



**INTERNATIONAL JOURNAL OF
PHARMACEUTICAL SCIENCES**
[ISSN: 0975-4725; CODEN(USA): IJPS00]
Journal Homepage: <https://www.ijpsjournal.com>



Research Article

Comparative study of Herbal Pain Relief Balm with Patanjali Herbal Balm

Patil Indira*, Pawar Pallavi, Ashwini Pundkar, Prachi Murkute, Santosh Payghan

Rajesh Bhaiya Tope College of B-Pharmacy.

ARTICLE INFO

Published: 14 April, 2025

Keywords:

Royal Poinciana
(Gulmohar), Herbal Pain
Relief Balm. Menthol.
Camphor.

DOI:

10.5281/zenodo.15212037

ABSTRACT

Modern life is stressful, and tension headaches are one result of that stress. Cosmetics have great demand since ancient time, nowa days, a focus has been shifted more towards derived cosmetic products. Not only cosmetic products, but also to the skin products due to their ease of application among all dermal drug delivery products, pain balm formulation is preferably used so as to get the faster local effect. Royal Poinciana (GULMOHAR) which has various therapeutic activity and is the main ingredients of formulation of pain relief balm. Other used ingredients are Menthol is naturally occurring cyclic terpene alcohol of plant origin, which has been used since antiquity of medicinal purpose. Its use in dermatology is ubiquitous, where it is frequently part of topical anti-pruritic, antiseptic, analgesic and cooling formulations.

INTRODUCTION

The pain balm works on the counter irritancy principal the where the instead of relieving the pain, the pain sensation is suppressed by causing the irritation to the point where formulation has been applied. The balm in common sense is defined as semisolid formulation (generally having medicament) and which is to be applied externally. Pain balm is such formulation that is intended to be used for the relief of mild to moderate rate pain. Tension headaches are very common, affecting up to 78% of people.

Unfortunately, there are also among the most neglected and difficult types of headaches to treat. Herbal balm is an ayurvedic formulation of powerful essential oils for quick relief from head ache, back ache, cold and in relieving pain. Herbal balm composition comprising organic essential oils, organic bees wax and other desired herbal components has medicated topical preparations for application to skin of human beings. Balms are topical preparations for application to skin to relieve pain and stiffness. This balm contains counter irritant chemical compounds such as methyl salicylate. Petroleum jelly is the common

***Corresponding Author:** Patil Indira

Address: Rajesh Bhaiya Tope College of B-Pharmacy.

Email : indirapatil003@gmail.com

Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.



base for any kind of balms. Pain is an unpleasant feeling often caused by intense or damaging stimuli, such as stubbed a toe, burning a finger, putting alcohol on a cut and bumping the funny bone. The international association for the study of pains widely used definition states, pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. Pain motivates the individual to withdraw from damaging situations, to protect a damaged body part while it heals and to avoid similar experiences in future. Most pain resolves promptly hence the pain stimulus is removed and the body has healed, but sometimes pain persists despite removal of stimulus and apparent healing of the body and sometimes pain arrives in the absence of any detectable stimulus, damage or disease.

Advantages Of Herbal Facial Scrub:

1. Avoidance of first pass metabolism.
2. Convenient and easy to apply.
3. Ability to deliver drug more selectively to a specific site.
4. Improving physiological and pharmacological response.
5. Providing utilization of drug with short biological half-life.
6. Provide suitability for self-medication.
7. Ability to easily terminate the medication when needed

Uses Of Herbal Pain Relief Balm:

1. Herbal pain balms can help relieve pain from headaches, backaches, colds.
2. Herbal pain balms can help treat rheumatoid arthritis.
3. Herbal pain balm was effective in reducing pain, swelling, tenderness, and headache.

Other Uses:

1. Arthritis.
2. Backaches.
3. Sore muscle.
4. Joint pain.
5. Leg cramps

Review Of Literature

1. Pratiksha Salunke, Shital Markad, Komal Magar, et al (2024) Acute pain serves as a warning, but chronic pain is a syndrome that necessitates careful selection of highly bioavailable analgesic medications for long-term treatment. Topical drugs are designed to address these issues by providing a stable plasma level, allowing for gradual delivery of the active ingredient, and having a high safety profile.
2. Riya Sangelia, Neelam Dhankhar, Shoaib Khan and Sunil Kumar et al (2024) The cosmetic industry has witnessed a significant shift towards natural and herbal products in recent years, aligning with the global trend of embracing a more sustainable lifestyle. This transition is evident in the growing demand for herbal cosmetics, which are regarded as invaluable gifts from nature.
3. PM Kumarapperuma, SASD Senanayake, MMPM Hasanthi, NTB Dias, S K Hettihewa et al (2024) Inflammation is a pathological condition that may lead to various chronic diseases. This study evaluates the anti-inflammatory effect of gulmohar plant flowers, screens its preliminary phytochemistry, and the plant material is subsequently used in a herbal balm formulation
4. Geeta Patel, Nakshi Patel, Anvi Patel and Karina Satwani et al (2024) The homogeneous mixing method was employed to address challenges in formulating the pain relief balm
5. Pratiksha Salunke, Shital Markad, Komal Magar, et al (2024) Topical drugs are designed to



address these issues by providing a stable plasma level, allowing for gradual delivery of the active ingredient, and having a high safety profile. The most popular medications topical formulations for the treatment of pain are reviewed here, along with new research findings

6. Dr. Sakthivel M, Dr. Mohamed Halith S", Karthikeyan R, Kaviya M, Kiruthika M, Kowsalya S, Krishnapriya R, et al (2023) Even in areas where modern medicine is available, the interest on herbal medicines and their utilization have been increasing rapidly in recent years. Plant derived substances and herbal medicines have recently attracted.

7. Getha Devi, S. Yamuna, Sk. Nourin, K. Naveen², Sk. Salma, D. Swathi, K. Gayathri, P. Subrahmanyam et al (2023) There has been an increasing focus on development of new routes of drug administration to provide tailored treatments for patients, without decreasing efficacy of analgesia, in proportion to the progression of the knowledge of pain mechanisms.

8. Anuj N. Nahata, Nazma M. Ansari, Shivani Nahar, Sanjay G. Walode, Vibhavari M. Chatur, et al (2022) These are the products of healthcare that are biologically active ingredients that impersonates to medical or drug like benefits. The design, quality, formulation of herbal pain relief balm made from natural ingredients was studied.

9. Miss. Telange-Patil P.V., Miss. Bendgude P.D., Miss. Chavan M.R., Miss. Jadhav S.T., et al (2022) Modern life is stressful, and tension headaches are one result of that stress. Cosmetics have great demand since ancient time, Now a days, a focus has been shifted more towards derived cosmetic products.

10. Nishigandha Waykule, Prachet Bagewadikar and Somasharan Kale, et al (2022) The rising global demand for natural products whose

production is harmless to the human body and environment has developed the novel method of formulations of joint pain balm.

11. Yati Sumiyati, Safira Nafisa", Wiwi Winarti, Esti Mumpuni, Diah Kartika Pratami, Desi Nadya Aulena', Novi Yantih' et al (2022) The purpose of this study was to obtain the best formulation of red ginger oil balm that can be used for aromatherapy as an analgesic.

12. Miss. Telange-Patil P.V., Miss. Bendgude P.D., Miss. Chavan M.R., Miss. Jadhav S.T., et al (2022) Modern life is stressful, and tension headaches are one result of that stress. Cosmetics have great demand since ancient time, Now a days, a focus has been shifted more towards derived cosmetic products

13. Fitria Nugrahaeni", Kriana Efendi, Abdul Kholik Aziz et al (2022) This means a preparation is needed to deliver the extract. Balm stick is an innovation in a stem-shaped balm that makes it easier to be used so that gulmohar flower extract is made into a balm.

14. Yadav A., Karmokar K., Gop R., Mudartha D., Maheshwari V. et al (2022) The cosmetic industry has witnessed a significant shift towards natural and herbal products in recent years, aligning with the global trend of embracing a more sustainable lifestyle. This transition is evident in the growing demand for herbal cosmetics, which are regarded as invaluable gifts from nature.

15. Yadav Abhishek and Samanta Krishanu et al (2021) Herbal medicine prepare various part of plant are used like flower, leaves, seeds, root etc. Instead of an herbal drug is design as the alternative formulation for the external use in the form of balm. For the medicinal use the herbal ointment apply externally on human body.

16. Sujeeva Krishanthi Hettihewa, Thotawaththage Loshadhi Indunika Srilal et al. (2021) The demand for the utilization of herbal



medicine is rising due to their high efficacy, affordability, ease of use, better adaptability with human body and lesser side effects.

17. Hafizh Fadhullah, Anisa Megantika, Kanya Citta Hana Alifia, Pandu Nugroho, Talitha Zada Gofara et al (2019) Our product provides the following benefits: it is a uniquely patented product; it contains a combination of a humectant, an emollient, and counter irritant to maintain relief on the joints; and it is manufactured using 100% herbal ingredients.

18. Lusi Putri Dwita, Kori Yati and Sri Nevi Gantini et al (2019) This research aimed to determine the anti-inflammation activity of *Nigella sativa* oil in a simple balm stick by topical application.

19. Katarzyna Seidler-Laskowski, Romuald Mursalski, Wojciech Kucharski, Elzbieta Kędzia¹, Kamila Nowosad, Jan Bieganowski et al (2015) The raw material of medicinal plants should fulfill the growing demands of herbal and cosmetic industries about its quality esp active substance content, sufficient yield, lack of pesticides and heavy metals residues and microbiologically clean.

20. Mayuri Kadu' Dr Suruchi Vishwas Rao, and Dr Sonia Singh et al (2015) Cosmetics are incredibly in demand since historical time. These days focus shifted more towards naturally derived cosmetic products.

4. Rational Of the Study: - Need of Work: -

In line with the advancement of our understanding of pain mechanisms, there has been a growing emphasis on the creation of novel drug delivery systems that can offer patients individualized treatments without compromising the effectiveness of analgesics. Acute pain serves as a warning, but chronic pain is a syndrome that

necessitates careful selection of highly bioavailable analgesic medications for long term treatment. Topical drugs are designed to address these issues by providing a stable plasma level, allowing for gradual delivery of the active ingredient, and having a high safety profile. The most popular medications topical formulations for the treatment of pain are reviewed here, along with new research findings.

A. Safety and Gentleness:

- Conventional Herbal pain relief balm often contain harsh chemicals, artificial fragrances, and microplastics that can irritate the skin and cause allergic reactions, especially for individuals with sensitive skin.
- Herbal balm utilize natural ingredients like bee wax, Menthol, Castor oil, and herbs, making them gentle and safer for most skin types.

B. Effectiveness:

- Herbal ingredients possess inherent properties that are beneficial for the skin.
- For example, Eucalyptus oil inflammation and moisturizes, camphor has antibacterial and anti-inflammatory properties.

C. Multifaceted Benefits:

- Conventional balm often contain harsh chemical that pose a threat to the environment and marine life.
- Herbal balm are often formulated with biodegradable ingredients and sustainable packaging, making them more eco-friendly choice.



D. Affordability:

Compared to expensive commercial balm, herbal balm can be made at home using readily available ingredients, making them a more affordable option.

Objectives: -

- To study avoidance of first pass metabolism.
- To ease the patients' joint and muscular pain.
- To Greatly Improve Headache Patients Experience
- To treat common colds in comparison to other product types.
- To reduce tension and encourage rest.
- Temporarily relieves the minor aches and pains of muscles and joints associated with: arthritis, Sprains, Muscle strains.

5. Plan Of Work: -

- Selection of pure drug
- Identification tests of drug:
 1. Dragendroff's test
 2. Hager test
 3. Test for Menthol
 4. Test for Bee Wax
 5. Test for Castor Oil
 6. Test for Camphor
- Preparation of reagents
- Experimental design
- Result & discussion
- Conclusion
- Reference

5. Drug Profile: -

1. Royal Poinciana



Figure no. 5.1 Royal Poinciana

Scientific Name: Delonix Regia.

Synonym: Gulmohar, Peacock Tree.

Family: Leguminosae.

Chemical Constituents: Mainly alkaloids, flavonoids, triterpenes, and steroids. The flowers also contain anthocyanins, such as cyanidin 3-O-rutinoside and pelargonidin 3-O-rutinoside.,

Uses:

1. The Royal Poinciana has anti-inflammatory properties.
2. mainly used to The Royal Poinciana has antidiabetic properties.
3. The extract from flower treat joint pains.

2. Menthol:



Fig no 5.2 (Menthol)

Scientific Name: Hexahydrothymol.

Synonym: Peppermint camphor.

Family: Lamiaceae.

Chemical constituents: Menthol(40.7%), Menthone(23.4%), menthyl acetate, 1,8-cineole, limonene, beta pinene, and beta-caryophyllene

Uses:

1. Reduces spasm and pain caused by endoscopy.
2. In migraine headache.
3. To treat nausea.
4. To reduce inflammation

Bees Wax:



Fig no 5.3 (Bees Wax)

Scientific name: Ceraalba.

Synonym: Yellow wax.

Family: Apidea.

Chemical constituents:

Myricylpalmitate (80%), free cerotic acid (15%), melissic acid, cerolein

Uses:

1. It has anti-inflammatory and anti-allergic properties.
2. It mainly use as an emulsifying agents, stiffener and gentle skin
3. Relieves stress and promote relaxation.
4. Relieves pain

Castor Oil:



Fig no 5.4(Castor Oil)

Scientific name: Ricinuscommunis.

Synonym: Ricinus oil.

Family: Euphorbiacea.

Chemical constituents: Triglyceride of ricinoleic acid 80%.

Uses:

1. Castor oil is commonly used as the laxative
2. Castor oil promote the wound healing.

3. Castor oil is a cathartic.
4. Castor oil used in arthritis and joint pains.
5. Castor oil helps to improve blood circulation

Eucalyptus Oil:



Fig no 5.5 (Eucalyptus oil)

Scientific name: Eucalyptus globules.

Synonym: Lemon scented gum.

Family: Myrtaceae.

Uses:

1. Relieves stuff nose.
2. Eases sore muscle and joint pain.
3. Clears respiratory complaints.
4. Reduces stress.
5. Disinfects wounds and cuts

Camphor



Fig no 5.6(Camphor)

Scientific name: Cinnamomum camphor.

Synonym: Alcindor.

Family: Lauraceae.

Chemical constituents: D-camphor (51.3%), 1,8-cineole (4.3%), and alpha terpinol

Uses:

1. Provide relief from cold cough, chest congestion, bronchitis and asthma.
2. Improves blood circulation and help to curb muscular and joint aches.
3. Powerful analgesic oil that produces a cooling sensation to numb
4. pain and awarming sensation to increase circulation.

MATERIALS AND METHODS:

Table 6.1: List of materials

Sr. No.	Particular	Quantity
1.	Royal Poinciana (Extract)	4 ml
2.	Menthol	3 gm
3.	Bees Wax	6.6 gm
4.	Castor Oil	3.4 ml
5.	Eucalyptus Oil	2 ml
6.	Camphor	1 gm

• Drugs and chemicals:

Royal Poinciana, Bees Wax, Menthol, Castor Oil, Eucalyptus Oil, Camphor.

• Glassware's and instruments:

Beaker', Stirrer , Measuring Cylinder , Weighing Balance, Motar And Pestle,

6. Authentification tests of drug:

1. Test For Drug Extract : (Royal Poinciana)

- (A) Dragendorff 's test. By adding 1 mL of dragendorff's reagent to 2 mL of extract, an orange red precipitate was formed, indicating the presence of alkaloids.



Fig no 6.1(Dragendorff Test)

- (B) Hager's test. Two milliliters of extract were treated with few drops of Hager's reagent. A yellow precipitate was formed, indicating the presence of alkaloids.

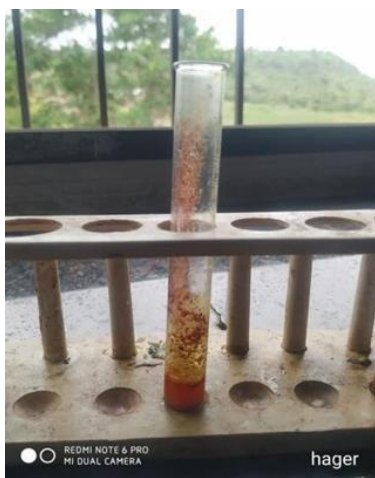


Fig no 6.2(Hager's Test)

2. Test For Menthol:

- (A) Take few crystals of menthol and mix with 5ml nitric acid and heat on water bath. Within a few minutes, the solution develops

blue colour and after sometime, it becomes golden yellow colour which indicates the presence of menthol.

- (B) 10mg crystals of methanol first dissolved in 4 drops of conc. H₂SO₄, then add few drops of Vanilline-H₂SO₄ reagent. Formation of yellowish orange colour which on addition to water changes to violet.

3. Test For Bees Wax:

- (A) Take few crystals of menthol and mix with 5ml nitric acid and heat on water bath. Within a few minutes, the solution develops blue colour and after sometime, it becomes golden yellow colour which indicates the presence of menthol.
- (B) 1 gm drug +10 ml alcohol, reflux for 1 hour with continuous stirring. Cloudy liquid gets appears which indicates the presence of bees' wax.

4 . Test for Castor oil:

- (A) Castor oil + petroleum ether = Completely soluble in petroleum ether=Castor oil is present
- (B) Castor oil + equal volume of alcohol = Clear liquid upon cooling at 0°C for (3 hours) =Castor oil is present

5. Test for Camphor:

- (A) Add 5 ml of acetone to 1 g of camphor in a test tube, shake well for 3-5 minutes, and let it stand for 30 minutes. If the crystals dissolve completely

Method of Preparation:



Weighing all the required herbal ingredients for herbal pain-relieving balm preparation were accurately weighed by using digital balance.

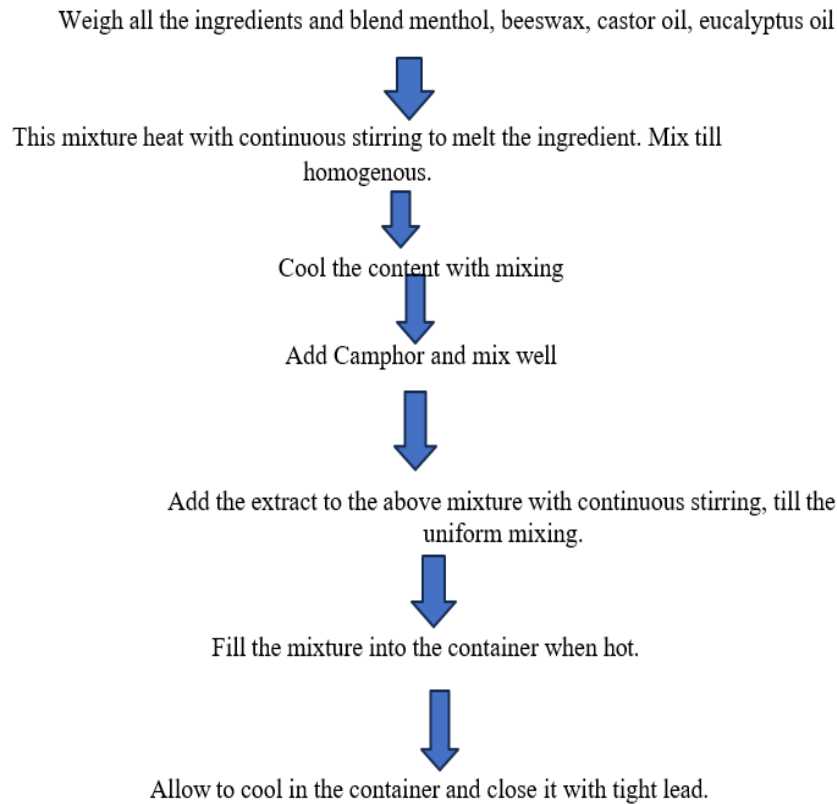


Fig no 10.1 (herbal Pain Relief Balm)

Marketed Product for Comparative study: Patanjali Balm

Patanjali Ayurveda Balm consists of pain-relieving ingredients that provide a cool and soothing sensation to help reduce pain and cramps.

It has anti-inflammatory properties which minimise inflammation and swelling.

Product Highlights:

- Provides relief from aches and pains
- Has anti-inflammatory properties
- Provides a cooling sensation

Formulation:

- Gaultheria fragrantissima 750gm
- Mentha piperita 500gm
- Eucalyptus globulus 400 gm
- Petroleum jelly
- Hard paraffin

Gandhapurataila (Gaultheria fragrantissima):

Used to relieve spasms of involuntary muscle, acts as an anti-inflammatory, and gives relief in pain and exhibits antiarthritic, antiseptic and astringent properties.

Pudina sat (Mentha piperita): Gives a cooling sensation and has a calming effect on the body, which can relieve sore muscles when used topically.

Nigiri tail (Eucalyptus globulus): Has anti-inflammatory properties that help ease muscle and joint pain and helps to reduce pain, inflammation and stiffness.

Manufacturer:

PATANJALI FOODS LIMITED Non-Food Division, Block-B, Patanjali Food and Herbal Park, Partha, Laskar Road, Haridwar- 249404, Uttarakhand.



Batch No.: AV1037 **Mfg. Date :**12/24 **MRP₹:** 60.00

Evaluation Tests:

- ❖ **Colour-** The colour of the herbal balm was checked by visually.
- ❖ **Odour-** The formulation was evaluated for its odour by smelling it.

- ❖ **Consistency:** The consistency of the formulation and particles were used to check the texture and homogeneity of preparation on the skin such as stiffness, grittiness, greasiness effect.
- ❖ **Texture:** It was tested by pressing a small quantity of the formulated balm between the thumb and index finger.
- ❖ **pH:** pH of 1% solution of the formulation was measured by using a calibrated digital pH meter at constant temperature.
- ❖ **Spread ability:** Spread ability of the formulations was determined by measuring the spreading diameter by keeping 1 g of sample between two horizontal glass plates (10cm x 20 cm). The standard weight 20 gm applied on the upper glass plate. The spreading quality checked by visual inspection.
- ❖ **Wash ability:** This test was performed directly on skin, formulation applied on skin and wash with normal water, after washing oily skin observed.
- ❖ **Grittiness:** The product was checked for the presence of any gritty particles by applying it on the skin.

RESULT:

In the presence of study, the pain balm of Royal Poinciana was formulated by using various excipients. The balm was then evaluated for the Given physical parameters and was found to be satisfactory in terms of appearance and texture. It was easily spreadable with fingers without any roughness felt to touch. The smell of the balm was found to be characteristics. Only thing was the colour was faded as the natural colorant with origin of Flower petals was incorporated. The balm was dense with the optimized melting point. In general, oral or topical antibiotic formulation is

used for the treatment of skin diseases. Traditional medicinal and aromatic plants are interesting and explore its various bioactive natural organic compounds for various treatments. In the last two decades, more research has been carried out towards the identification of the bioactive

compound from medicinal plants and developing into drug for the various treatments.

Comparative Study between Formulated Product & Marketed Product

Table 7.1: Observation Table of Pain Relief Balm & Marketed Pain Relief Balm

Sr. No.	Physical properties & test	Description of formulated product	Description of marketed product
1.	Physical state	Semisolid	Semisolid
2.	Color	Light Orange	White
3.	Odor	Characteristic	Characteristic
4.	Washability	Not Washable	Not washable
5.	Melting Point	53 ⁰ c	62 °C
6.	Consistency	Good	Good
7.	Texture	Smooth	Smooth
8.	Ph	5	6
9.	Spread ability	Easily Spread	Easily Spread
10	Grittiness	Gritty	Gritty

CONCLUSION

Herbal remedies are now regarded as secure as the demand for synthetic and herbal formulations is rising on the international market. In summary, the primary aim of the research was to develop and assess the fundamental physical parameters and stability assessment of Herbal balm -containing pain relief products. After making the same attempt, the assessment parameter results indicated that, provided the herbs formulation in the balm, stays steady. flower extracts used to relieve pain, Reduce Inflammation and This herbal balm show good physical properties. Based on the study research it can be Concluded that herbal components can be effectively formulated as in the form of balm which having excellent pain-relieving property. Patanjali Balm is used for providing natural relief with a blend of herbal ingredients, it helps soothe headaches, cold symptoms, muscle soreness, and joint pain. Its fast-absorbing, non-greasy formula makes it easy

to apply and provides quick relief. Ideal for on-the-go use, this balm is perfect for everyday application when needed.

REFERENCES

1. C.K. kokate, A. P. Purohit, S. B .Gokhale , "Text book of Pharmacognosy",Nirali Publication,49th edition.
2. Shoba Rani R. Hiremath. Text book of Industrial Pharmacy, Drug deliverysystem & Cosmetics & Herbal Drug Technology “, Universities Press (India)Ltd,2nd Edition.
3. P.p. Sharma,"Cosmetic formulation manufacturing and Quality Control " 5 th edition Vandana publication- delhi4) fizz and Richard 2012 transdermaldelivery system UP patent 5736154.
4. Miss. Telange- Patil P.V., Miss Bendgude P. D., Miss. Chavan M. R. Miss. Jadhav S.T., “Formulation and Evaluation of herbal pain



- relivingBalm” 2022 IJCSPUB volume 12 ISSN: 2250-1770.
5. P. Geetha Devi, S. Yamuna, Sk. Nourin¹, K. Naveen², Sk. Salma³, D. swathi⁴, K. Gayathri⁵, Subrahmanyam "Formulation of NaturalMiracle Balm By Using Herbal Plants And Evaluation On Topical Regions" | Ymer Volume 21: Issue 7 (July) - 2022 |ISSN: 0044-0477.
 6. Sujeewa Krishanthi Hatheway*, Thotawaththage Losh Adhi Indunika Srilal "Development of a novel herbal balm with Leea in diva (Bumf) Marr (Borella) leaf extract and in vitro evaluation of anti-inflammatory and radical scavenging activities" Asian Journal of Pharmacognosy 4(3): 22-29 ISSN-0128-1119.
 7. Jagruti S Bidar, Shivam S Wamankar, Kajal K Kakkar, Samadhan K cowalker "Formulation and evaluation of herbal pain reliving balm" 'International Journal of Advanced Research and Development 2023Volume 8, ISSN: 2455-4030
 8. Ahmadi A, Schwebel DC, Rezaei M. The efficacy of wet-cupping in the treatment of tension & migraine headache. Am J chin Med,2008:36(1):37-44.
 9. Nalla Arvinda and channel Krishna Mohan "Formulation, Evaluation of herbal ointment for Antimicrobial Activity" World Journal of Pharmaceutical and Medical Research, 2017: 3 (7): 113 – 117.
 10. Pratiksha Salunke, Shital Markad, Komal Magar, "Formulation and Evaluation of Herbal Pain Relief Balm" 2024 IJCRT | Volume 12, ISSN: 2320- 2882.
 11. Sekar Mahendran & Kurashiki Abdul Rashid "“Formulation, Evolutions & Antibacterial properties of Herbal ointment containing methanolic Extract of CLIN acanthus nutans leaves” International Journal of Pharmaceutical and clinical Research 2016; 8(8) : 1170 -1174 .
 12. Dr. Sakthivel M1*,Dr Mohamed Halite S2*, Karthikeyan R3, Kaviya M3,Kiruthika M3, Kowsalya S3, Krishnapriya R3 "Formulation and Evaluation of Herbal Ointment ContainingNeem and Turmeric Extract" Int. J. Pharm. Sci. Rev. Res., 78(2), January – February 2023; Article No. 21ISSN 0976 – 044X.
 13. P. Geetha Devi, S. Yamuna, Sk. Nourin¹, K. Naveen², Sk. Salma³, D. Swathi. Gayathri, P. Subrahmanyam "Formulation Of Natural Miracle Balm By Using Herbal Plants And Evaluation On Topical Regions" Volume 21: ISSUE 7 (July) - 2022 |YMER || ISSN: 0044-0477.
 14. Riya Sangelia¹, Neelam Dhankhar², Shoaib Khan³ and Sunil Kumar "Preparation and Assessment of Herbal Lip Balm by using Butea MonospermicFlowers" African journal of biological sciences, Volume 6, Issue 9,2024 ISSN: 2663-2187.
 15. Geeta Patel, Naskhi Patel, Anvi Patel and Karina Sawani Development and Evaluation of Herbal Balm For cheilitis | WJPR | Vol 13, Issue 13, 2024. | ISO 9001 |ISSN 2277– 7105
 16. Yadav A.1, Karmokar K.2 Gop R.3, Mudartha D.4, Maheshwari V.5 Formulation and Evaluation of Herbal Lipbalm from Amaranth Leaf Colour Pigment International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321- 9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 8 Issue VI June 2020
 17. Hafizh Fadhullah Anisa Megantika, Kanya Citta Hana Alifia, Pandu Nugroho, Talitha Zada Gofara Durable Moisturizing Herbal Balm with Honey, Hyaluronic Acid, and SPF



UI Proceedings on Science and Technology,
Vol. 2 2019

18. P M Kumarapperuma1*, S A S D Senanayake1, M M P M Hasanthi1, N T B Dias1, S K Hettihewa2 Formulation of a novel anti-inflammatory balm using *Neolitsea cassia* (L.) *International Journal of Pharmaceutical Science and Research* Volume 9, Issue 3, 2024, ISSN: 2455-4685.
19. Sumiyati Y, Nafisa S, Winarti W, Mumpuni E, Pratami DK, Aulena DN, et al. Formulation and evaluation of red ginger oil (*Zingiber officinale* Roscoe) balm as an analgesic. *Int J Appl Pharm*,2022:14(3):88–90.
20. Khogta S, Patel J, Barve K, Londhe V. Herbal nano-formulations for topical delivery. *J Herb Med*,2020:20:100300.
21. Sahu K. Development and characterized analgesic herbal balm using herbs as a medicine. *GSC Adv Res Rev*,2024:19(3):122–127.
22. Kumar, E.; Mastan, S.K.; Amrander Reddy, G.; Ragunandan, N.; Sreekanth, N.; Chaitanya, G. Anti-arthritis property of the ethanolic leaf extracts of *Cardiospermum halicacabum* Linn. *Biomed. Pharmacol. J.*, v.1, p.2, 2008.

HOW TO CITE: Patil Indira*, Pawar Pallavi, Ashwini Pundkar, Prachi Murkute, Santosh Payghan, Comparative study of Herbal Pain Relief Balm with Patanjali Herbal Balm, *Int. J. of Pharm. Sci.*, 2025, Vol 3, Issue 4, 1759-1771
<https://doi.org/10.5281/zenodo.15212037>

