major consumer countries of preserved fresh flowers. However, our design and production technology of preserved fresh flowers are still not mature enough, resulting in the delay in opening the international market. Therefore, it is necessary to highlight beauty and implication through color changes. In addition, the function and value of culture should be embedded in the design process, which is the vitality of the product. For example, the frame painting effect of preserved fresh flowers can be presented in the form of Chinese traditional painting. Obviously, this makes the products of preserved fresh flowers have great value, and improves their cultural connotation and artistic quality.

##### **4.2 Use Rich Colors to Reflect the Depth of Preserved Fresh Flower Products**

Colors are not to add together, but to represent different painting scenes through different colors. The preserved fresh flower should be found from the separate flower language and aesthetic feeling, and combined with more color derivatives with story, entertainment and emotional lines for integrated design. For example, the traditional love story of the Cowherd and the Weaver Maid in China can be reflected in the frame painting, and through color bedding of preserved fresh flowers, the greatest emotional identity can be realized. For customers, the most important thing is to meet their psychological needs and visual appreciation. Based on these two points, it is necessary to further process preserved fresh flowers, so as to achieve a leap in product design and effect.

#### **5. Conclusion**

The design and development of preserved fresh flower products based on color analysis is only a sort of thinking of preserved fresh flower art creation. From a more far-reaching perspective, only by grasping the instrumental means of color, can we better apply to the overall design of products, make preserved fresh flower products play a greater value and significance in life, and become a soul art product.

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