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# Journal of Chemical and Pharmaceutical Research

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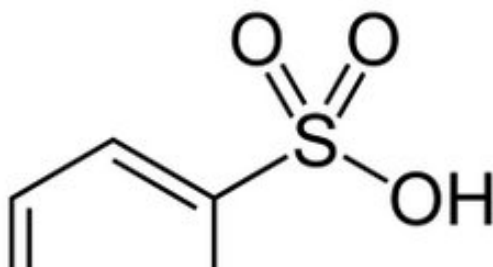
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---



Tinggalkan suatu pesan

Seroprevalence of avian influenza in broilers of District Quetta, Balochistan, Pakistan (<http://www.jocpr.com/articles/seroprevalence-of-avian-influenza-in-broilers-of-district-quetta-balochistan-pakistan.pdf>)

Arif M, Rind R. U, Shah M. G, Nisha A. R, Umer M, Kaka U, Zaman A, Tariq M, Rehman SA, Hasan SM and Khan MS  
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---

Extraction and simple characterization of anthocyanin compounds from *Rubus rosifolius* Sm fruit (<http://www.jocpr.com/articles/extraction-and-simple-characterization-of-anthocyanin-compounds-from-rubus-rosifolius-sm-fruit.pdf>)

Hilda Amanda, Adlis Santoni and Djaswir Darwis  
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---

Preparation and performance of different acid-doped polyaniline (<http://www.jocpr.com/articles/preparation-and-performance-of-different-aciddoped-polyaniline.pdf>)

Xiao Hua Wang, Chuan Qiang Li, Qi Tang and Yuan Hua Mu  
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---

Kinetic model of pickles shelf life prediction (<http://www.jocpr.com/articles/kinetic-model-of-pickles-shelf-life-prediction.pdf>)

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---

Treatment of Dairy Wastewater using Orange and Banana Peels (<http://www.jocpr.com/articles/treatment-of-dairy-wastewater-using-orange-and-banana-peels.pdf>)

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---

Photocatalytic hydroxylation of phenol to dihydroxybenzenes by TiO<sub>2</sub>/RGO composites (<http://www.jocpr.com/articles/photocatalytic-hydroxylation-of-phenol-to-dihydroxybenzenes-by-tio2rgo-composites.pdf>)

Xili Shang, Changhai Li, Meiling Liu, Ping Du and Jingjing Zheng  
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---

Quantity essential oil from rose callus leaf (*Rosa hybrid* L. variety Hybride tea purple): Results of light elicitation (<http://www.jocpr.com/articles/quantity-essential-oil-from-rose-callus-leaf-rosa-hybrid-l-variety-hybride-tea-purple-results-of-light-elicitation.pdf>)

Ribkahwati, Hery Purnobasuki, Isnaeni and Edy Setiti Wida Utami  
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---

Antibacterial screening of different part of Drumstic tree (*Moringa oleifera* Lam) (<http://www.jocpr.com/articles/antibacterial-screening-of-different-part-of-drumstic-tree-moringa-oleifera-lam.pdf>)

Rabiu Abdulkadir, Zarizal Suhaili and Md. Sarwar Jahan  
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Tinggalkan suatu pesan

Utilization of *Annona muricata* L. seeds as potential adsorbents for the removal of rhodamine B from aqueous solution (<http://www.jocpr.com/articles/utilization-of-annona-muricata-l-seeds-as-potential-adsorbents-for-the-removal-of-rhodamine-b-from-aqueous-solution.pdf>)

**Zulkarnain Chaidir, Firda Furqani, Rahmiana Zein and Edison Munaf**

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---

Studies on the toxicological effects of bimetals on the cladoceran, *Daphnia magna* and examination of histopathological effects through Transmission Electron Microscopy (TEM) (<http://www.jocpr.com/articles/studies-on-the-toxicological-effects-of-bimetals-on-the-cladoceran-daphnia-magna-and-examination-of-histopathological-effects-through-transmission-electron-microscopy-tem.pdf>)

**Akila Selvi Rajaretnamand Shaleesha A. Stanley**

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---

Efficacy of old antibiotics against commonly isolated bacterial isolates in a tertiary care hospital (<http://www.jocpr.com/articles/efficacy-of-old-antibiotics-against-commonly-isolated-bacterial-isolates-in-a-tertiary-care-hospital.pdf>)

**Snehali Majumder\* and Mohammed Rahmatullah**

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---

Synthesis and biological activity studies of novel heterocyclic compounds (<http://www.jocpr.com/articles/synthesis-and-biological-activity-studies-of-novel-heterocyclic-compounds.pdf>)

**C. A. M. A. Huq and S. Sivakumar**

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---

Synthesis, characterization, in silico DNA studies and antibacterial evaluation of transition metal complexes of thiazole based pyrazolone Schiff base (<http://www.jocpr.com/articles/synthesis-characterization-in-silico-dna-studies-and-antibacterial-evaluation-of-transition-metal-complexes-of-thiazole.pdf>)

**J. Senthil Kumarana, J. Muthukumar, N. Jayachandramani and S. Mahalakshmi**

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---

Efficient and convenient Suzuki cross-coupling reaction catalyzed by a new synthesized palladium co-ordination metal complex of cyano-acetohydrazide Schiff base (<http://www.jocpr.com/articles/efficient-and-convenient-suzuki-crosscoupling-reaction-catalyzed-by-a-new-synthesized-palladium-coordination-metal-compl.pdf>)

**Jadeja Juvansinh, Mayank Mamtora, Javed Mahetar, Manawar Rohit and M. K. Shah**

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---

Effects of pv cell modification to its performance in generating current and voltage with KI/KI3 electrolytes system (<http://www.jocpr.com/articles/effects-of-pv-cell-modification-to-its-performance-in-generating-current-and-voltage-with-kiki3-electrolytes-system.pdf>)

**Rera Aga Salihat, Arif Yasthophi, Admin Alif and Hermansyah Aziz**

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---

 Comparative analysis of functional & structural impact of N171A in endo- $\beta$ -N-acetylglucosaminidases through computational approach (<http://www.jocpr.com/articles/a-comparative-analysis-of-functional-structural-impact-of-n171a-in-endonacetylglucosaminidases-through-computational-ap.pdf>)

**Tinggalkan suatu pesan**

Shechinah Felice Choragudi, B. V. Raman, Leela T and Bondili JS

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---

Synthesis, physical and chemical properties of new esters of 2-((4-R-3-R1-1,2,4-triazole-5-yl)thio)acetic acids (<http://www.jocpr.com/articles/synthesis-physical-and-chemical-properties-of-new-esters-of-24r3r1124triazole5ylthioacetic-acids.pdf>)

O. Shcherbynaa, E. S. Pruglo, O. I. Panasenko and Ye. H. Knysh

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---

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---

Formulation and in-vitro evaluation of levocetirizine dihydrochloride orodispersible tablets (<http://www.jocpr.com/articles/formulation-and-invitro-evaluation-of-levocetirizine-dihydrochloride-odispersible-tablets.pdf>)

Gharti Kul P., Sharma Bidur and Bharati Laxman

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---

Separation and identification of heavy metal ions by thin layer chromatography on silica gel-G (<http://www.jocpr.com/articles/separation-and-identification-of-heavy-metal-ions-by-thin-layer-chromatography-on-silica-gelg.pdf>)

Meghna H. Jumde and Wasudeo B. Gurnule

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---

The relationship between the impaction of Mandibular Third Molar and Guns Ratio (<http://www.jocpr.com/articles/the-relationship-between-the-impaction-of-mandibular-third-molar-and-guns-ratio.pdf>)

Hoshyar Abbasi, Nafeseh Nikkerdar and Ebrahim Rabiei

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---

Development and application of software for expanding map symbol database in oracle spatial (<http://www.jocpr.com/articles/development-and-application-of-software-for-expanding-map-symbol-database-in-oracle-spatial.pdf>)

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---

Characterization of the keratinolytic activity of indigenous Bacillus subtilis keratinase (<http://www.jocpr.com/articles/characterization-of-the-keratinolytic-activity-of-indigenous-bacillus-subtilis-keratinase.pdf>)

Yasmeen Faiz Kazi, Pardeep Kumar and Irshad Hussain Soomro

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---

Controlling calcium dissolution during lanthanides leaching operation from phosphogypsum waste (<http://www.jocpr.com/articles/controlling-calcium-dissolution-during-lanthanides-leaching-operation-from-gypsum-waste.pdf>)

Juraim, M. M. Fawzy and O. S. Helaly

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---

Tinggalkan suatu pesan



Foreign language teaching principles in multimedia network environment (<http://www.jocpr.com/articles/foreign-language-teaching-principles-in-multimedia-network-environment.pdf>)

**Zou Xiaowei and Chen Ying**

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---

Study of niosomated cytarabine (<http://www.jocpr.com/articles/study-of-niosomated-cytarabine.pdf>)

**Rabei H, Saffari Z, Chiani M, Farhanghi A and Norouzian D**

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---

Reach Us   +32-10-28-02-25

---

Polyphenol total content, IC50 and antioxidant activities of ethanol extract from some cocoa (*Theobroma cacao*) beans in South Sulawesi Indonesia (<http://www.jocpr.com/articles/polyphenol-total-content-ic50-and-antioxidant-activities-of-ethanol-extract-from-some-cocoa-theobroma-cacao-beans-in-sou.pdf>)

**Andi Emelda**

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---

DPPH antioxidant activity, total phenolic and total flavonoid content of different part of Drumstic tree (*Moringa oleifera* Lam.) (<http://www.jocpr.com/articles/dpph-antioxidant-activity-total-phenolic-and-total-flavonoid-content-of-different-part-of-drumstic-tree-moringa-oleifera.pdf>)

**Abdulaziz Rabi Abdulkdir, Dhiya Dalila Zawawi and Md. Sarwar Jahan**

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---

Quantum dots: A potential candidate as a biomedical material (<http://www.jocpr.com/articles/quantum-dots-a-potential-candidate-as-a-biomedical-material.pdf>)

**Shfali Arora, Mamta Latwal, Shaiely Singhal, Shilpi Agarwal, K. Mohan Reddy and Deepak Kumar**

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---

New assay method UV spectroscopy for determination of Indomethacin in pharmaceutical formulation (<http://www.jocpr.com/articles/new-assay-method-uv-spectroscopy-for-determination-of-indomethacin-in-pharmaceutical-formulation.pdf>)

**Karima Fadhil Ali, Ali Rasool Mahmood Albakaa and Zinah Hussein Ali**

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---

Study on the diversity of microbial communities and chemical constituents in Sichuan pickles (<http://www.jocpr.com/articles/study-on-the-diversity-of-microbial-communities-and-chemical-constituents-in-sichuan-pickles.pdf>)

**Shuai Zhang, Zuchao Lei, Xiufeng Long, Peng Qiu, Lei Wang, Zhigang Zeng and Yongqiang Tian**

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---

Simultaneous determination of guaiphenesin and salbutamol sulphate in pharmaceutical dosage by reverse phase high performance liquid chromatography (<http://www.jocpr.com/articles/simultaneous-determination-of-guaiphenesin-and-salbutamol-sulphate-in-pharmaceutical-dosage-by-reverse-phase-high-perfor.pdf>)

**Rele**

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---

Tinggalkan suatu pesan

First polyphasic identification of clostridium celerecrescens from Luzhou-flavor liquor pit mud (<http://www.jocpr.com/articles/first-polyphasic-identification-of-clostridium-celerecrescens-from-luzhouflavor-liquor-pit-mud.pdf>)

**Zhengkai Xue**

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---

Studies on the interaction and effect of Mn(II), Fe(II), Co(II), Ni(II),Cu(II), Zn(II) and Cd(II) mixed- ligand complexes of cephalixin mono hydrate and furan-2-carboxylic acid to different DNA sources (<http://www.jocpr.com/articles/studies-on-the-interaction-and-effect-of-mnii-feii-coii-niicuii-znii-and-cdii-mixed-ligand-complexes-of-cep-cephalixin-mono-hydrate-and-furan-2-carboxylic-acid-to-different-dna-sources.pdf>)

**Taghreed H. Al-Noor\*, Israa AJ. Ibrahim and Mohmmud Mahdi Jawad**

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---

Validation of a HPLC method for the quantification of flavonoids in Mexican Lime (Citrus Aurantifolia) during the Progression of Witches' Broom Disease (<http://www.jocpr.com/articles/validation-of-a-hplc-method-for-the-quantification-of-flavonoids-in-mexican-lime-citrus-aurantifolia-during-the-progress.pdf>)

**Saeed Mollayi, Faezeh Ghanati and Alireza Ghassempour**

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---

Study of technological properties of the active pharmaceutical ingredients for developing the combined medicine for neuropathy complex treatment (<http://www.jocpr.com/articles/study-of-technological-properties-of-the-active-pharmaceutical-ingredients-for-developing-the-combined-medicine-for-neur.pdf>)

**Almakaiev MS**

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---

Optimization of a liposomal delivery system for the highly antioxidant methanol extract of stem-bark of Schumacheria castaneifolia Vahl (<http://www.jocpr.com/articles/optimization-of-a-liposomal-delivery-system-for-the-highly-antioxidant-methanol-extract-of-stembark-of-schumacheria-cast.pdf>)

**K. M. G. K. Pamunuwa, C. J. Bandara, V. Karunaratne and D. N. Karunaratne**

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---

Anticancer properties of resveratrol on chemically induced hepatocellular carcinoma in rats: Inhibition of metastasis and angiogenesis (<http://www.jocpr.com/articles/anticancer-properties-of-resveratrol-on-chemically-induced-hepatocellular-carcinoma-in-rats-inhibition-of-metastasis-and.pdf>)

**Abeer H. Abdel-Halim, Amal A. Fyiad, Mamdouh M. Ali and Saeed M. Soliman**

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---

Ion exchange resins as drug delivery carriers (<http://www.jocpr.com/articles/ion-exchange-resins-as-drug-delivery-carriers.pdf>)

**S. Sivaneswari, D. Veena, P. Sai Sumana, P. Subhashree, L. Ramya, R. Rajalakshmi, P. J. Chandana and E. Karthikeyan**

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---



Tinggalkan suatu pesan

Antibacterial and photocatalytic activity of ZnO nanoparticles synthesized by sol-gel method (<http://www.jocpr.com/articles/antibacterial-and-photocatalytic-activity-of-zno-nanoparticles-synthesized-by-sol-gel-method.pdf>)

**S. Sunitha and A. Nageswara Rao**

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---

Diversity of some endophytic fungi associated with rice black bug *Paraeucosmetus pallicornis* on rice plant (<http://www.jocpr.com/articles/diversity-of-some-endophytic-fungi-associated-with-rice-black-bug-paraeucosmetus-pallicornis-on-rice-plant.pdf>)

**Nur Amin, La Daha, Nurariaty Agus, Ade Rosmana and Muh. Fadlan**

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---

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Ethnobotanic study, phytochemical screening, antioxidant and antibacterial activities of *Tapinanthus pentagonia* (<http://www.jocpr.com/articles/ethnobotanic-study-phytochemical-screening-antioxidant-and-antibacterial-activities-of-tapinanthus-pentagonia.pdf>)

**Mohamed Samba, Aichetou Cheikh, M. V. Ould-Mohamed-Abdellahi, Abderrahmane Hadou, Ahmed Ismail Boumediana, Abdi Kaihil, Mohamed Vadel Deida, Samba Dieng, El Mokhtar Essassi and Mohamed Said Minniha**

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---

Gas chromatography-Mass Spectrometric assessment of the presence of phthalates in branded and locally available cosmetics stored in glass and plastic containers (<http://www.jocpr.com/articles/gas-chromatography-mass-spectrometric-assessment-of-the-presence-of-phthalates-in-branded-and-locally-available-cosmetics.pdf>)

**Sana. Zulfiqar, Naeema Khan, Irum Asif, Zeeshan Ahmed and Muhammad Arshad**

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---

Equilibrium and kinetic studies of adsorption system of chromium ions from aqueous solution using *chondrus crispus* activated carbon (<http://www.jocpr.com/articles/equilibrium-and-kinetic-studies-of-adsorption-system-of-chromium-ions-from-aqueous-solution-using-chondrus-crispus-activa.pdf>)

**A. Elavarasan, V. Nandhakumar and B. Ravi**

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---

Synthesis and characterization of azo derivatives of diacetylresorcinol (<http://www.jocpr.com/articles/synthesis-and-characterization-of-azo-derivatives-of-diacetylresorcinol.pdf>)

**K.Loganathan, K.Sithick Ali, M.Purushothaman, S.Silambarasan and A. Jamal Abdul Nasser**

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---

Phytochemical and pharmacognostical studies of leaves of *Jasminum mesnyi* Hance (<http://www.jocpr.com/articles/phytochemical-and-pharmacognostical-studies-of-leaves-of-jasminum-mesyini-hance.pdf>)

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---



Tinggalkan suatu pesan

Synthesis and evaluation of antimicrobial activity of benzofuran derivative and its metal complexes (<http://www.jocpr.com/articles/synthesis-and-evaluation-of-antimicrobial-activity-of-benzofuran-derivative-and-its-metal-complexes.pdf>)

**Mayank J. Mamtora, Javed G. Mahetar, Juvansinh J. Jadeja, Rohit B. Manawar and Manish K. Shah**

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---

Copper adsorption onto starch as biopolymer: Isothermal equilibrium and kinetic studies (<http://www.jocpr.com/articles/copper-adsorption-onto-starch-as-biopolymer-isothermal-equilibrium-and-kinetic-studies.pdf>)

**Abdelkader Labidi, Ali Saad and Manef Abderrabba**

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---

Reach Us   +32-10-28-02-25

Anti-mycobacterial and anti-inflammatory activity of Peganum harmala (<http://www.jocpr.com/articles/antimycobacterial-and-antiinflammatory-activity-of-peganum-harmala.pdf>)

**Homa Davoodi, Ezatollah Ghaemi, Maesoumeh Mazandarani, Fatemeh Shakeri, Seyedeh Naeme Javid and Mishar Klishadi**

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---

Chemical controlled strategy of ant occupied coconut tree (*Iridomyrmex cordatus*) (Hymenoptera: Formicidae) as the vector of cocoa pod rot disease (*Phytophthora palmivora*) (<http://www.jocpr.com/articles/chemical-controlled-strategy-of-ant-occupied-coconut-tree-iridomyrmex-cordatus-hymenoptera-formicidae-as-the-vector-of-coc.pdf>)

**Ahdin Gassa and Muhammad Junaid**

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---

Antimicrobial activity of Ayurvedic herbs against urinary tract infection pathogens (<http://www.jocpr.com/articles/antimicrobial-activity-of-ayurvedic-herbs-against-urinary-tract-infection-pathogens.pdf>)

**Seema Rawat and Sapna Swarup**

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---

Validation of Kayzero/Solcoi software by analysis of reference materials at Kartini research reactor Yogyakarta-Indonesia (<http://www.jocpr.com/articles/validation-of-kayzerosolcoi-software-by-analysis-of-reference-materials-at-kartini-research-reactor-yogyakartaindonesia.pdf>)

**Sri Murniasih, Agus Taftazani and Roto**

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---

Analysis of principal components of pollution in Baiyangdian (<http://www.jocpr.com/articles/analysis-of-principal-components-of-pollution-in-baiyangdian.pdf>)

**Li Bicaia, He Liansheng, Meng Ruib and Song Juanjuana**

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---

Synthesis, characterization and antibacterial activity of Hystatin 2 derivatives (<http://www.jocpr.com/articles/synthesis-characterization-and-antibacterial-activity-of-hystatin-2-derivatives.pdf>)

**Muhammad Fadzli Abd Razak, Asnuzilawati Asari, Ahmad Sazali Hamzah, Siti Nor Khadijah Addis and Habsah**

Tinggalkan suatu pesan

Mohamad

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---

Study of antibacterial potential and phytochemical constituents of three sided *Cissus quadrangularis* (<http://www.jocpr.com/articles/study-of-antibacterial-potential-and-phytochemical-constituents-of-three-sided-cissus-quadrangularis.pdf>)

Suhashini R. and J. Helan Chandra

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---

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---

Adsorption of acid black-7 from synthetic aqueous solution onto *Cucumis sativus* peel (<http://www.jocpr.com/articles/adsorption-of-acid-black7-from-synthetic-aqueous-solution-onto-cucumis-sativus-peel.pdf>)

T. Smitha, T. Santhi and M. Makeswari

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---

One-pot synthesis of novel 2-arylnaphtho[2',3':4,5] thieno[2,3-d][1,3]pyrimidine-4,5,10(3H)-triones (<http://www.jocpr.com/articles/onepot-synthesis-of-novel-2arylnaphtho2345-thieno23d13pyrimidine45103triones.pdf>)

Yulia Len, Iryna Drapak, Rostyslav Musyanovych, Glib Zagorij and Volodymyr Novikov

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---

Interpretation of groundwater quality around Ambattur Lake, Chennai, Tamil Nadu (<http://www.jocpr.com/articles/interpretation-of-groundwater-quality-around-ambattur-lake-chennai-tamil-nadu.pdf>)

S. Nandhakumar, K. Varun and N. Sathyanarayanan

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---

Synthesis and characteristics of amino acid derivatives of 1,4-naphthoquinone (<http://www.jocpr.com/articles/synthesis-and-characteristics-of-amino-acid-derivatives-of-14naphthoquinone.pdf>)

Oksana Figurka, Viktoriia Kochubei, Semen Khomyak, Mykola Platonov, Ivan Martynyuk, Olena Stadnichuk, Zoryana Gubriy, Maria Kurk and Volodymyr Novikov

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---

Antibacterial activity of probiotic mixed culture against MRSA and ESBL (<http://www.jocpr.com/articles/antibacterial-activity-of-probiotic-mixed-culture-against-mrsa-and-esbl.pdf>)

Isnaeni and Ni Made Mertaniasih

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---

A study on antimicrobial and anthelmintic activity of methanolic leaf extracts of *Syzygium malaccense* (L.) Merr. & Perry (<http://www.jocpr.com/articles/a-study-on-antimicrobial-and-anthelmintic-activity-of-methanolic-leaf-extracts-of-syzygium-malaccense-l-merr--perry.pdf>)

Aiswarya Purushothaman, A. Sangita Sudhir, Gleena Joby, Aravind R. and Alexeyena Varghese

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---



Tinggalkan suatu pesan

Practical synthesis of Mirabegron (<http://www.jocpr.com/articles/practical-synthesis-of-mirabegron.pdf>)

Ravindra Vedanthama, Bhaskar Kandagatla, Sunitha Vyala, Prasada Raju VVNV, Praveen Cherukupalli, Javed Iqbal, Vilas H. Dahanukar, Mukkanti Kagga, Rakeshwar Bandichhor and Srinivas Oruganti

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---

In vitro antibacterial, antioxidant and  $\alpha$ -amylase inhibition activity of medicinal plants (<http://www.jocpr.com/articles/in-vitro-antibacterial-antioxidant-and-amylase-inhibition-activity-of-medicinal-plants.pdf>)

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---

Impact of chlorothalonil and propiconazole on enzyme activities in groundnut (*Arachis hypogaea* L.) soils (<http://www.jocpr.com/articles/impact-of-chlorothalonil-and-propiconazole-on-enzyme-activities-in-groundnut-arachis-hypogaea-l-soils.pdf>)

Chlorothalonil, Propiconazole, Dehydrogenase, Phosphatase, Groundnut soils

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---

Research of acid mine wastewater treatment technology (<http://www.jocpr.com/articles/research-of-acid-mine-wastewater-treatment-technology.pdf>)

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---

pH metric analysis of complex formation of Cu(II), Ni(II), Co(II) and Fe(III) metal ions and 2-hydroxy-4-substituted phenyl-6-substituted phenyl pyrimidines at 0.1 M ionic strength ([http://www.jocpr.com/articles/ph-metric-analysis-of-complex-formation-of-cu\(II\)-ni\(II\)-co\(II\)-and-fe\(III\)-metal-ions-and-2-hydroxy-4-substituted-phenyl-6-substituted-phenyl-pyrimidines-at-0.1-m-ionic-strength.pdf](http://www.jocpr.com/articles/ph-metric-analysis-of-complex-formation-of-cu(II)-ni(II)-co(II)-and-fe(III)-metal-ions-and-2-hydroxy-4-substituted-phenyl-6-substituted-phenyl-pyrimidines-at-0.1-m-ionic-strength.pdf))

Praneeta V. Susatkar

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---

Impact of urbanization on groundwater quality of Bhagalpur city: Deterioration of water quality and its sustainable management (<http://www.jocpr.com/articles/impact-of-urbanization-on-groundwater-quality-of-bhagalpur-city-deterioration-of-water-quality-and-its-sustainable-manag.pdf>)

Firoze Ahmad

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---

Development and validation of a stability indicating RP-UPLC method for the determination of paracetamol and ibuprofen in tablet (<http://www.jocpr.com/articles/development-and-validation-of-a-stability-indicating-rpuplc-method-for-the-determination-of-paracetamol-and-ibuprofen-in.pdf>)

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---

 ation of peasant's satisfaction about Chongqing rural tourism from the perspective of protecting peasants' and interests (<http://www.jocpr.com/articles/an-evaluation-of-peasants-satisfaction-about-chongqing-rural-tourism-from-the-perspective-of-protecting-peasants-rights.pdf>)

Tinggalkan suatu pesan

**Nanjie Li, Binghui He and Shuhui Jiang**

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---

Bio-removal of toxic Cr (VI) by marine bacteria, Halomonas sp.VITP09 (<http://www.jocpr.com/articles/bioremoval-of-toxic-cr-vi-by-marine-bacteria-halomonas-spvitp09.pdf>)

**Sangeetha Subramanian, Vikas Dhaka, Vipul Ranjan and Vivek Pratap Singh**

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---

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Emerging trend in gastroretentive floating tablets technology of ranitidine hydrochloride (<http://www.jocpr.com/articles/emerging-trend-in-gastroretentive-floating-tablets-technology-of-ranitidine-hydrochloride.pdf>)

**D. Nagendrakumar, Keshavshetti G. G. and Bhagyashri Patil**

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---

Analytical method development and validation of simultaneous estimation of amlodipine besylate and atorvastatin calcium by RP-HPLC method (<http://www.jocpr.com/articles/analytical-method-development-and-validation-of-simultaneous-estimation-of-amlodipine-besylate-and-atorvastatin-calcium-b.pdf>)

**K. S. Nataraj, K. Alekhya, B. Surendra Babu, K. Gnananath and Ch. Bindu**

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---

Extraction of manganese(II) from acidic buffer medium using D2EHPA and Cyanex 272 as extractants (<http://www.jocpr.com/articles/extraction-of-manganeseii-from-acidic-buffer-medium-using-d2ehpa-and-cyanex-272-as-extractants.pdf>)

**Niharbala Devi**

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---

Preliminary phytochemical and pharmacognostic analysis of Bauhinia tomentosa (<http://www.jocpr.com/articles/preliminary-phytochemical-and-pharmacognostic-analysis-of-bauhinia-tomentosa.pdf>)

**R. Balabhaskar and K. Vijayalakshmi**

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---

Stability indicating quantitative RP-HPLC method development and validation for simultaneous determination of metformin hydrochloride and saxagliptin in bulk and combined tablet dosage form (<http://www.jocpr.com/articles/stability-indicating-quantitative-rphplc-method-development-and-validation-for-simultaneous-determination-of-metformin-h.pdf>)

**Mohammad Yunoos and D. Gowri Sankar**

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---

Ditolyldithiophosphates of titanium: Synthesis, characterization and in vitro antimicrobial and cytotoxic studies (<http://www.jocpr.com/articles/ditolyldithiophosphates-of-titanium-synthesis-characterization-and-in-vitro-antimicrobial-and-cytotoxic-studies.pdf>)

**S. Ruchi, Ruchi Khajuria, Sandeep Kumar and Sushil K. Pandey**

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---

Tinggalkan suatu pesan

Effect of number of coatings on structure, mechanical properties and corrosion behaviour of HA coating on 316L stainless steel (<http://www.jocpr.com/articles/effect-of-number-of-coatings-on-structure-mechanical-properties-and-corrosion-behaviour-of-ha-coating-on-316l-stainless.pdf>)

**Deepak Narang and Uma Batra**

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---

Bilateral absence of musculocutaneous nerve and its clinical and surgical implications (<http://www.jocpr.com/articles/bilateral-absence-of-musculocutaneous-nerve-and-its-clinical-and-surgical-implications.pdf>)

Reach Us   +32-10-28-02-25

**Ishwar B. Bagoji, M. A. Doshi, Gavishiddappa A. Hadimani, Balappa M. Bannur and B. G. Patil**

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---

Design and synthesis of novel pyrazolines as potent antimicrobial and antioxidant agents (<http://www.jocpr.com/articles/design-and-synthesis-of-novel-pyrazolines-as-potent-antimicrobial-and-antioxidant-agents.pdf>)

**G. Vasanth Kumar, Bi Bi Ahmadi Khatoon and K. Ajay Kumar**

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---

Validation of a method for direct cadmium determination in breast milk by graphite furnace atomic absorption spectrometry using tantalum treated graphite tube and co-injection of iridium as chemical modifier (<http://www.jocpr.com/articles/validation-of-a-method-for-direct-cadmium-determination-in-breast-milk-by-graphite-furnace-atomic-absorption-spectrometr.pdf>)

**Paulo Celso Pereira Lara, Josianne Niccácio Silveira, Waldomiro Borges Neto, Mark A. Beinner and José B. B. da Silva**

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---

Novel synthesis of 8-mercaptomethone via pulegon and disodium tetrasulphide ignited by Dowex® 50WX4 (<http://www.jocpr.com/articles/novel-synthesis-of-8mercaptomethone-via-pulegon-and-disodium-tetrasulphide-ignited-by-dowex-50wx4.pdf>)

**Chengyuan Liang, Shiyun Zhang, Shuntao Chen, Wen Zhang and Gennian Mao**

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---

Synthesis, growth and characterization of semi-organic nonlinear optical 4-sodium substituted 1,4-but-2-ene-di-oic crystals (<http://www.jocpr.com/articles/synthesis-growth-and-characterization-of-semiorganic-nonlinear-optical-4sodium-substituted-14but2enedioic-crystals.pdf>)

**K. Kalpana\*, R. Uvarani and A. Jegatheesan**

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---

Pharmacological properties, phytochemical and GC-MS analysis of Bauhinia acuminata Linn. (<http://www.jocpr.com/articles/pharmacological-properties-phytochemical-and-gcms-analysis-of-bauhinia-acuminata-linn.pdf>)

**Ani Krishna S. R, Hafza S, Poorna Chandrika G, Lekhya Priya C. and Bhaskara Rao K. V**

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Tinggalkan suatu pesan



Pharmaceutical water system-validation aspects (<http://www.jocpr.com/articles/pharmaceutical-water-systemvalidation-aspects.pdf>)

**Sumanth T. N. and Afrasim Moin**

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---

Novel synthesis of Ticagrelor, an anti-thrombotic agent (<http://www.jocpr.com/articles/novel-synthesis-of-ticagrelor-an-antithrombotic-agent.pdf>)

**Nitin A. Shimpia, Siva Koteswararao Prathib, Anil Kumar Ponnuruc, Ramesh Batharajud and Rajesh B. Dhakea**

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---

Evaluation of antibacterial, antioxidant and lipid degradation potential of Psidium guajava leaf extracts (<http://www.jocpr.com/articles/evaluation-of-antibacterial-antioxidant-and-lipid-degradation-potential-of-psidium-guajava-leaf-extracts.pdf>)

**P. Shreenidhi Ranjini and V. Jeyamanikandan**

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---

Preliminary phytochemical, total phenolics and flavonoid content analysis of Vitex negundo and Calatropis gigantea leaf ethanolic extracts (<http://www.jocpr.com/articles/preliminary-phytochemical-total-phenolics-and-flavonoid-content-analysis-of-vitex-negundo-and-calatropis-gigantea-leaf-e.pdf>)

**K. Prasanna and V. Karthikeyan**

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---

Characterization of antimicrobial compounds from Streptomyces isolates (<http://www.jocpr.com/articles/characterization-of-antimicrobial-compounds-from-streptomyces-isolates.pdf>)

**Nupur Mathur, Anoop Paliwal, Noopur Mathur, Pratibha Sharma and Pradeep Bhatnagar**

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---

Antibacterial and antifungal activity of Strychnos nux vomica seed extract (<http://www.jocpr.com/articles/antibacterial-and-antifungal-activity-of-strychnos-nux-vomica-seed-extract.pdf>)

**A. Louds Magdalin Joy and M. Reginald Appavoo**

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---

Modification of chitosan for sorption of metal ions (<http://www.jocpr.com/articles/modification-of-chitosan-for-sorption-of-metal-ions.pdf>)

**Sandeep Chauhan**

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---

Investigations of the influence of dextran on sugar cane quality and sugar cane processing in Kenana sugar factory (<http://www.jocpr.com/articles/investigations-of-the-influence-of-dextran-on-sugar-cane-quality-and-sugar-cane-processing-in-kenana-sugar-factory.pdf>)

**Red M. Bukhari, Salem El Khaseh, Abdalmoneim Osman and Salah Eldeen F. Hegazi**

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Tinggalkan suatu pesan

Factorial design of experiment model enables to optimize the variables in wastewater decolorization process by using areca husk activated carbon fibre (<http://www.jocpr.com/articles/factorial-design-of-experiment-model-enables-to-optimize-the-variables-in-wastewater-decolorization-process-by-using-are.pdf>)

**A. Basker and P. S. Syed Shabudeen**

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---

Benzothiazole: Unique and versatile scaffold in the field of cancer (<http://www.jocpr.com/articles/benzothiazole-unique-and-versatile-scaffold-in-the-field-of-cancer.pdf>)

**Gollapalli Naga Raju, Karumudi Bhavya Sai, Kota Chandana and N. Rama Rao**

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---

Nisin peptide as promising natural food preservative for food (<http://www.jocpr.com/articles/nisin-peptide-as-promising-natural-food-preservative-for-food.pdf>)

**Walladah Toaima, Juliana Trak and Khalil ALKowwatly**

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---

Sensitivity Research of the Unsteady Aerodynamics of a Horizontal Axis Wind Turbine under Different Yaw Angle (<http://www.jocpr.com/articles/sensitivity-research-of-the-unsteady-aerodynamics-of-a-horizontal-axis-wind-turbine-under-different-yaw-angle.pdf>)

**Xiaoming Chen and Shun Kang**

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---

Anti-nephrotoxic perception of Diosmin, a citrus flavonoid inhibiting cadmium chloride induced oxidative stress in experimental rats (<http://www.jocpr.com/articles/antinephrotoxic-perception-of-diosmin-a-citrus-flavonoid-inhibiting-cadmium-chloride-induced-oxidative-stress-in-experim.pdf>)

**Kothandaraman Sindhu, Rajendran Revathy, Mathi Selvam, Subbaiyan Sathish and Maruthaiveeran Periyasamy Balasubramanian**

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---

Analyzing EMG and MMG signals for MMG driven bionic arm (<http://www.jocpr.com/articles/analyzing-emg-and-mmg-signals-for-mmg-driven-bionic-arm.pdf>)

**Sindu Divakaran, Sheeba Abraham, J. Bethanne Janney and G. Umashankar**

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---

Antimicrobial activity of Neem, Tulsi, Henna and Amla against pathogenic bacteria (<http://www.jocpr.com/articles/antimicrobial-activity-of-neem-tulsi-henna-and-amlag-against-pathogenic-bacteria.pdf>)

**Seema Rawat**

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---

Molecular Characterization of a Squalene Synthase Gene from Phellinus igniarius (<http://www.jocpr.com/articles/molecular-characterization-of-a-squalene-synthase-gene-from-phellinus-igniarius.pdf>)

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Tinggalkan suatu pesan

Simultaneous RP-HPLC estimation and validation of ramipril and atorvastatin in bulk and combined tablet formulation (<http://www.jocpr.com/articles/simultaneous-rphplc-estimation-and-validation-of-ramipril-and-atorvastatin-in-bulk-and-combined-tablet-formulation.pdf>)

**A. Ravi Varma\*, J. V. Shanmukha Kumar and S. Mutta Reddy**

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---

Grafting, cross-linking and blending of chitosan as adsorbent Cr (VI) ions from artificial waste water with adsorption-fluidization method (<http://www.jocpr.com/articles/grafting-crosslinking-and-blending-of-chitosan-as-adsorbent-cr-vi-ions-from-artificial-waste-water-with-adsorptionfluidiz.pdf>)

**Suyanto**

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---

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Flourescence in situ hybridization analysis of hot spring microbes using rRNA targeted oligonucleotide probes (<http://www.jocpr.com/articles/flourescence-in-situ-hybridization-analysis-of-hot-spring-microbes-using-rrna-targeted-oligonucleotide-probes.pdf>)

**Ankhi Maiti and Sagarika Bhattacharyya**

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---

The Analysis of TV Primary Fuses Blown in the Distribution Network (<http://www.jocpr.com/articles/the-analysis-of-tv-primary-fuses-blown-in-the-distribution-network.pdf>)

**Zhirui Liang and Mengya Zhao**

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---

The interactive technology to intelligent office systems (<http://www.jocpr.com/articles/the-interactive-technology-to-intelligent-office-systems.pdf>)

**Zhen-Hai Mu**

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---

Natural green pigments to transform sunlight into electricity (<http://www.jocpr.com/articles/natural-green-pigments-to-transform-sunlight-into-electricity.pdf>)

**N. T. Mary Rosana, Joshua Amaranth D and K. L. Vincent Joseph**

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---

Development of extractive spectrophotometric method for the determination of nickel (II) with Schiff base 2-[(hydroxyphenylimino)methyl]-4-nitrophenol (<http://www.jocpr.com/articles/development-of-extractive-spectrophotometric-method-for-the-determination-of-nickel-ii-with-schiff-base-2hydroxyphenylim.pdf>)

**Datta B. Mandhare and Vasant D. Barhate**

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---

The Development and Research of The 1kv multi-Chips Full Cold Shrink Cable Terminal Products (<http://www.jocpr.com/articles/the-development-and-research-of-the-1kv-multichips-full-cold-shrink-cable-terminal-products.pdf>)

**Zhen-Hai Mu**

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---

Tinggalkan suatu pesan

In vitro antioxidant activities, phenolic, flavonoid and carotenoid content from different polarity extracts of five citrus peels using DPPH and Cuprac method (<http://www.jocpr.com/articles/in-vitro-antioxidant-activities-phenolic-flavonoid-and-carotenoid-content-from-different-polarity-extracts-of-five-citru.pdf>)

**Irda Fidrianny, Hadianti Nurfitri and Sukrasno**

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Antibacterial activity of phenoxazine derivatives (<http://www.jocpr.com/articles/antibacterial-activity-of-phenoxazine-derivatives.pdf>)

Reach Us   +32-10-28-02-25

**B. T. Sridhar, K. Girish, B. C. Channu, K. N. Thimmaiah and M. N. Kumara**

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Taming wall teichoic acid multi drug resistance in gram positive pathogens (<http://www.jocpr.com/articles/taming-wall-teichoic-acid-multi-drug-resistance-in-gram-positive-pathogens.pdf>)

**Manu Chaudhary and Anurag Payasi**

**Page No: 18-23**

Evaluation of antioxidant, DNA cleavage and  $\alpha$ -amylase inhibitory activity of polyphenolics from the root bark of Bauhinia racemosa (<http://www.jocpr.com/articles/evaluation-of-antioxidant-dna-cleavage-and-amylase-inhibitory-activity-of-polyphenolics-from-the-root-bark-of-bauhinia-r.pdf>)

**Renuka Jain, Namita Yadav and Satish C. Jain**

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Rationale for the choice of the gelling agent, physical and chemical properties of the gel with a complex of essential oils (<http://www.jocpr.com/articles/rationale-for-the-choice-of-the-gelling-agent-physical-and-chemical-properties-of-the-gel-with-a-complex-of-essential-oi.pdf>)

**V. V. Pul-Luzan, I. I. Baranova, S. N. Kovalenko and S. A. Mamedova**

**Page No: 1532-1535**

Green extraction techniques: Effect of extraction method on lipid contents of three medicinal plants of Apiaceae (<http://www.jocpr.com/articles/green-extraction-techniques-effect-of-extraction-method-on-lipid-contents-of-three-medicinal-plants-of-apiaceae.pdf>)

**Khaled A. Shams, Nahla S. Abdel-Azim, Wafaa A. Tawfik, Heba D. Hassanein, Mahmoud A. Saleh and Faiza M. Hammouda**

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Enhanced production of Rifamycins B and SV by medium supplementation with Vermiculite (<http://www.jocpr.com/articles/enhanced-production-of-rifamycins-b-and-sv-by-medium-supplementation-with-vermiculite.pdf>)

**Elsayed A. Elsayed, Hoda GM Omar and Hesham A. El Enshasy**

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Tinggalkan suatu pesan

Oral glucose tolerance, antinociceptive and acute toxicity studies with *Trichosanthes dioica* fruits (<http://www.jocpr.com/articles/oral-glucose-tolerance-antinociceptive-and-acute-toxicity-studies-with-trichosanthes-dioica-fruits.pdf>)

**Bengir Al Labib, Susanka Roy, Shahnaz Rahman, Md. Mahbubur Rahman and Mohammed Rahmatullah**

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---

The grid resource assignment research using genetic algorithm (<http://www.jocpr.com/articles/the-grid-resource-assignment-research-using-genetic-algorithm.pdf>)

**Guo-Ping Zou**

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---

Chromatographic separation of Pb(II), Cr(II), Cd(II), Ni(II) and Fe(III) in aqueous solutions using *Lanchocarpus laxiflorus* plant leaves (LLL) (<http://www.jocpr.com/articles/chromatographic-separation-of-pbii-crii-cdii-niii-and-feiii-in-aqueous-solutions-using-lanchocarpus-laxiflorus-plant-lea.pdf>)

**J.T. Barminas, B. A. Aliyu, A. H. Santuraki and S. A. Osemeahon**

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---

Production of *Pleurotus platypus* and its nutrient analysis (<http://www.jocpr.com/articles/production-of-pleurotus-platypus-and-its-nutrient-analysis.pdf>)

**A. Abirami and T. Ananthi**

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---

Sol-gel preparation of porous In-TiO<sub>2</sub> photocatalyst using cetyltrimethylammonium bromide as template (<http://www.jocpr.com/articles/solgel-preparation-of-porous-intio2-photocatalyst-using-cetyltrimethylammonium-bromide-as-template.pdf>)

**Wenjie Zhang, Xiaobei Pei and Jinlei Chen**

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---

Effect of pectin from date (*Phoenixd actylifera*) upon lead acetate induced reproductive toxicity in male rats (<http://www.jocpr.com/articles/effect-of-pectin-from-date-phoenixd-actylifera-upon-lead-acetate-induced-reproductive-toxicity-in-male-rats.pdf>)

**Ouldali O, Sadi N, Ait Hamadouche N and Aoues Aek**

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---

*Osmanthus fragrans* extracts for preventing noise induced hearing loss in brewery workers: A randomized, double-blind, controlled study (<http://www.jocpr.com/articles/osmanthus-fragrans-extracts-for-preventing-noise-induced-hearing-loss-in-brewery-workers-a-randomized-doubleblind-contro.pdf>)

**Yih-Min Sun, Hui-Fang Chu and Chien-Ya Hung**

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---

Adsorptive removal of copper (II) using carboxymethyl cellulose (CMC), polyethylene glycol (PEG) and montmorillonite (MMT) clay ternary blend (<http://www.jocpr.com/articles/batch-adsorptive-removal-of-copper-ii-using-carboxymethyl-cellulose-cmc-polyethylene-glycol-peg-and-montmorillonitemmt-c.pdf>)

Tinggalkan suatu pesan

**P. Sathiyarayanan and R. Joel Karunakaran**

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---

Preliminary phytochemical analysis, antihyperglycemic, antinociceptive activity and toxicity studies on leaves of *Casearia elliptica* Wild (<http://www.jocpr.com/articles/preliminary-phytochemical-analysis-antihyperglycemic-antinociceptive-activity-and-toxicity-studies-on-leaves-of-casearia.pdf>)

**Md. Shamiul Hasan Khan, Md. Forhad Molla, Samira Sultana, Shahnaz Rahman and Mohammed Rahmatullah**

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---

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---

Poultry immunity against Ranikhet Disease Virus (RDV)- A case study of an indigenous poultry medication in village production systems of Maharashtra, India (<http://www.jocpr.com/articles/poultry-immunity-against-ranikhet-disease-virus-rdv-a-case-study-of-an-indigenous-poultry-medication-in-village-producti.pdf>)

**Jamunabhen Bhanabhai Patel, Sheila Patel, Purshottam Patel, Ravikumar R. K, Amol S. Kinhekar, Vivek Kumar, Ingle VC, Sudhakar Awandkar, Prabhakar A. Tembhurne and Vipin Kumar**

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---

Neuroprotective activity of ethanolic extracts of *Cassia auriculata* in experimentally induced Parkinsonism (<http://www.jocpr.com/articles/neuroprotective-activity-of-ethanolic-extracts-of-cassia-auriculata-in-experimentally-induced-parkinsonism.pdf>)

**Shravan Kumar Nanumala**

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---

Electrochemical studies of some new adipic acid dihydrazide combining benzaldehyde derivatives (<http://www.jocpr.com/articles/electrochemical-studies-of-some-new-adipic-acid-dihydrazide-combining-benzaldehyde-derivatives.pdf>)

**Shalaby A. Yasin, Maher M. El-Naggar, Elsayed M. Mabrouk and Mohamed S. Yasin**

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---

Effect of *Foeniculum vulgare* on melanogenesis in B16 melanoma cells (<http://www.jocpr.com/articles/effect-of-foeniculum-vulgare-on-melanogenesis-in-b16-melanoma-cells.pdf>)

**Devika Arunkumar and S. Mohandass**

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---

Nano TiO<sub>2</sub>: A recyclable catalyst for one pot synthesis of 2-(substituted phenyl) phthalazin-1(2H)-one (<http://www.jocpr.com/articles/nano-tio2-a-recyclable-catalyst-for-one-pot-synthesis-of-2substituted-phenyl-phthalazin12hone.pdf>)

**Vishal Lad, Jabbar G. Mulla, B. R. Agarwal and Mazahar Farooqui**

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---

Benzothiazine containing thiosemicarbazides are important synthetic intermediates for synthesis of triazole and oxadiazole derivatives (<http://www.jocpr.com/articles/benzothiazine-containing-thiosemicarbazides-are-important-intermediates-for-synthesis-of-triazole-and-oxadiazole.pdf>)

**B. S. J. Khairnar and Bhata R. Chaudhari**

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---

Tinggalkan suatu pesan

An algorithm for similarity-based virtual screening (<http://www.jocpr.com/articles/an-algorithm-for-similaritybased-virtual-screening.pdf>)

**Mubarak Himmat, Naomie Salim, Mohammed Mumtaz Al-Dabbagh and Ali Ahmed**

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In vitro anti-leishmanial activity of *Onosma stenosphon* extract against (<http://www.jocpr.com/articles/in-vitro-antileishmanial-activity-of-onosma-stenosphon-extract-against.pdf>)

**Ali Fattahi Bafghi, Jamshid A. Yatollahi and Farzaneh Mirzaei**

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Antibacterial activity of diazotised dyes synthesized from cardanol (<http://www.jocpr.com/articles/antibacterial-activity-of-diazotised-dyes-synthesized-from-cardanol.pdf>)

**C. V. Mythili and V. Kalyani**

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Screening of bacterial antioxidant exopolysaccharides isolated from Egyptian habitats (<http://www.jocpr.com/articles/screening-of-bacterial-antioxidant-exopolysaccharides-isolated-from-egyptian-habitats.pdf>)

**Selim MS, Mohamed SS, Shima RH, El Awady ME and El Sayed OH**

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The study of the antimicrobial activity of *Carduus crispus* extracts (<http://www.jocpr.com/articles/the-study-of-the-antimicrobial-activity-of-carduus-crispus-extracts.pdf>)

**Omirbaeva A. E., Datkhaev U. M., Gladukh. Ie. V., Iudina Iu.V., Strilets O. P. and Strelnikov L. S.**

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Biochemical and biometrics characterization of five varieties of *Pistacia vera* L. grown in Maoussa experimental station (northwest of Algeria) (<http://www.jocpr.com/articles/biochemical-and-biometrics-characterization-of-five-varieties-of-pistacia-vera-l-grown-in-maoussa-experimental-station-n.pdf>)

**Sid Ahmed Boualem, Khéloufi Benabdeli and Abdelkader Elouissi**

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Antimicrobial activity of extracts of *Cinnamomum zeylanicum* bark and its combination with antibiotics against various microorganisms (<http://www.jocpr.com/articles/antimicrobial-activity-of-extracts-of-cinnamomum-zeylanicum-bark-and-its-combination-with-antibiotics-against-various-mic.pdf>)

**Piyush Vyas, Arvind Suthar, Devendra Patel, Paras Dayma, Jigar Raval and Deepkumar Joshi**

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Antibacterial activity of marine bacteriocinogenic *Lactobacillus casei* Lb 28 against clinical pathogens including multidrug-resistant organisms (MDROs) (<http://www.jocpr.com/articles/antibacterial-activity-of-marine-bacteriocinogenic-lactobacillus-casei-lb-28-against-clinical-pathogens-including-multid.pdf>)

**Saïdouni F, Matallah-Boutiba A and Boutiba Z**

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Tinggalkan suatu pesan

Solubility and bioavailability enhancement of albendazole by complexing with hydroxy propyl  $\beta$  cyclodextrin (<http://www.jocpr.com/articles/solubility-and-bioavailability-enhancement-of-albendazole-by-complexing-with-hydroxy-propyl--cyclodextrin.pdf>)

Anjana MN, Jipnomon Joseph and Sreeja C. Nair

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Dwarika Prasad

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and characterization of new potential allelochemical from Bidens biternata (Lour.) Merrill & Sherff (<http://www.jocpr.com/articles/isolation-and-characterization-of-new-potential-allelochemical-from-bidens-biternata-lour.-merrill-sherff.pdf>)

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---

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---

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---

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 ypolidemic properties study of total triterpenic acids from Polyporus umbellatus ([www.jocpr.com/articles/the-hypolipidemic-properties-study-of-total-triterpenic-acids-frompolyporus-umbellatus.pdf](http://www.jocpr.com/articles/the-hypolipidemic-properties-study-of-total-triterpenic-acids-frompolyporus-umbellatus.pdf))

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---

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E/Z-Iminol Conformational behavior of the substituted formohydroxamic: A DFT study (<http://www.jocpr.com/articles/eziminol-conformational-behavior-of-the-substituted-formohydroxamic-a-dft-study.pdf>)

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---

In vitro antioxidant, antimicrobial and larvicidal studies of schiff base transition metal complexes (<http://www.jocpr.com/articles/in-vitro-antioxidant-antimicrobial-and-larvicidal-studies-of-schiff-base-transition-metal-complexes.pdf>)

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---

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---



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---

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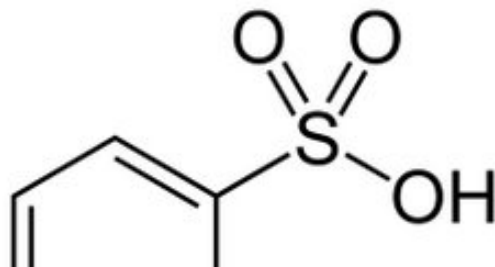
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## Quantity essential oil from rose callus leaf (*Rosa hybrid L. variety Hybride tea purple*): Results of light elicitation

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### ABSTRACT

Essential oil from rose petals roses are very small, the average ranged from 0.01 to 10.0%. Local Americana beauty red roses and roses Holand from Cipanas contains oil rose about 0.08 to 0.14%, with citronellol 27.23 % and geraniol 16.18%, in East Java (Batu) content of local *Rosa hybrida* varieties Hybride Tea purple containing  $\beta$ -citronellol 21.07 % and Geraniol 0.18 % In Indonesia, produce rose essential oil is low, compared rose essential oil of Kashmir and Bulgarian. The essential rose oil research try to improve the callus of rose leaf with elicitation abiotic. This Research of essential oil in rose leaf callus induced by elicitor Long exposures (0 hours / day, 12 hours / day and 24 hours / day) and light intensity (1200 Lux and 2400 Lux). Formation of the results obtained Geraniol need light. The content is highest Citronellol in the dark treatment

**Keywords:** abiotic elicitor, callus, citronellol and geraniol

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### INTRODUCTION

Rose essential oil is a vegetable oil that produces a distinctive fragrant. In Indonesia, grown roses from the Netherlands, the varieties of *Hybride tea* [4]. Extraction of essential rose oil has been done through the process of distillation from rose petals. The essential rose oil made up of 75 % is composed dominant about geraniol and citronellol then 25 % rose champor, the containing compounds nerol, linalool, phenyl ethyl alcohol, farnesol, stearoptene,  $\alpha$ -pinene,  $\beta$ -pinene,  $\alpha$ -terpinene, limonene, p-cymene, Camphene,  $\beta$ -caryophyllene, neral, citronellyl acetate, geranyl acetate, neryl acetate, eugenol, methyl eugenol, rose oxide,  $\alpha$ -damascenone,  $\beta$ -damascenone, benzaldehyde, benzyl alcohol, rhodinyl acetate and phenyl ethyl formate [14].

The local red roses from Cipanas West Java contains geraniol 27.23 % and citronellol 16.18 % [14]. Preliminary research on the oil content of rose petals local varieties of *tea Hybride* contained in three locations Batu East Java with 5 varieties: *Hybride white tea*, *Hybride yellow tea*, *Hybride rose tea*, *Hybride red tea* and *Hybride purple tea*. Only one location in the village Sidorame with *purple tea* varieties Hybride containing citronellol and geraniol. Ingredients obtained: citronellol (21.73%) and geraniol (0.18%) [7]. The problem is there is oil content rose in Indonesia is very low when compared to the industry standard rose essential oil in Turkey. The content of *Rosa damascena* Mill citronellol was 35.1%. and 17.9% geraniol [2][12].



In an effort to improve the content of the research conducted through tissue culture techniques and elicitation techniques. Increased content of volatile oil carried through the elicitation technique using light. Elicitation is a method to induce phytoalexin formation, secondary metabolites that have been or other secondary metabolites that normally do not accumulate in plants [5]. Elicitation is the process of adding elicitor with the aim to induce and enhance the formation of secondary metabolites [6]. culture usually requires long irradiation or irradiation ranges from 10-24 hours long. Long exposures are optimal is 16 hours [10].

### EXPERIMENTAL SECTION

This study was conducted in labobatorium Biotechnology Faculty of Pharmacy, Airlangga University.

Leaf explants of shoots roses varieties of *Hybride tea purple* measuring 2 cm and the leaves were taken to the three that are still colored red, grown on Murashige and Skoog medium with the addition of plant growth regulator 0.1 mg/L Naphthalene Acetic Acid and 3 mg/L Benzyl Amino Purin [11].

Callus two months old in subculture to elicitation using factorial completely randomized design with two factors. The first factor while irradiation with 3 treatments as follows: 0 hours/day (total darkness), 12 hours/day and 24 hours/day (total light). The second factor light intensity with 2 treatments as follows: 1200 Lux and 2400 Lux.

Extraction of essential oils from callus elicitation results done by weighing 100 g of callus wind dried for 24 hours, then soaked with n-Hexan with a ratio of 1 : 3 for 24 hours. Strain and cool evaporated [1]

Sample extraction yield with 5 mL n-Hexan, divortex for 3 minutes, centrifuged at 2.500 rpm for 5 minutes. Supernatant (hexan phase) was taken and injected for analysis Gas chromatography analysis - MS spectrophotometer

### RESULTS AND DISCUSSION

#### Callus and Color Quality

In Table 1. the quality obtained the friable callus with brown translucent color on dark treatment, the quality of compact and friable callus with green translucent color on irradiation treatment 12 hours/day and the quality of compact callus with green color on treatment irradiation 24 hours/day.

Irradiation on the growth of plant organs in vitro requires full light, while the splitting process does not require light [13]. The light effect on the formation of clorofil [8]. This is consistent with the results of the study showed that callus formed on treatment while the dark is brown translucent color that gets the green light. According Widyastuti green callus can improve growth, enhance the cell's ability to bind CO<sub>2</sub> for photosynthesis purposes optimal light intensity in 1000 to 5000 lux more than it will inhibit the growth of.callus.

Table 1. Observations Color and Quality Callus Generated After Elicitation Light Treatment

Treatment (weeks)		Color of Callus	Quality of Callus
L1	4	Brown translucent	Friable
	6	Brown translucent	Friable
	8	Brown translucent	Friable
L2I1	4	Green translucent	Compact and Friable
	6	Green translucent	Compact and Friable
	8	Green translucent	Compact and Friable
L2I2	4	Green translucent	Compact and Friable
	6	Green translucent	Compact and Friable
	8	Green translucent	Compact and Friable
L3I1	4	Green	Compact
	6	Green	Compact
	8	Green	Compact
L3I2	4	Green	Compact
	6	Green	Compact
	8	Green	Compact

**Weight Callus**

In Table 2. the tendency of dark treatment resulted in the lightest callus. While the provision of various length and intensity of light affects callus heavier. The more the intensity and duration of light irradiation heavier callus formed. The low light intensity effect on carbohydrate production decline resulting in lower weight of the plant [3]. Effect of light intensity deals with the process of photosynthesis. In this process of photosynthesis light energy needed to form carbohydrates [15]. The greater the amount of energy the optimal formation of the large amount of light energy received depends on the intensity of light. The higher the light intensity the greater the energy, the more carbohydrates are formed.

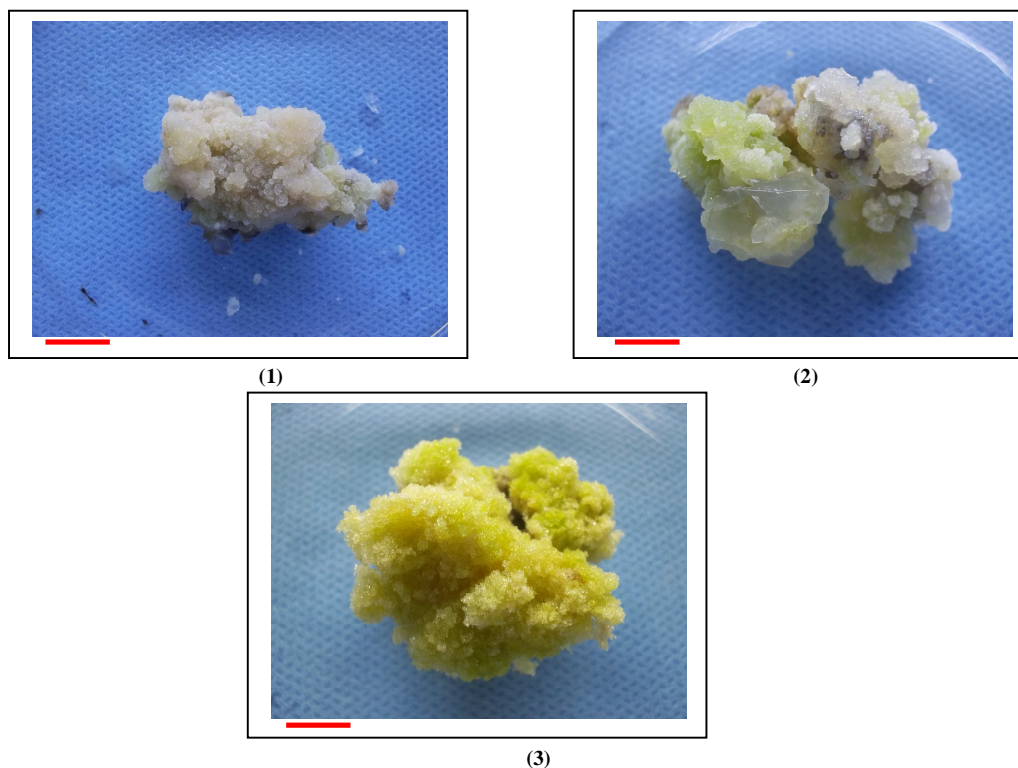
**Table 2. Observations Wet weight Shaped Rose Leaves Callus After elicitation Light Treatment**

Treatment	Age of callus (days)							
	7	14	21	28	35	42	49	56
L1	0.942	1.038 ab	1.132 b	1.219 c	1.294 c	1.420 c	1.562 b	1.656 b
L2	0.84	0.964 b	1.175 b	1.432 a	1.719 a	2.087 a	2.310 a	2.416 a
L3	1.024	1.110 a	1.228 a	1.362 b	1.487 b	1.887 b	2.205 a	2.669 a
Duncan 5 %	TN	N	N	N	N	N	N	N

**Profile Oil Rose**

The results of the content analysis of secondary metabolites were performed using GCMS can be seen in table 3. Treatment of light capable of producing *geraniol* content, while in dark conditions *geraniol* not formed. The results of all treatments contained *citronellol* in any form treatment then *citronellol* a marker compound.

Light intensity affects the total energy received by jaingan or cells in tissue culture. Increasing the amount of chlorophyll formed by light followed by an increase in activity of the enzymes of photosynthesis [13]. In the production of secondary metabolites compounds with in vitro culture technique was also affected by light. Light affects the enzyme-inducing enzymes involved in the biosynthesis of secondary metabolite formation. Without light causes in vitro culture is not able to form some secondary metabolites.



**Figure (1) on the dark callus formed transparent with friabel quality (2) on the light intensity of 1200 lux callus formed transparent and green with friabel and compact quality (3) on the light intensity of 2400 lux callus formed green with compact quality. — 1 cm**

Table 3. Profiling Essential Oil Content in Callus Elicitation Results Light Rose Leaves

Ingredients Essential oil (%)	Lighting treatment (weeks)														
	L1			L2I1			L2I2			L3I1			L3I2		
	4	6	8	4	6	8	4	6	8	4	6	8	4	6	8
Benzaldehyde				0.363	0.403	0.326	2.241	0.551	0.361				0.367		
Benzyl Alcohol				2.010	5.754	4.680	3.484	1.992	3.405		2.980		2.142		
Phenethyl Alcohol				16.265	16.406	13.845	13.307	5.256	16.672	0.338		0.319			
Linalool										0.241					
$\beta$ -Citronellol	36.629	31.025	31.623	31.624	18.248	22.054	29.542	21.077	30.664	7.209	6.067	6.361	5.848	5.583	5.872
Geraniol				2.375				2.185							
Geranyl acetate								1.859		2.488	1.998	2.132	2.610	3.407	2.228
Geraniol formate							0.520								
Geranyl benzoate							0.214		0.220	0.455					

### CONCLUSION

The results of the observations that have been obtained in this study can be summarized as follows:

1. Quality of friable callus callus with translucent brown color on dark treatment. Quality compact and friable callus callus with green translucent color on irradiation treatment 12 hours/day. The quality of compact callus callus with green color on irradiation treatment 24 hours/day.
2. *Citonellol* as marker compounds.
3. Formation of Geraniol need light.
4. Highest Cironellol Content contained on the form of dark treatment on callus age of 2 weeks.
5. Network callus that forms on the dark loose produce callus, whereas the light treatment resulted in a denser network.

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### REFERENCES

- [1] D Amarsih; Yulianingsih; SD Sabari, *J. Hort* . **2006**, 16 (14) : 356 – 359.
- [2] H Baydar, *Euro Cosmetics*, **2006**, 14 (6) : 13– 17.
- [3] Djukri; BS Purwoko, *Ilmu Pertanian*, **2003**, 10 (2) : 17–25..
- [4] S Ercisli, *Genet. Resour. and Crop Evolut*, **2005**, 52: 787–795.
- [5] AMS Pereira; BW Bertoni; FLA Cãmara; B IDuarte; MEC Queiroz; VGM Leite; RM Moraes; D Carvalho; SC França, *Plant Cell, Tissue and Org. Cult*, **2000**, 60: 165–169.
- [6] KG Ramawat. *Plant Biotechnology*. 1<sup>st</sup> Edition, S. Chand & Company LTD. New Delhi. **2008**, 93 – 134.
- [7] Ribkahwati; H Purnobasuki; Isnaeni; EDW Utami prosiding *Seminar Nutrasetikal dan Kosmesetikal*, **2013**
- [8] FB Salisbury; CW Ross.. *Plant Physiologi*. 1<sup>st</sup> Edition. Wadsworth Publishing Company Belmont. California **1992**
- [9] AS Shawl; R Adams, *Perfumer & Flavorist*, **2009**, 34 : 1–5.
- [10] A Taji; P Kumar; P Lakshmanan. *In vitro plant breeding*. food products Press. **2002**, 15 – 44.
- [11] NH Vu; PH Anh; DT Nhut. *Plant. Cell Tissue Organ Culture*, **2006**, 87 : 315 – 320
- [12] A Wediyanto; Soesilo; M Syai, dkk. *Standart Operasi Prosedur Budidaya Bunga Potong*. **2010**, XVI–1.
- [13] Widyastuti, N. Pengaruh Intensitas Cahaya terhadap Multiplikasi Kultur Jaringan Tanaman secara *In vitro*. Disampaikan pada *Seminar Nasional Penerapan Teknologi kendali dan Instrumentasi pada Pertanian*. S 4–5, 1 – 7.
- [14] D Yulianingsih; R Amarsih; Tahir; SD Sabari. *J. Hort*, **2006**, 16 (4) : 345 – 348.
- [15] PF Zainal. Pengaruh Cahaya terhadap Pertumbuhan dan Perkembangan Tanaman. *Makalah Fisiologi*. Jurusan Biologi FMIPA Univ. Haluoleo Kendari, **2012**, 5 – 10.