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REVIEW ARTICLE

Simplified Informative Study on Nanoemulsion

H. Sujitha[1], P. Anup Reddy[2], S. Pavani[2]*.....325

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ABSTRACT:
The fact that 40% of the newly discovered chemical entities and many existing drug molecules are poorly water soluble, presents a serious challenge to the successful formulation and marketing of new drugs in the pharmaceutical industry.This review gives a conceptual idea about Nanoemulsion (NE) system.Various formulation strategies have been reported including the use of Surfactants, Cyclodextrins, Nanoparticles, Solid dispersions, Micronization, Lipids and Permeation enhancers.Recently, much attention has been paid to lipid-based formulations with particular emphasis on Nanoemulsion and dry emulsion drug delivery systems to improve the oral bioavailability of lipophilic drugs. Nanoemulsion drug delivery systems are among the methods used to improve the oral bioavailability of poorly soluble drugs by presenting and maintaining the drug in a dissolved state, in small droplets of oil, all over its transit through the gastrointestinal tract.

KEYWORDS: Nanoemulsion,Drug delivery, Phase Diagram, Surfactant, Droplet Size.

Biological, pharmaceutical and analytical considerations of CaCo-2 Monolayer.

Bhavesh K. Machhar, Dr. Ragin Shah, Bhavin Bhimani, Dr. Upendra Patel, Dhiren Daslaniya, Ghanshyam Patel.*
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ABSTRACT:
A major objective in the pharmaceutical industry is to develop new drugs with Good Oral Bioavailability that is a highly desirable property for molecules under investigation in the drug- discovery process because it opens up a variety of formulation possibilities, dosing conditions and leads to better patient compliance. Good oral bioavailability occurs when the drug has Maximum Solubility and Maximum Permeability at the site of absorption. Hence the extent of absorption of the drug in-vivo could be predicted based on permeability and solubility measurements in-vitro. Thus the Assessment of Intestinal Permeability represents one essential part in the prediction of oral any new drug candidate. Moreover, permeability information provides the formulation scientist with both Biopharmaceutical as well as Regulatory Insight during a prototype formulation. So far as a number of in-vitro methods for assessing the intestinal permeability of a given drug candidate have been developed and recently reviewed. In the last decade, the use of Caco-2 cell monolayer has gained in popularity as an in-vitro primary absorption screening tool in several pharmaceutical companies and several examples of successful correlation with human absorption have been reported. Spontaneously differentiate to express morphological (polarized columnar cells) and functional characteristics of mature small-intestinal enterocytes. Four times higher in transepithelial resistance compared to HT29-H monolayer. It expresses various drug metabolizing enzymes like, aminopeptidase, esterase, and sulfatase. It express various transporters like, uptake transporters responsible for the absorption of bile acids, large neutral amino acid, biotin, monocarboxylic acids and PEPT1, and efflux transporters like, P-glycoprotein, BCRP, MRP2 and MRP3. Expression of brush border enzymes such as lactase sucrase, isomaltasedipeptidylpeptidase IV.

KEYWORDS: Permeability, Enzymes, Prototype, $CaCO_2$ Monolayer

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ABSTRACT:
Many therapeutic drugs are difficult to reach the central nervous system (CNS) from the systemic blood circulation because the blood-brain barrier (BBB) and the blood-cerebrospinal fluid barrier (BCSFB) form a very effective barrier which prevents most molecules from passing through it. There is the unique relationship between nasal cavity and cranial cavity tissues makes intranasal delivery to the brain feasible. An intranasal delivery provides some drugs with short channels to bypass the blood-brain barrier (BBB), especially for those with fairly low brain concentrations after a routine delivery, thus greatly enhancing the therapeutic effect on brain diseases. The nasal mucosa is nearby the brain, cerebrospinal fluid (CSF) and the drug concentrations can exceed plasma concentrations. Intranasal delivery provides a noninvasive method of bypassing the BBB to rapidly deliver therapeutic agents to the brain, spinal cord, lymphatics and to the vessel walls of the cerebrovasculature for treating CNS disorders.

KEYWORDS: Central nervous system (CNS), Blood-brain barrier (BBB), Cerebrospinal fluid, Nasal cavity.

RESEARCH ARTICLE

Evaluation of antioxidant and wound healing activity of the leaves of *Bridelia airyshawii* spreng.
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ABSTRACT:
In recent years, oxidative stress and free radicals have been implicated in impaired wound healing**.** The wound healing parameters were evaluated by using incision, and dead space wounds in extract-treated rats and controls. free radical are generated in side every human body these free radicals are beneficial if they are generated in small amount but if they are generated in huge amount they are harmful to our body. At low concentration free radicals can stimulate the proliferation of cells as well as the formation of connective tissue and new blood vessels. "Skin wounds are rich in free radicals. There was a longer-lasting free radical effect in the wounds that had been treated with acetone and aqueous extract of *LBR*. The wound healing activity of acetone and aqueous extracts of *Bridelia airyshawii* Spreng. (Euphorbiaceae) was evaluated on incision and dead space wound models on albino rats. The healing activity was more significant in acetone extract treated animals. In incision wound models the wound healing process was evidenced by increase in the tensile strength. While in dead space wound model, the weight of the granuloma and tensile strength were increased indicating the increase in collagenation. The results were also compared with control and standard drug.

KEYWORDS: Antioxidant Activity, *Bridelia airyshawii*, Dead space, Incision wound.

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ABSTRACT:
In the present study, an attempt was made to prepare and evaluate the natural polymers based compression coated tablets for controlled release of an antibiotic, cefadroxil monohydrate. The core tablets were prepared by direct compression method and compression coating granules were prepared by wet granulation method using sodium alginate and xanthan gum. The weight and drug content of all the tablets were found to be uniform. The hardness and friability were found within specified range. The core tablets released 99% drug within 1 h, while the compression coated tablets were capable of releasing the drug for 24 h. The coating formula containing more amount of aluminum chloride released the drug slowly as compared to barium chloride. Drug release mechanism was found to be non-Fickian transport type.

KEYWORDS: Compression coated tablets, cefadroxil monohydrate, controlled release, sodium alginate, xanthan gum.

IR Quantification of Alverine Citrate in Bulk and Oral Dosage Form

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ABSTRACT:
Alverine is chemically N-Ethyl-3-phenyl-N-(3-phenylpropyl) propan-1-amine, commonly used as a smooth muscle relaxant, antispasmodic in irritable bowel syndrome and dysmenorrheal agent. A simple and sensitive Infrared spectrophotometric method has been developed for the estimation of alverine citrate in capsule dosage form. The Method involves the determination of alverine citrate by absorbance and peak area method of IR spectrophotometry. The sample was analyzed by KBr pellet method; IR band at 2052cm-1 was considered for quantification;. The calibration graph were plotted with a) absorbance against concentration b) area calculated by inbuilt software against concentration; The Beer's law range was found to lie between 1-3mg. The correlation coefficient for the method was found to be 0.999 and the developed method was analyzed for specificity, limit of detection (LOD), limit of quantification (LOQ), linearity of response, precision and accuracy. Thus the proposed method could be adopted for routine analysis of bulk drug and its formulation.

KEYWORDS: Infrared spectroscopy (IR), Beer's law, Limit Of Detection (LOD), Limit Of Quantification (LOQ)

Spectrophotometric Estimation of Faropenem in bulk and in Pharmaceutical Formulations

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ABSTRACT:
A simple, economical, precise, reliable and reproducible Visible Spectrophotometric Method has been developed for the estimation of Faropenem in bulk as well as in tablet formulations. The method is based on the formation of blue colored chromogen, when the drug reacts with Folin-Ciocalteu (F-C) reagent in alkaline medium. The colored species has an absorption maximum at 745 nm and obeys Beer's law in the concentration range 50-300 mcg/mL. The apparent molar absorptivity and sandell's sensitivity were 0.370x 103 and 0.587respectively. The slope and intercept of the equation of the regression line are 0.001 and 0.0479 respectively.

The optimum experimental parameters for the reaction have been studied and the validity of the described procedure was assessed. Statistical analysis of the results has been carried out revealing high accuracy and good precision. The proposed method was successfully applied for the determination of Faropenem in pharmaceutical formulations.

KEYWORDS: Faropenem, FC(folin-ciocalteu) reagent, Ultraviolet-Visible double beam- spectrophotometer, calibration curve, absorption spectrum.

Preliminary Evaluation of *Remusatia vivipara* tubers Mucilage as Gelling Agent

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ABSTRACT:
The mucilage from the tubers of *Remusatia vivipara* (Family Araceae) was extracted by dissolving in water and precipitating in 90% alcohol, yield (10 %) of mucilage. Such mucilage when mixed with water, a protective and soothing preparation results. The objective of the present work is to study the *Remusatia vivipara* mucilage as gelling agent. To study the gelling properties, gels were prepared using Diclofenac sodium as model drug. Six batches of drug loaded gels with concentration of mucilage corresponding to 2.0,2.5,3.0,3.5,4.0 and 4.5%w/w were formulated by using glycerin as wetting agent and thiomersol as preservative. The prepared gels were evaluated for Diclofenac sodium content, pH, rheological studies such as viscosity and extrudability, Consistency, Homogeneity, Spreadability, in vitro diffusion profile and stability studies. The gel prepared with 3.5 % of *Remusatia Vivipara* tubers mucilage showed desired gel characteristics with better drug release profile when compared with marketed formulation. Stability study revealed that the gel formulations were physically stable.

KEYWORDS: *Remusatia vivipara* tubers mucilage, Diclofenac sodium, gelling agent, Spreadability

Rational Use of Drugs in Acute Pharyngitis

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ABSTRACT:
Background: Rational use of drugs is well recognized as an important part of health policy. The studies which had done to document drug use patterns indicates that overprescribing, multidrug prescribing, misuse of drugs, use of unnecessary expensive drugs and overuse of antibiotics and injections are most common problems of irrational use drugs by prescriber as well as consumers. Acute pharyngitis is second most common and self limiting minor upper respiratory tract infections (URTI) in India and worldwide so everyone is worried about it and hence many drugs are still over prescribed especially antibiotics. So it is important to promote appropriate use of drugs in health care system is must and needed in achieving quality of health and medical care for patients and community. Therefore present study was done to analyze the appropriate and Rational Use of Drugs (RUD) in Acute Pharyngitis(AP).
Objective: The goal was to study and evaluate the prescription patterns with respect to rationality of drugs used in the patients clinically diagnosed for acute pharyngitis.
Method: This was an observational, cross sectional study carried out in civil hospital and Private ENT hospital at Nashik. Total 178 prescriptions of patients clinically diagnosed as acute pharyngitis and written by qualified physician were collected and assessed for RUD as per WHO's standard guidelines.
Results: We studied 178 prescriptions of acute pharyngitis between age group 18-60 years. Total 47 different drugs from different categories were used out of which 80.85% were right for treating pharyngitis. From prescription it had been noticed that only 66.85% prescriptions were correct and respective to indication. Right dose of used drugs

was mentioned in 40.44% prescriptions where as duration of therapy is right in about 71.35% prescriptions. Around 60% drugs are prescribed from essential medicine list. It had been come to our knowledge that in 26.40% prescription act of commission is followed and in 18.53% act of omission is followed. There was not a single prescription in which banned drug formulation was used for treating clinically diagnosed acute pharyngitis.
Conclusion: Prescription patterns of AP are most irrational with respect to right indication and right dosage schedule than duration of therapy. Inappropriate dose and indication may lead to different ADRs and may increase the cost of treatment.

KEYWORDS: Rational use of drugs, acute pharyngitis, drug use problems.

Formulation and Evaluation of Diclofenac sodium Organogel

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ABSTRACT:
The objective of present study was to develop diclofenac sodium organogel using sorbitan monoesters. Various organogels were prepared using isopropyl myristate, tween 80, sorbitan monostearate and sorbitan monopalmitate as organogelator. The formulated organogels were evaluated for their appearance, homogeneity, pH, viscosity, spreadibility, and % drug content and drug release. The drug release study was carried out using Franz diffusion cell.Rat skin of suitable size was clamped on to the cell. Organogel containing 7.5% of sorbitan monostearate showed highest drug release rate, however on further increasing the organogelator concentration the drug release rate was found to decrease. This decrease in drug release rate can be attributed to entrapment of drug into fiber network which hinder drug release. Organogel containing sorbitan monopalmiatate showed a lower drug release rate

KEYWORDS: Organogel, Organogelator, Span 40, Span 60, Tween 80, Isopropyl myristate

Effect of *Annona squamosa*, *Bacopa monneri* and *Baliospermum montanum* alcoholic extracts on bacterial enzymes in 1, 2-dimethyl hydrazine induced Colon Cancer in rats.

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ABSTRACT:
The intestinal microflora may play a significant role in the pathogenesis of colon cancer. Differences in composition and concentrations of some fecal and colon bacterial enzymes were initially reported in low compared to high risk colon cancer groups. Activity of colon biotransforming enzymes were considered to be hallmarks of colon carcinogenesis. *Annona squamosa*, *Bacopa monneri* and *Baliospermum montanum* show various pharmacological and biological activities. Our present study shows the effect of alcoholic extracts of *Annona squamosa*, *Bacopa Monneri* and *Baliospermum montanum* administration on 1, 2-dimethylhydrazine induced colon cancer in rat colon, and fecal and mucosal biotransforming enzyme activities. A total of 42 rats were randomized into seven groups. Administration of alcoholic extracts of *Annona squamosa* 300mg/kg b.wt, Bacopa monneri 300mg/kg b.wt and *Baliospermum montanum* 200mg/kg b.wt lowered the activities ofcolon, fecal and mucosal bio-transforming enzymes. Our findings suggest that these extracts may be possible chemopreventive agents against colon cancer.

KEYWORDS: Colon cancer, Bacterial enzymes, DMH, Mucinase, β-glucuronidase, β-glucosidase.

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ABSTRACT:
The present study was carried out to assess the cytotoxic and antioxidant activities of methanol, ethyl acetate and *n*-hexane extract of leaves of *Aegle marmelos* or Bael. The cytotoxicity assay was carried out by brine shrimp lethality bioassay. The antioxidant properties were assessed by using 1, 1-diphenyl-2- picrylhydrazyl radical (DPPH) and nitric oxide (NO) scavenging capacity. The methanol, ethyl acetate and *n*-hexane extracts showed potential antioxidant activity with IC_{50} values of 6.629, 4.383 and 3.606 µg/ml respectively and comparison was made with standard ascorbic acid having IC_{50} value of 2.687µg/ml. The methanol extract depicted potential antioxidant activity with IC_{50} value of 1.233µg/ml in nitric oxide scavenging capacity assay compared to standard ascorbic acid of 3.712µg/ml. The extracts showed potent cytotoxic activity with LC_{50} values of 4.482, 5.278 and 5.278 µg/ml respectively whereas the standard vincristine sulfate showed 3.364µg/ml. The three extracts of leaves of *A. marmelos* possessed significant antioxidant and cytotoxic potentials in this experiment.

KEYWORDS: *Aegle marmelos*, cytotoxicity, antioxidant, brine shrimp, DPPH

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ABSTRACT:
A simple, sensitive, precise and accurate UV-Visible spectrophotometric method has been developed for the determination of Risperidone in bulk drug and pharmaceutical formulation (tablet). The method is based on the oxidative coupling reaction of the drug with 3-Methyl-2-Benzthiazolinone hydrochloride (MBTH) in the presence of Ferric chloride Fe (III) to form green coloured chromogen exhibiting λ max at 666nm. Beer's law was obeyed over the concentration range of 4-14µg/ml with a linear regression value 0.993.The method was validated in accordance with the current ICH guidelines. Interday and Intraday studies showed high degree of repeatability, recoveries obtained do not differ significantly from 100% showed accuracy and reliability of the method. The proposed method was applied successfully for the determination of Risperidone in pure bulk form and in tablets without interference from commonly encountered additives.

KEYWORDS: Risperidone, UV Visible spectrophotometry, MBTH, Validation

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ABSTRACT:
The main aim of the study is to formulate Carvedilol loaded microbeads of sodium alginate using chitosan and HPMC as release modifiers by ionotropic gelation method. The microbeads were prepared by varying the concentration of sodium alginate, HPMC and chitosan. The drug-polymer compatibility was studied by FTIR studies. The prepared microbeads were evaluated for swelling ratio, particle size, drug entrapment, Scanning electron microscopy (SEM), bio adhesion study and invitro release study. Particle size distribution of both placebo and drug loaded formulations were measured by an optical microscope and particle size of optimized beads was determined by SEM. No significant drug-polymer interactions were observed in FT-IR studies. Invitro drug release profile of Carvedilol micro beads was examined in pH 1.2 N Hydrochloric acid for first 2 hours followed by phosphate buffer pH 7.4 for remaining time. The in vitro wash-off test indicated that the sodium alginate micro beads had good mucoadhesive properties. The formulated beads had shown higher entrapment efficiency, drug loading, low particle size and moisture content. The formulation F3 released Carvedilol for longer duration (24 hours) and showed better mucoadhesion.

KEYWORDS: Carvedilol, sodium alginate, microbeads, ionotropic gelation, Cross linking

Detail anatomical study of *Aponogeton natans* (Linn.) Engl. & Krause.
An important folklore medicine.

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ABSTRACT:
The present study is to investigate anatomical characters of *Aponogeton natans* (Linn.) Engl. & Krause. for its standardization. The required samples of different organs were cut and removed from the plant and fixed in FAA .The paraffin embedded specimens were sectioned with the help of rotary microtome and the section was stained with toludine blue. Microscopic descriptions of tissues were supplemented with the micrographs wherever necessary. The characters like flat midrib on the adaxial side with broadly "V" – shaped on the abaxial side and abaxial epidermis is comparatively thick with narrowly oblong cells are the characteristic features of *Aponogeton natans*(Linn.) Engl. & Krause. The present study on anatomical characters of *Aponogeton natans* (Linn.) Engl. & Krause.will be providing useful information in regard to its correct identity and help to differentiate from the closely related other species of Aponogeton.

KEYWORDS: *Aponogeton natans*, leaf, lamina, bulb, rhizome, macroscopy, anatomy.

Antibacterial studies of *Catharanthus roseus* of Jazan province against the selected bacterial strains

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ABSTRACT:
The objective of this preliminary work is to identify the phyto constituents and antibacterial activity of *Catharanthus roseus* of Jazan province, KSA. In Saudi Arabia the plant is used for the ornamental purpose and has been found well grown in Jazan province. Active constituents from the leaves of *Catharanthus roseus* were isolated by cold maceration process and confirmed by respective chemical test. The anti bacterial activity of methanolic extract on various human pathogens viz *Bacillus subtilis*, *Staphylococcus aureus*, *Streptococcus pyogenes*, *Escherichia coli*, *Klebsiella planticola* and *Proteus vulgaris* was performed. The extracts predominately show the presence of alkaloids and flavonoids. However, there is no significant anti bacterial spectrum of activity against the tested human pathogens.

KEYWORDS: *Catharanthus roseus*; antibacterial activity; Jazan province.

Development and Evaluation of Mucoadhesive Buccal Tablet of Simvastatin

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ABSTRACT:

Mucoadhesive buccal tablets of Simvastatin were prepared with an objective of enhanced bioavailability using Carbopol 934P in varying concentration with secondary polymers like Sodium alginate, Sodium CMC, HPMC K4M, Xanthan gum by direct compression method. Preformulation studies confirmed identity and purity of the drug by means of IR Spectroscopy and Melting point determination. An analytical method was developed for Simvastatin. The tablets were evaluated for hardness, thickness, weight variation, friability and drug content concluded that all these parameters were in acceptable range of pharmacopoeial specification. The tablets were studied for surface pH, swelling index, in vitro drug release, ex vivo residence time, mucoadhesive strength, ex vivo permeation. The surface pH of the tablet was from 6.16 to 6.66 which fall in the range of salivary pH and all the tablets showed ex vivo residence time of 3.24 to 6.35 h indicated good adhesive capacity of tablet. The buccal tablet showed good swelling of >65% up to 8 h maintaining the integrity of polymers. The in vitro release of simvastatin was extended only for 6-7 h, if Carbopol 934P in combination with secondary polymer Xanthan gum was used. While the tablets contained Carbopol 934P along with Sodium alginate, Sodium CMC, HPMC K4M prolonged the released up to 8 h. Hence Carbopol 934P along with sodium alginate, Sodium CMC, HPMC K4M could be used to prepared prolonged released buccal tablet. The in vitro release of batches containing Carbopol 934P with sodium CMC show maximum drug release 97.11% which obeyed Korsemeyer-Peppas release kinetics with Non fickian transport mechanism of release due to more hydrophilic nature of polymer and drug. All the tablets showed good mucoadhesive strength of 7.60 to 30.10 g with high force of adhesion. The ex vivo permeation concluded that Carbopol enhanced the flux and permeability coefficient of simvastatin from the tablets. More flux observed in batches containing Carbopol 934P with Sodium CMC.

KEYWORDS: Carvedilol Simvastatin, primary and secondary polymers, in vitro drug release, mucoadhesion, ex vivo permeation.

Comparative structural and proximate values of five different cultivated strains of *Pleurotus ostreatus*

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ABSTRACT:

The objective of this study was to investigate the comparative macro- and microscopical features and proximate compositions of five different strains of *Pleurotus ostreatus*, commercially cultivated in India. All the strains vary among themselves in terms of their pileus size, colour and Q value of basidiospores etc. which is also evident from the cluster analysis plot. The size of the basidiospores among strain no. Pl-560, N2 and Pl-800 were quiet larger than the remaining strains viz. Pl-350 and Pl-500. Total amount of protein, carbohydrate, fat, crude fibre, moisture as well as mineral contents of five different strains were determined. Proximate compositions of dried mushrooms showed significant variations. Among five strains, strain no. Pl-560 was rich in protein, crude fibre and amino acid content.

KEYWORDS: Cluster analysis, Edible, Nutritional value, *Pleurotus ostreatus*

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ABSTRACT:
Effective process validation contributes significantly to assuring drug quality. Process Validation of Escitalopram oxalate Tablet 5 mg strength was developed for the quality control and quality assurance purpose.

In Vitro dissolution study was carried out using USP II apparatus (paddle apparatus). The crushing strength Kg/cm2 of prepared tablets was determined for 10 tablets of and standard deviation was determined for each batch. The average hardness and standard deviation was studied. Assay was performed to know the content of drug substance by UV spectrophotometer. The Method was validated in accordance to ICH guidelines.

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ABSTRACT:
Schizophrenia and schizoaffective disorder are severe and chronic psychiatric illnesses for which treatment compliance is important in the prevention of relapse. Atypical antipsychotic drugs, such as risperidone, have been found to be effective in the treatment of a range of psychiatric disorders. Sublingual tablet of oral formulations of these drugs have been developed to improve their acceptability to patients and thus improve compliance. The focus of present investigation was to improve solubility, bioavailability and to achieved rapid onset action. The solubility was improved by using solid dispersion with β-cyclodextrin. Sublingual tablets of risperidone were prepared by direct compression technique. Nine Formulations were formulated using 32 full factorial designs to explore the effects of sodium starch glycolate and micro crystalline cellulose (as independent variables) on Friability, Disintegration time and t90 % drug release (as dependent variables). In addition, the prepared tablets were also evaluated for weight variation, thickness, diameter, friability, content uniformity, wetting time and drug release studies. The formulation was optimized with desirable friability, disintegration time and t90 % drug release by using design expert software 8.0.6.1. Batch F2 reveals fast dissolution and disintegration rate of optimized risperidone sublingual tablet, which is prerequisite for rapid management of schizophrenia.

KEYWORDS: Schizophrenia, psychiatric disorders, treatment compliance, sublingual tablets, risperidone.

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ABSTRACT:
A highly efficient plant propagation protocol was developed for *Euphorbia hirta* L. using nodal shoot segments as explant. The explants were surface sterilized with 0.1% (w/v) mercuric chloride on Murashige and Skoog (MS) medium augmented with different concentrations of 6-Benzylaminopurine (BAP) and Kinetin (Kn) singly or in combination with Indole-3-acetic acid (IAA). Use of BAP at 2.0 mgl-1 induced the highest frequency (100%) of shoot induction as well as maximum number of shoots per explant (6.22). Proliferated shoot clumps were further multiplied and elongated on 0.5 mgl-1 BAP and Kn. The highest rooting frequency (92.8%) as well as highest number of roots (4.3) was observed in half strength MS medium supplemented with 2.0 mgl-1 Indole-3-butyric acid (IBA). Regenerated plantlets were acclimatized successfully in the green house and finally transplanted in the pots.

KEYWORDS: *Euphorbia hirta*, in vitro, rooting, green house.

Preliminary Phytochemical Studies and Antimicrobial Activity of the Aqueous Extract of the Leaves of Dichapetalum madascariense, Poir, Family Dichapetalaceae

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ABSTRACT:
Purpose – the leaves of *Dichapetalum madascariense* were claimed to have antimicrobial properties. The leaves were used to treat wounds, yaws, ulcers, running stomach, as well as fever in Ogidi in Idemili North Local government area of Anambra state, Nigeria. This investigation was carried out to ascertain the veracity of the claim.
Methodology – The leaves was collected and dried at ambient temperature and pulverized. 200gm of the powdered drug was extracted with 400ml of water using the cold maceration technique for 24hours with occasional shaking. This was filtered and the process repeated using the marc. The combined filtrates were freeze dried using the freeze drying equipment to get the extract. The preliminary phytochemical tests were carried out using standard methods. The antimicrobial activity was evaluated using agar dilution method.
Result – the leaves of *Dichapetalum madascariense* exhibited antimicrobial property. Alkaloid, tannins, steroid, saponins, and glycosides were found.
Conclusion – the claim on the use of *Dichapetalum madascariense* appears to be obvious in line with the results of the investigation.

KEYWORDS: *Dichapetalum madascariense*, agar dilusion, marc, freeze dry.