



HISTOGRAM OF HIBISCUS FLOWER AND THALAMPOO/FRAGRANT SCREW PINE FLOWER USED AS A MEDICINAL VALUE USING IMAGE PROCESSING TECHNIQUES

¹ Mr. K.Nithiyanandhan, ² Mr. Rongali.Yer Naidu

¹ HoD, Department of Computer Applications, Impact Group of Institutions, Bengaluru-560092, Karnataka and Research Scholar, Rayalaseema University, Kurnool, Andhra Pradesh, India.

² Department of Computer Applications, Brindavan College, Bangalore, Karnataka, India.

ABSTRACT

Image processing has been proved to be an effective tool for analysis in various fields and applications. The present study deals with the analysis of Hibiscus flower, Thalam poo/Fragrant screw pine flower, by using the techniques of Image Processing. Flowers play an important role directly or indirectly in our daily life since there are several floral medicines in the medicine system that are useful for treating different types of disease. Some important flowers used as single drugs and in compound formulations that contribute to the popularization of different important medicinal use of flowers.

Key Words: Image Processing, Hibiscus flower, Thalam poo/Fragrant screw pine flower medicinal.

I. INTRODUCTION

Image processing is frequently viewed as arbitrarily manipulating an image to achieve an aesthetic standard or to support a preferred reality. However, image processing is more accurately defined as a means of translation between the human visual system and digital imaging devices. The human visual system does not perceive the world in the same manner as digital detectors, with display devices imposing additional noise as well as bandwidth restrictions.

Importance of Flowers

For a considerable length of time, specialists have since quite a while ago recognized the treatment properties of a few blooms. Blossoms and plants offer absolutely normal restorative properties, frequently without the unpleasant reactions of current tablets and medications. Besides, less expensive more affordable than pharmaceuticals sold by pharmaceutical organizations is produced using blooms.

The best places to acquire dried blooms or their basic oils are a home grown wellbeing store. Be watchful while getting ready tonics and different blends since a few blooms can be exceptionally powerful. Pregnant or nursing moms specifically ought to counsel with their specialist before utilizing any fundamental oils. To take in more about utilizing restorative blooms for home cures, view the absolute most powerful ones beneath.

* Corresponding authors, ¹nithiya_r@yahoo.com

²ry_naidu@rediffmail.com

Fresh flowers are not only full of life but also hold curative prowess. In Ayurveda, many flowers and their healing properties in day to day life.

Yellow or orange colour, flowers use as a sources of vitamin C and beta-carotene, a life and death vitamin in maintaining the vigor of your eyes, wearing only a smile and excused system. Anthocyanins are antioxidants that are breath of life to have successful effects against getting on, arise and cardiovascular disease.

Red flowers in vitamin C, beta-carotene and anthocyanins. They also suppress lycopene, which is breath of life to have a protective doom against unassailable cancers, especially prostate cancer.

Green flowers are steep in vitamin C, vitamin E and lutein. Lutein is consequential to rivet the eyes on health and is breath of life to make a long story short the spin of the roulette wheel of cataracts and wane the meta stases of macular degeneration.

Importance of Flowers in India

Herbs fashioned a critical a part of medicinal remedy and treatment in the historic civilization. Their use, which evolved in the Vedic times, maintains into the current era. A number of these herbs and plants are found in abundance in a few components.

II. RELATED WORK

The review article [1] discussed on several flower drugs in Unani system of medicine which are useful for treating different types of disease conditions/ailments, a review has been made focusing on the therapeutic uses, brief description, major chemical constituents and dosages of some important flowers used in Unani System of Medicine as single drugs and in compound formulations contributing to the popularization of various important medicinal uses of these flowers.

The review article [2] investigated on Bach Original Flower Essence (BFE) Rescue Remedy, a modality used since 1930 but not yet thoroughly investigated scientifically, was evaluated for the reduction of acute situational stress. Statistical analyses indicated that only the high-state anxiety treatment subgroup demonstrated a statistically significant difference between pretest and posttest scores. The results suggest that BFE Rescue Remedy may be effective in reducing high levels of situational anxiety.

In a review article [3] on research has been conducted on the integration of flower essences therapy and intuition into a holistic life coaching practice. The objective for the current qualitative case study was to examine the clients' experiences, beliefs, and perceptions regarding the integration of flower essences and intuition in a holistic life coaching context Clients who elected to participate in the study kept a weekly reflection journal regarding their insights and any key spiritual experiences.

In a review article [4] discussed Dahlia was used even in economical purpose in landscaping, in floristry as a cut flower, for the pharmaceutical industry, cosmetic, food and as raw material for the extraction of dyes. Both the tuberous roots and the flowers of this ornamental and medicinal plant are used for therapeutic purposes.

In a review article [5] a studied on Human mind is a complex network of neurons working through the electromagnetic impulses and radiations.

III. PROBLEM SPECIFICATION

The main objectives of the present study are to make a detailed analysis of flower like Hibiscus Flower and Thalam poo/Fragrant Screw pine Flower by using the techniques of image processing. Different samples are taken and the experiments are conducted.

IV. METHODOLOGY

In order to make a detailed analysis of the Hibiscus Flower and Thalam poo/Fragrant Screw pine Flower and the codes are written in Matlab 7.50 Version.

V. EXPERIMENTS AND RESULT

The experiments to analyze the medicinal properties of flowers are conducted by using Matlab (Version 7.5). The results are presented in Table 1, Table2, Figure 1, Figure 2, Graph 1, Graph 2, Graph 3, Graph 4.

Name of the Flower: Hibiscus Flower

Name of the Family: Malvaceae

Name of the Botanical: Hibiscus rose sineusis

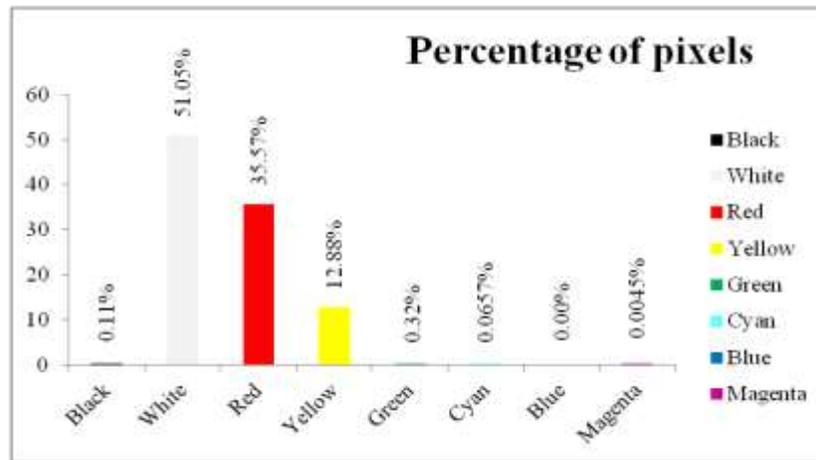


Figure 1 Sample Hibiscus Flower

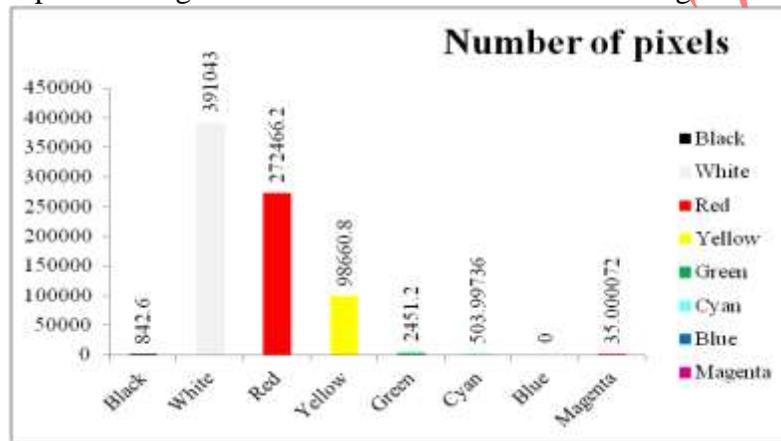
Total
Pixels:7666000

Name of the Colors	Number of pixels	Percentage of pixels
Black	842.6	0.11
White	391043	51.05
Red	272466.2	35.57
Yellow	98660.8	12.88
Green	2451.2	0.32
Cyan	503.99736	0.065796
Blue	0	0
Magenta	35.000072	0.0045692

Table 1: Results of the Hibiscus Flower



Graph 1. Histogram of Hibiscus Flower with Percentage of Pixels



Graph 2. Histogram of Hibiscus Flower with Number of Pixels

Medicinal Benefit of Hibiscus

- ❖ Boost liver health of the humans
- ❖ Lower blood fat levels
- ❖ To reduce Lower Blood pressure

In the above graph 1 it is clear that the Hibiscus flower contains 51.05 % of white pigments, so to increase the immunity power and it is also contains 35.57% of red pigments hence it is found to contain antioxidants . Therefore Hibiscus flowers are beneficial for all these diseases found in human which are due to deficiency of vitamin C of yellow pigment is less 1.88% . It also contains 0.32% of green pigments which are due to folate, carotenoids and form vitamin A, stimulate detoxifying enzymes and pathways for chemoprevention

Name of the Flower: Thalampoo/Fragrant Screw pine Flower

NavaJyoti, International Journal of Multi-Disciplinary Research Volume 5, Issue 2, February 2021

Name of the Family: Pandanceae
Name of the Botanical: Pandanus odatifer

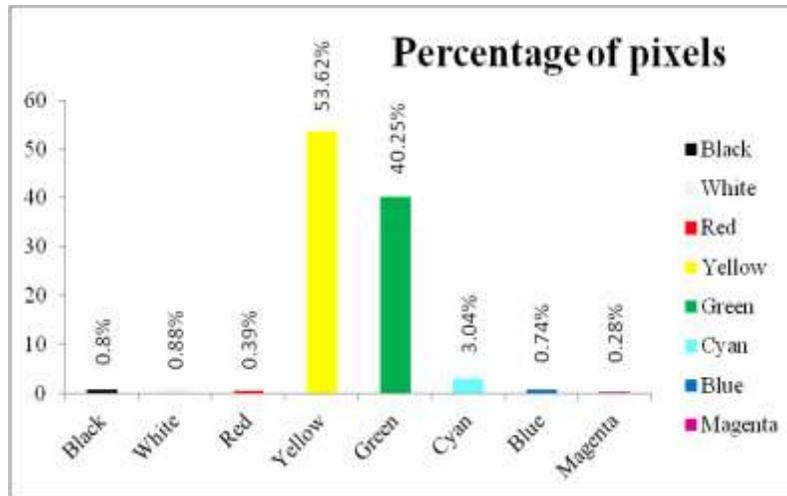


Figure 2 Sample Thalampoo/Fragrant Screw pine Flower

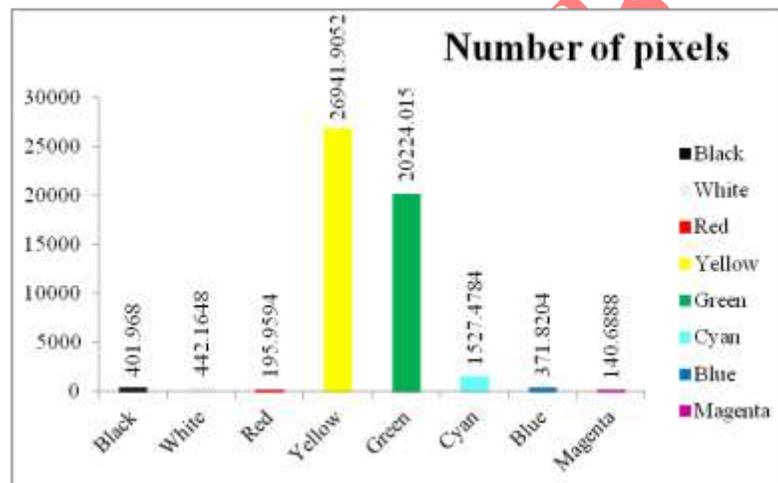
Total Pixels:31494

Name of the Colors	Number of pixels	Percentage of pixels
Black	401.968	0.8
White	442.1648	0.88
Red	195.9594	0.39
Yellow	26941.9052	53.62
Green	20224.015	40.25
Cyan	1527.4784	3.04
Blue	371.8204	0.74
Magenta	140.6888	0.28

Table 2: Results of the Thalampoo/Fragrant Screw pine Flower



Graph 3. Histogram of Thalampoo/Fragrant Screw pine Flower with Percentage of Pixels



Graph 4. Histogram of Thalampoo/Fragrant Screw pine Flower with Number of Pixels

Medicinal Benefit of Thayampoo/Fragrant Screw Pine Flower

- ❖ To reduce the body heat
- ❖ Wound healing and also used for arthritis.
- ❖ To prevent spontaneous abortion
- ❖ It is used as good fragrance

In above graph3 it is clearly that Thayampoo/Fragrant Screw Pine Flower 53.62% of yellow pigments which are helpful to boost antioxidant intake promote anti-inflammation and also 40.25% of green pigments the benefits of detoxification.

VI. CONCLUSION

India is the largest producer of medicinal herbs and has a wonderful potential of medical system. Therefore, the standardization of herbs, medicines and manufacturing techniques are absolutely necessary. The display of colors and their characteristics are presented in Table 1 and Table 2. The results clearly indicate the variations in different flowers through histograms and finally it is concluded. That through Image processing techniques it is possible to explore the hidden scientific potentiates & characteristics in medicinal flowers where naked eye not possible.

REFERENCES

1. Prathapa Reddy and etal. on “Therapeutic uses of Flowers - Leads from Traditional System of Medicine” International Journal of Herbal Medicine 2015; 3(3): 12-20E-ISSN: 2321-2187
2. Robert Halberstein and etal on “Healing With Bach Flower Essences: Testing a Complementary Therapy”, Complementary Health Practice Review, Vol. 12 No. 1, January 2007 3-14.
3. Alicia Holland on “Integrating Flower Essences Therapy and Intuition into a Holistic Life Coaching Practice” Journal of Traditional Medicine & Clinical Naturopathy Volume 6 ,Issue 4, ISSN: 2573-4555.
4. Moldovan and etal on “Dahlia An Unforgettable Flower - A New Perspective For Therapeutic Medicine“ Hop and Medicinal Plants, Year:2017, No. 1-2, 2017 ISSN 2360-0179.
5. Rajashree Mashru “Curative powers of Bach Remedies: A Review “World Journal of Pharmaceutical World Journal of Pharmaceutical Research Volume 6, Issue 8, 699-719. Review Article ISSN 2277–7105
6. www.wikipedia.
7. A Mat Lab Approach practical Stormy Attaway 2009.
8. Rafael C. Gonzalez and Richard E. Woods “Digital Image processing“ Second Edition, Prentice Hall.