

भैषज संदेश BHAISHAJ SANDESH



Newsletter Published By Columbia Institute of Pharmacy, Raipur, (C.G.), India

NBA Accredited UG Programme (B. Pharm.)
CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals
DST-FIST, GOI sponsored PG Programme

CONTENTS

- *Message from Editor's Desk*
- *Columbia Institute of Pharmacy*
- *Achievements*
- *Women's Day Celebration*
- *Annual sports and Cultural Week*
- *Hanuman Jayanti Celebration*
- *Prize Distribution Ceremony*
- *Industrial Visit*
- *Campus Interview*
- *SPIC MACAY*
- *Faculty Development Program*
- *Causerie*
- *Students' Thought*
- *Best Report on Industrial Visit*
- *GPAT Quiz*
- *New drug approval 2020*
- *Inspiring Quotes*
- *Less Known Facts about Traditional Food*
- *Plants with Health Benefits*
- *Upcoming events*

Message from Editor's Desk

Welcome to all the readers.....

We are very happy to introduce volume II of 9th edition of our bimonthly news letter. As we all know, a newsletter mirrors a college- its vision and mission. It also highlights the event, activities, academic progress and achievements of students. Contribution of teachers and other crucial information related to Pharmacy field are also incorporated in it. In this edition, we have tried to capture the last two months activities. I do hope that the newsletter encourages many more including students to use it as a platform to express their creativity. Please feel free to offer any suggestion for improvement.

Sincerely

Dr. Ravindra Pandey

Editorial Board

1. Dr. Ravindra Pandey
Professor, CIP, Raipur
2. Disha Kesharwani
Assistant Professor, CIP, Raipur
3. Shreya Jain
B. Pharm 8th Sem

Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)
CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals
DST-FIST, GOI sponsored PG Programme

Columbia Institute of Pharmacy

It's a great pleasure to introduce Columbia Institute of Pharmacy, which is Synonymous to ultimate in Pharmacy education in the state of Chhattisgarh. Columbia Institute of Pharmacy, Raipur is run and managed by Jan Pragati Education Society (JPES), established in the year 2003. Innovation excellence & quality are the driving forces on the vision of Columbia Institute of Pharmacy which has a rich proud heritage of academic excellence. The campus is lavishly spread over acres of lush green land and situated 14 km away from the hustle bustle of the city and just 4 km away from Chhattisgarh state assembly setting unabated efforts to add value in Pharma, Engineering and Management education.



Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

ACHIEVEMENTS

Paper Publication

1. **Dr. Pushpa Prasad** published a paper titled "Metallic ion- based grapheme oxide functionalized silk fibroin- based dressing promotes wound healing via improved bactericidal outcomes and faster re-epithelization" in the current issue of Biomed Mater, 20;17, 2022 along with **Dr. Amit Roy**, Sharda Gupta, Mohammad Mahtab Alam, Irfan Ahmed and Arindam Bit .
2. **Dr. Amit Roy** published a paper titled "Accelerating skin barrier repair using novel bioactive magnesium-doped nanofibers of non-mulberry silk fibroin during wound healing" in the current issue of Journal of Bioactive and Compatible Polymers, 37: 1, 2022 along with **Dr. Pushpa Prasad**, Sharda Gupta, Arindam Bit, pallab Dutta, and Venna Acharya.
3. Mr. Gunjan Kalyani published a paper titled "Delineation on Drug Regulatory Agencies with special reference to Europe and India" in the current issue of International Journal of Pharmaceutical Sciences Review and Research, 73: 2, April 2022.

Other Achievements

1. **Dr. Beena Gidwani** delivered an **expert session** in online mode on event "**A week for discussing struggle, stress and health challenge in life of women in our country**" as a special guest and Keynote Speaker, organized by Humanitarians: The Youth in WOW week of Women.
2. **Dr. Ravindra Pandey** gave his valuable contribution as "**Chairperson**" in the **International Conference** on Current perspectives of Pharmacovigilance in Drug Discovery and Development **held on 7th and 8th April 2022 at Kalinga University**, Faculty of Pharmacy, Naya Raipur, Chhattisgarh, India.
3. **Dr. Shivshankar Shukla** gave his valuable contribution as "**Adjudicator**" for poster and oral presentations in the **International Conference** on Current perspectives of Pharmacovigilance in Drug Discovery and Development **held on 7th and 8th April 2022 at Kalinga University**, Faculty of Pharmacy, Naya Raipur, Chhattisgarh, India.

Students Achievements

1. Students of B. Pharm 8th Semester, Ms. Renu Sharma, and Ms. Shreya Jain got the chance to **hold the Indian Flag** at the **Wagah Border, Attari** on 21/04/2022.

Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

Women's Day Celebration

Women's day was celebrated by Columbia Institute of Pharmacy on 08th March 2022. The theme for the program was "Gender Equality Today for Sustainable Tomorrow". Essay and speech competitions were organized on the occasion. All the students were actively participated in the programs.



Annual Sports and Cultural Week

Columbia Institute of Pharmacy organized annual sports and cultural week from 12- 16 March 2022. The program was started with inspiring speech of Shree Harjeet Singh Hura, Secretary, Jan Pragati Education Society, in inaugural program. Different sport activities were organised including kho- kho, kabaddi, volley ball, badminton, chess, carom, tug of war, discus through etc. The cultural events organised were dancing and singing competitions. Students participated and enjoyed in all the activities.



Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

Hanuman Jayanti Celebration

Columbia Institute of Pharmacy celebrated Hanuman Janmotsav on 16th April 2022 in Temple of Columbia campus. All the members of Columbia actively participated in poojan, hawan and Prasad preparation on this auspicious occasion. After pooja and hawan, khichadi prasadam was distributed.



Prize Distribution Ceremony

Prize distribution ceremony was organized by Columbia Institute of Pharmacy on 16 April 2022 for appreciation of students for their performance in extracurricular activities. The prizes were given by Shree Kishore Jadwani, Chirman, Janpragati Education Society. All the members of Columbia actively participated in the program.



Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

Industrial Visit

An Industrial visit tour was organised for one week from 22/04/22 to 29/04/2022 by Columbia Institute of Pharmacy, Raipur for the students of B. Pharm 8th sem. The objective of the tour was to familiarize students with the real-life scenario of the industry working environment and to provide practical exposure for the subjects taught to them during regular classes. Students visited two industries Dr. Reddy's laboratories and BRD Health sciences, Baddi, Solan, Himanchal Pradesh. The Faculty members Ms. Monika Bhairam, Ms. Poonam Sahu, Mr. Swapnil Lal and Mr. Shiv Kumar Bhardwaj also joined them during the visit.



Campus Interview

A campus interview was held on 18th April 2022 for different positions at TN Sys Meryl Pharma Pvt Ltd. Six students of B. Pharma 8th semester got selected. The students' names are Pawan Kumar Sahu, Akant Verma, Suraj Banjare, Biplav Dwivedi, Shreya Jain and Manjusha Sahu. A record number of students being placed in reputed multinational pharma companies through the placement cell of the institutions in these years. This speaks volumes about the calibre and competence of our students as well as the efforts taken by the Principal & faculties in our unwavering focus on quality education.



Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

SPIC MACAY

Columbia Institute of Pharmacy, Raipur in association with SPIC MACAY organized an event on 29th April 2022 “The International Dance Day”. Renowned & exemplary Odishi Dancer, Ms. Janhavi Behara and her team was invited. She performed various mythological stories of Seeta haran, Lord Krishna stories, and Ram seeta sanwad etc by her dance. She also explained various Mudras of Odishi Dance. All the faculty members of Columbia group of Institutions were present along with the students.



Faculty Development Program

Columbia Institute of Pharmacy organized a faculty Development program on 29/04/22. The expert invited was Dr. B.C. Mal. He guided the faculties for maintaining the quality of education. He gave a presentation on topic **Quality Education: Role of Stakeholders**. All the faculty members of Columbia group were actively participated in FDP learnt various aspects of quality education.



Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

Causerie

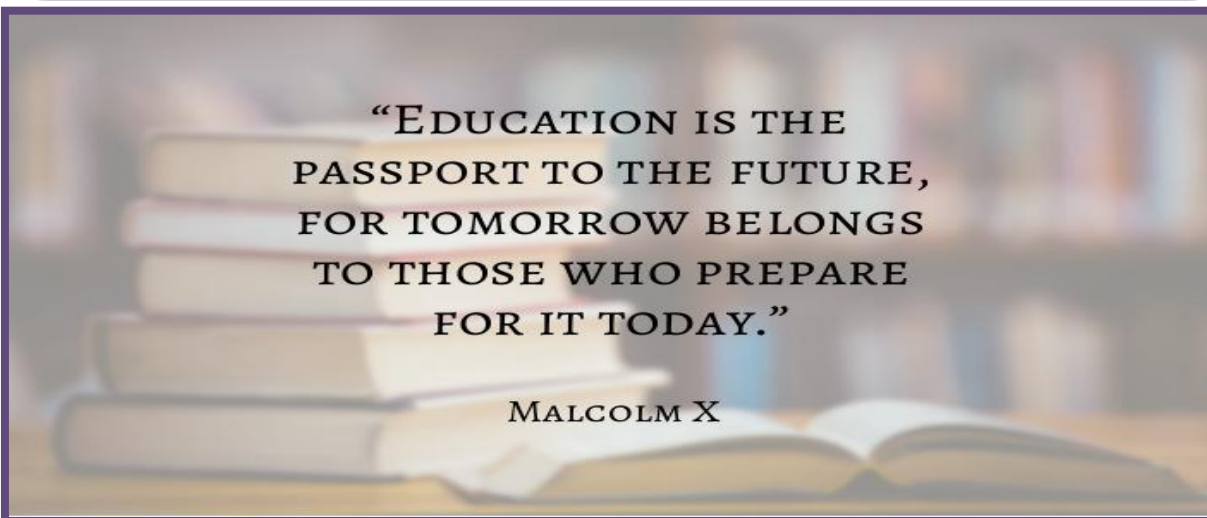
QUALITY CONTROL OF THE TRADITIONAL HERBS AND HERBAL PRODUCTS

Quality is of prime concern to human beings in all aspects of life. When it comes to the quality of the pharmaceuticals which are consumed by humans, it is of utmost important as they are used for the wellbeing of the human kind. There are stringent guidelines and regulation for the quality control of the synthetically synthesized chemical pharmaceuticals. They have to undergo various series tests and quality control checks before being marketed and consumed by the patients and consumers. Due to this stringency in the regulations, the quality of the synthetically manufactured pharmaceuticals is maintained up to the mark which assures both safety and efficacy of the pharmaceutical products.

The quality of the herbals is altered by various physical, chemical, and geographical aspects which contribute to the quality of these materials. Apart from that, adulteration is also an increasing concern when it comes to herbal material quality. Various chemical and phytochemical test, analytical techniques, and hyphenated analytical techniques are used for determining the quality aspects of the herbal materials in the herbal pharmaceuticals.

In the case of the herbal products which are part of traditional medicine system, the novel formulations developed are required to be standardized for safety, efficacy, and potency. It is required that the various techniques are used for the quality control examination of the herbs, which can be regulated to gain the required quality products by setting proper norms. And this in turn will provide the safer use and effective treatment and required potency of the products which will benefit society by providing means of wellbeing.

Ms. Neha Dubey,
Assistant Professor, CIP, Raipur



**“EDUCATION IS THE
PASSPORT TO THE FUTURE,
FOR TOMORROW BELONGS
TO THOSE WHO PREPARE
FOR IT TODAY.”**

MALCOLM X

Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme



Students' Thought

Petals like life

Our life is like flower petals,
Sometimes hard and sometimes soft!
When a flower come to life,
It know how to fight!
When it comes to blooming,
It struggles all day and night!
After blooming it cheerfully enjoys the side,
While it know that it will not be able to
survive more than one night!
Still it blooms till its last breath,
Taking away the memories it made!
Lastly it withers by the end of the day,
Then another flower come another day!

Nidhi Chandravanshi
B. pharm 8th Sem

Thank you, teachers

Dear teachers,
Yours lessons are with me even today,
They didn't include academics,
This much I can say!
I saw you teach history in a crisis,
Saw you behave like nothing amiss!
But when I walked your footsteps,
I realized,
At the brave front you put up,
I was surprised!
At the spirit, at the hope and the drive,
This lesson of faith and work,
We all always revive!
You taught us humility
In the midst of every quagmire,
Your courage is a thing to admire!
This is sheer gratitude on paper,
It's a thank you for lessons,
That'll remain forever!

Kriti Navrange,
B. Pharm 8th Sem

*"The Best Way to predict your future
is to create it"*

.....Abraham Lincoln

Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

Best Report on Industrial Visit by Yash Govindani, B. Pharm 8th Semester

REPORT ON INDUSTRIAL VISIT

- **Date of visit** - 22 April, 2022
- **Place of visit** –
 - BRD HEALTHSCIENCES (Plot no. 23, DIC Industrial Area, Baddi, Dist.: Solan (H.P.), 173205
 - Dr. Reddy's Laboratories Ltd. (XQ6C+ 8FW Baddi (H.P), 173205
- **Time** – 11:00 am to 05:00 pm
- Total 50 students along with 4 faculty members have joined this industrial visit. This plants mainly deals with manufacturing of lotion, ointment, ear drops, and allopathic liquid oral dosage forms and tablets.

Dr. Reddy's Laboratories in India

Dr. Reddy's Laboratories commenced its generics business in India in 1986 and is today a trusted name in the healthcare industry consistently serving the needs of millions of patients with high quality, affordable and innovative medicines across therapy areas. Portfolio spanning wide range of therapy and disease areas Over the years, the company has significantly grown its portfolio of products across mass and specialty therapies. Today, our portfolio has over 200 products covering the whole spectrum of disease areas spanning gastroenterology, oncology, pain management, cardiovascular, dermatology, urology, nephrology, rheumatology and diabetes. Seven of our brands are listed in "Top-300 of the Indian Pharma Market" and many others hold leadership positions in their respective categories. Ensuring that medicines are available when needed Dr. Reddy's has built a robust field force driven by the zeal to make a difference in the lives of patients. The 5000-member strong team network connects with more than three lakh doctors on a regular basis to ensure that quality medicines we make are available for patients across the length and breadth of the country.

BRD Lifesciences

We have one of the best Tablets and Liquid Oral facilities that are backed by our strong quality control facilities and quality assurance department. As a cGMP and ISO-9001:2008 certified Company, we follow the cGMP and GLP practices strictly. Our pharmaceutical formulations have been well received and appreciated in the market for their accurate medical combination and effective quality testing. Our formulations are well known for their safe usage and fast effect ents and their caregivers

Visiting Areas –

1. Warehouse
2. QC Department
3. Tabletpunchingmachine
4. Tabletoranulationmachine

Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

GPAT Quiz- 14

1. The effective concentration for betonies as suspending agent is
 - a) 1-2 %
 - b) 2-5%
 - c) 5-10 %
 - d) 10-20 %
2. The most important clue that helped in the determination of the double helical structure of DNA came from
 - a) Chargaff's rules
 - b) Hershey-Chase experiment
 - c) Avery-MacLeod-McCarty experiment
 - d) Nirenberg and Khorana's codon assignments
3. Tissue plasminogen activator that disperses blood clots, beneficial if it is given within
 - a) 3 days
 - b) 9 hours
 - c) 3 hours
 - d) 24 hours
4. A drug is used as an ophthalmic solution in Herpes keratitis is
 - a) Zalcitabine
 - b) Trifluridine
 - c) Ritonavir
 - d) Stavudine
5. The chairman of the Drugs Technical Advisory Board is
 - a) The Drugs Controller of India
 - b) The Director, Central Drugs Laboratory, Kolkata
 - c) The President, Pharmacy Council of India
 - d) The Director General of Health Services
6. The example of water soluble antioxidant is
 - a) Butylated hydroxyl anisole
 - b) Butylated hydroxyl toluene
 - c) Propyl gallate
 - d) Ascorbic acid
7. An antineoplastic agent methotrexate inhibits the enzyme dihydrofolate reductase. they bind so tightly that their inhibition has been termed "Pseudo irreversible"-basis of this binding is due to-
 - a) Free carboxyl group
 - b) N- methyl p-amino benzyl group
 - c) Di amino pyrimidine
 - d) Glutamic acid
8. In the process of sugar coating of tablets the colorants are added in one of the following steps
 - a) Syrup coating
 - b) Polishing
 - c) Sub coating
 - d) Seal coating
9. An 80 year old lady suffering from osteoarthritis of hip and knee joints is given diclofenac 50mg thrice daily and paracetamol 1 g as required. She complains of passing black stools. This symptom is due to-
 - a) Paracetamol causing the black stools
 - b) Change in food habits
 - c) Upper gastro intestinal bleeding due to diclofenac
 - d) Age related decrease in gastrointestinal motility
10. A common organism that causes meningitis belongs to the genus
 - a) Candida
 - b) Neisseria
 - c) Pseudomonas
 - d) Clostridium

Answer key Quiz 13: 1.(a) 2. (c) 3.(c) 4.(d) 5.(a) 6.(c) 7.(c) 8.(b) 9.(b) 10.(a)

Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

New Drug Approved in 2022

Ztalmi

Company: Marinus Pharmaceuticals

Approval Status: Approved on 18/03/2022

Specific Treatments: For the treatment of seizures in cyclin-dependent kinase-like 5 deficiency disorder

It is basically Ganaxolone which is a neuroactive steroid gamma-aminobutyric acid (GABA). A receptor positive modulator indicated for the treatment of seizures associated with cyclin-dependent kinase-like 5 (CDKL5) deficiency disorder (CDD) in patients 2 years of age and older

Mechanism of Action

Ganaxolone binds to allosteric sites of the GABA_A receptor to modulate and open the chloride ion channel, resulting in a hyperpolarization of the neuron. This causes an inhibitory effect on neurotransmission, reducing the chance of a successful action potential (depolarization) from occurring.

Side Effects

Somnolence, pyrexia, salivary hyper secretion, and seasonal allergy.

Inspiring Quotes:-

- ✓ *"The bad news is time flies. The good news is you're the pilot."*
- ✓ *"Success is not final, failure is not fatal: it is the courage to continue that counts."*
- ✓ *"You define your own life. Don't let other people write your script."*
- ✓ *"Do not allow people to dim your shine because they are blinded. Tell them to put some sunglasses on."*
- ✓ *"You can be everything. You can be the infinite amount of things that people are."*

Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

Less Known Facts about Traditional Food Bel Sharbat

Bel fruit is also known as bengal quince, stone apple or wood apple. These round shaped hard skinned fruits have a mushy and soft pulp within. The aroma is like a peachy aroma. The taste is sweetish sour. Bel has a lot of health benefits. It helps in digestion and helpful in getting rid of ulcers and constipation. It also helps in blood purification.

Recipe: First take the bel fruits and with a rolling pin (belan) hit all around. Open the hard shell brown colored pulp. With a spoon scoop out the soft pulp. Add the scooped soft pulp in a bowl. Then add 1 cup water. Soak this mixture for 20 minutes. After 20 minutes, mash the pulp. Mash very well. Strain the mashed mixture in parts. Once the mixture is strained and then adds 12 tablespoons jiggery also adds sugar. Then add roasted cumin powder, cardamon powder and 2 pinches of black salt. Mix very well. Pour in glasses and serve bel sherbat.

Nutritional value:

Nutrients	Per serving (100 gm)
Edible portion	64%
Moisture(gm)	61.5
Protein(gm)	1.8
Fat(gm)	0.3
Mineral(gm)	1.7
Fibre(gm)	2.9
Carbohydrates(gm)	31.8
Calcium(mg)	85
Phosphorous(mg)	50
Vitamin C (mg)	8
Potassium (mg)	600
Energy	137k.cal

**“SUCCESS CONSISTS OF GOING FROM FAILURE
TO FAILURE WITHOUT LOSS OF ENTHUSIASM.”**

Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

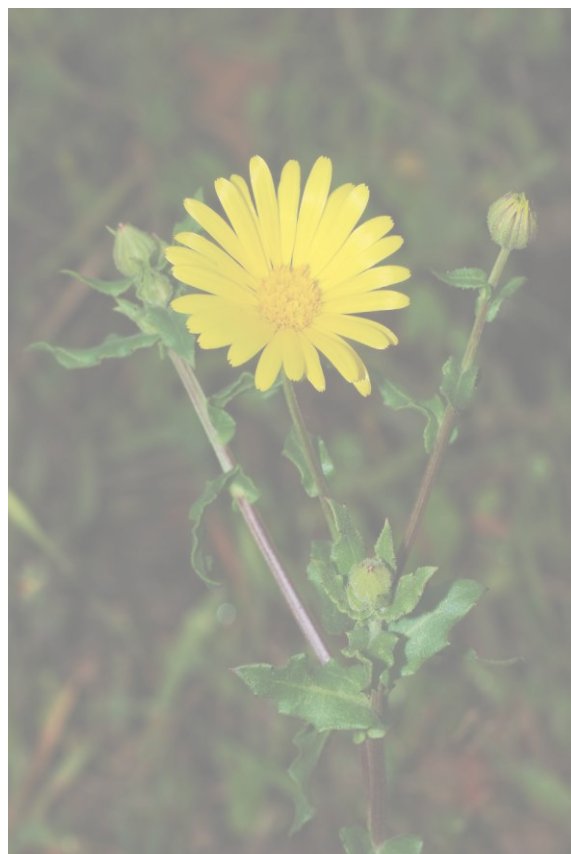
CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

Plants with Health Benefit

Calendula

Synonym: pot marigold, common marigold, ruddles, Mary's gold or Scotch marigold.



Family:	Asteraceae
Kingdom:	Plantae
Order:	Asterales
Genus:	<i>Calendula</i>

Nutritional value per 100 g (3.5 oz)	
Total Calories	335
Total Fat	2.47
Cholestrol	Nil
Total Carbohydrate	Traces
Protein	12.22
Vitamin A	1.73
Vitamin c	45.5
Sodium	1070.34

Morphology:

Calendula officinalis is a short-lived aromatic herbaceous perennial, growing to 80 cm (31 in) tall, with sparsely branched lax or erect stems. The leaves are oblong-lanceolate, 5–17 cm (2–7 in) long, hairy on both sides, and with margins entire or occasionally waved or weakly toothed. The inflorescences are yellow, comprising a thick capitulum or flowerhead 4–7 centimetres surrounded by two rows of hairy bracts; in the wild plant they have a single ring of ray florets surrounding the central disc florets. The disc florets are tubular and hermaphrodite, and generally of a more intense orange-yellow colour than the female, tridentate, peripheral ray florets. The flowers may appear all year long where conditions are suitable. The fruit is a thorny curved achene.

Chemical Composition:

The flowers of *C. officinalis* contain flavonol glycosides, triterpene oligoglycosides, oleanane-type triterpene glycosides, saponins, and a sesquiterpene glucoside

Uses: *Calendula officinalis* oil is still used medicinally as an anti-inflammatory and a remedy for healing wounds. *Calendula* ointments are skin products available for use on minor cuts, burns, and skin irritation.

Columbia Institute of Pharmacy, Raipur

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme