

2nd International Conference

Organized By

Ambe Durga Education Society's

Dadasaheb Balpande College of Pharmacy

(Degree and Diploma),

Near Swami Samarth Dham Mandir, Besa,
Nagpur-440037, Maharashtra, India.

**on 14th and 15th
February 2020**

Theme:

**"Invigorating Research in
Pharmaceuticals:
Reasonable Industrial Approach"**

Venue: Hotel RE-GEN-TA,
CENTRAL Nagpur.
Jagnade Square,
Nandanvan, Nagpur,
Maharashtra, India.

Souvenir and Abstract Book

*"An event that is full of potentials to learn the latest trends in the
Pharma industry and to learn about the business culture."*



National Assessment and Accreditation Council
An Autonomous Institution of the University Grants Commission
राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्
विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान



DEVELOPMENT AND EVALUATION OF MUCOLYTIC FAST DISSOLVING ORAL FILM CONTAINING AMBROXOL, GUAINPHENESIN AND LEVOSALBUTAMOL

Telrandhe Roshan, Kankariya Ekta, Mahajan Nilesh, Mahapatra Debarshi, Gangane Purushottam

Department of Pharmaceutics, Dadasaheb Balpande College of Pharmacy, Nagpur- 440037, MS, India

roshan.telrandhe24@gmail.com

ABSTRACT

This research aimed at development and evaluation of mouth dissolving oral film (MDF) containing mucolytic drugs Ambroxol, Guainphenesin and Levosalbutamol. The main objective was immediate availability of drugs following bucal absorption. Taste masking of all bitter taste drugs and formulation development and evaluation of MDF was the other objective. Combination of polymers (HPMC K15 and pectin), disintegrants, sweeteners, and complexing agent (β -cyclodextrin) offered taste masking drugs loaded (ambroxol, guainphenesin, and levosalbutamol) films. Drug- β -cyclodextrins complexes were prepared by kneading method in the drug: polymer ratio of 1:1, 1:2, and 2:1, respectively. The formulated films were evaluated for their physiochemical parameters like disintegration time, surface pH, thickness, weight, folding endurance, drug content, in-vitro taste evaluation, drug-excipient interaction by FT-IR, physical state analysis by DSC and in-vitro dissolution study. The Formulation F-1 as the drug: polymer ratio 2:1 with HPMC K15M and pectin showed increased the release rate drug contents of 89.87% for ambroxyl; 84.81% for guainphenesin; and 93.94% for levosalbutamol. A lower entrapment efficacy has been observed in the polymeric constituents (HPMC K15 and pectin) present in the formulation. Formulation F-1 shows an analogous cumulative drug release was examined with an impressive >90% drug release in <10 minutes duration. The optimized formulation F-1 was also showed satisfactory pH (6.7), the disintegration time of 26 seconds. The present research will definitely overcome all the limitations of conventional dosages form and will open new utilities and avenues for rationally developing and commercializing mucolytic film formulations in the near future.

Keywords Oral film; Fast dissolving; Taste masking; Mucolytic drugs.

EXTRACTION AND IDENTIFICATION OF MELATONIN FROM GRAINS AND VEGETABLES FOR INDUCING SLEEP

Tiwaskar Gayatri , Ranekar Sham, Thakare Vinod, Warokar Amol, Dumore Nitin

Dadasaheb Balpande College of Pharmacy, Besa, Nagpur, India- 440037

gtiwaskar073@gmail.com

ABSTRACT

To determine the contents of melatonin in naturally occurring fruits and crops and to identify the presence of melatonin by using various parameters. Sample Preparation (tomatoes): Freeze-dried fruit sample was reconstituted to its original moisture. Then the fruit extract were mixed to ensure proper mixing and allowed to sit at room temperature for 5 minutes to ensure good rehydration. The sample was then centrifuged for 10 minutes at 5000 rpm and 4°C. An aliquot of 500 μ L of the supernatant (juice) was decanted into 1.7 ml in replicates of three per sample. Chloroform was added to the tubes at 700 μ L to extract the melatonin. The tubes were capped and shaken vigorously by hand for 10 minutes at room temperature. The solvent layer was decanted into clean tubes and the extraction was repeated. The first and second solvent extracts were combined and dried at room temperature. Detection: The detection of melatonin, both sample and standard was investigated using high performance liquid chromatography (ACN: water), TLC (methanol: chloroform). This same work is done with rice grains and further work is processing with corn and peanut. The melatonin extracted from the tomato was identified by HPLC, TLC method. The retention time of standard and sample melatonin was 9.36 and 9.40 resp. The above results demonstrate that extract of grains and vegetables contains melatonin that can be beneficial to induce sleep by natural origin.

Keywords Sleep, melatonin, HPLC and Grains