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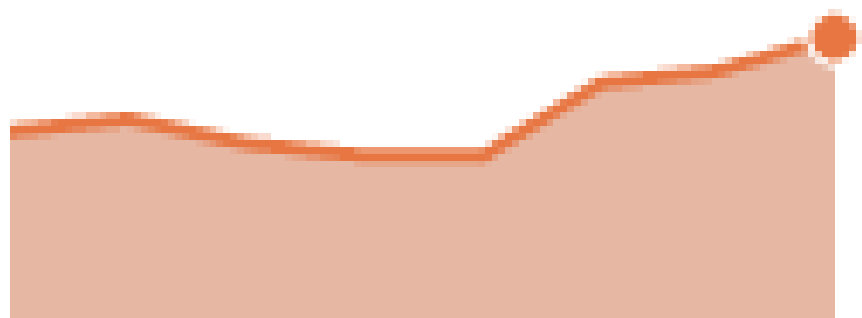
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Singh AK. Acid Catalised Solvolysis of Amyl Methanoate in Binary Aqueous solvent system and solvent effect on kinetics of activation parameters. *Asian Journal of Research in Chemistry*. 2020 Nov 1;13(6):485-8. doi: 10.5958/0974-4150.2020.00085.1

Al-Ogaili NA, Osama S, Jazme D, Saad S. In Vitro Antibacterial Investigation and Synergistic Effect of Ficus carica and Olea europaea Aqueous Extracts. *Research Journal of Pharmacy and Technology*. 2020 Mar 1;13(3): 1198-203. doi: 10.5958/0974-360X.2020.00221.8

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Stacey GL and Keen NT. *Plant-microbe interactions*. Chapman and Hall, New York. 1996.

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Author(s): Pedda Kasim D Sai Kishore N, Suneetha P, K Bramareswara Rao, Naresh Kumar M, Krishna M.S.R.

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Author(s): Sugashini Settu, Sathiavelu Arunachalam

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Author(s): Radha.V, Sheeja. S. Varghese

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Author(s): Simmy Gupta, Jyoti Prabha Bishnoi

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Author(s): Septiana P. Suciadi, Alexander P. Nugraha, Diah S. Ernawati⁵, Nurina F. Ayuningtyas, Ida B. Narmada, Chiquita Prahasanti, Aristika Dinaryanti, Igo Syaiful Ihsan, Eryk Hendrinto, Helen Susilowati, Fedik Abdul Rantam

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In vitro regeneration of *Vigna unguiculata* using marine seaweed *Sargassum polycystum* (AbstractView.aspx?PID=2019-12-4-17)

Author(s): S. Vinoth, N. Rathika, M. Jhansi, P. Gurusaravanan, M. Vigneswaran, R. Subbaiya, G. Karthiga Devi, S. Chozhavendhan, R. Devika

DOI: 10.5958/0974-360X.2019.00262.2 (<https://www.doi.org/10.5958/0974-360X.2019.00262.2>)

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Author(s): Varsha I. Sarode, Ritesh P. Bhole

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Author(s): Ramli Salfarina

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Author(s): Purushothaman V, Madhumathi R, Sakthiselvan P

DOI: 10.5958/0974-360X.2019.00247.6 (<https://www.doi.org/10.5958/0974-360X.2019.00247.6>)

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Views: 5 (pdf), 737 (html)

Access:  Open Access

Cite: Nazarbek B. Omarov, Meirbek Z. Aymagambetov, Farida S. Raikhimzhanova, Aidar D. Raimkhanov. *Surgical Treatment of Perforated Duodenal Ulcer with The use of a Mini-Access. Research J. Pharm. and Tech.* 2019; 12(4):1601-1606. doi: 10.5958/0974-360X.2019.00266.X (<https://www.doi.org/10.5958/0974-360X.2019.00266.X>)

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(AbstractView.aspx?
PID=2019-12-
4-21)

Evaluation of Diuretic Activity on Leaves Extract of *Cardiospermum halicacabum* Linn (AbstractView.aspx?PID=2019-12-4-22)

Author(s): V. Velmurugan, T. Sundarajan, A. Chandran, G. Arunachalam

DOI: 10.5958/0974-360X.2019.00267.1 (<https://www.doi.org/10.5958/0974-360X.2019.00267.1>)

Views: 77 (pdf), 1156 (html)

Access:  Open Access

Cite: V. Velmurugan, T. Sundarajan, A. Chandran, G. Arunachalam. *Evaluation of Diuretic Activity on Leaves Extract of *Cardiospermum halicacabum* Linn. Research J. Pharm. and Tech.* 2019; 12(4):1607-1609. doi: 10.5958/0974-360X.2019.00267.1 (<https://www.doi.org/10.5958/0974-360X.2019.00267.1>)

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(AbstractView.aspx?
PID=2019-12-
4-22)

The effect of Calcium and Vitamin D Supplements as an Adjuvant Therapy to Metformin on Lipid profile in vitamin D Deficient/Insufficient Polycystic Ovary Syndrome Patients (AbstractView.aspx?PID=2019-12-4-23)

Author(s): Sally Kaddoura, Marwan Alhalabi, Abdul Hakim Nattouf

DOI: 10.5958/0974-360X.2019.00268.3 (<https://www.doi.org/10.5958/0974-360X.2019.00268.3>)

Views: 1 (pdf), 689 (html)

Access:  Open Access

Cite: Sally Kaddoura, Marwan Alhalabi, Abdul Hakim Nattouf. The effect of Calcium and Vitamin D Supplements as an Adjuvant Therapy to Metformin on Lipid profile in vitamin D Deficient/Insufficient Polycystic Ovary Syndrome Patients. *Research J. Pharm. and Tech.* 2019; 12(4): 1610-1614. doi: 10.5958/0974-360X.2019.00268.3 (<https://www.doi.org/10.5958/0974-360X.2019.00268.3>)

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(AbstractView.aspx?
PID=2019-12-
4-23)

Computer based Objective Clinical Examination (COCE) of Student's Medical Skills (Diagnosis, Prognosis and Treatment Planning), A new Method of Clinical Assay (AbstractView.aspx?PID=2019-12-4-24)

Author(s): Ali Forouzanfar

DOI: 10.5958/0974-360X.2019.00269.5 (<https://www.doi.org/10.5958/0974-360X.2019.00269.5>)

Views: 3 (pdf), 781 (html)

Access:  Open Access

Cite: Ali Forouzanfar. Computer based Objective Clinical Examination (COCE) of Student's Medical Skills (Diagnosis, Prognosis and Treatment Planning), A new Method of Clinical Assay. *Research J. Pharm. and Tech.* 2019; 12(4):1615-1618. doi: 10.5958/0974-360X.2019.00269.5 (<https://www.doi.org/10.5958/0974-360X.2019.00269.5>)

Read More »

(AbstractView.aspx?
PID=2019-12-
4-24)

The Roles of Psychomotricians in Rehabilitation sport (AbstractView.aspx?PID=2019-12-4-25)

Author(s): Youn TaeSuh, Ju Byung Park, Sang Doo Kim

DOI: 10.5958/0974-360X.2019.00270.1 (<https://www.doi.org/10.5958/0974-360X.2019.00270.1>)

Views: 4 (pdf), 530 (html)

Access:  Open Access

Cite: Youn TaeSuh, Ju Byung Park, Sang Doo Kim. *The Roles of Psychomotricians in Rehabilitation sport. Research J. Pharm. and Tech.* 2019; 12(4):1619-1624. doi: 10.5958/0974-360X.2019.00270.1 (<https://www.doi.org/10.5958/0974-360X.2019.00270.1>)

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(AbstractView.aspx?
PID=2019-12-
4-25)

Node Authentication and Key Generation/Update Protocol and data Integrity Verification for Safety Communication in Smart Grid Environment (AbstractView.aspx?PID=2019-12-4-26)

Author(s): Won-Kyu Choi, Jong-Oh Park, Moon-Seok Jun

DOI: 10.5958/0974-360X.2019.00271.3 (<https://www.doi.org/10.5958/0974-360X.2019.00271.3>)

Views: 3 (pdf), 677 (html)

Access:  Open Access

Cite: Won-Kyu Choi, Jong-Oh Park, Moon-Seok Jun. *Node Authentication and Key Generation/Update Protocol and data Integrity Verification for Safety Communication in Smart Grid Environment. Research J. Pharm. and Tech.* 2019; 12(4):1625-1631. doi: 10.5958/0974-360X.2019.00271.3 (<https://www.doi.org/10.5958/0974-360X.2019.00271.3>)

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(AbstractView.aspx?
PID=2019-12-
4-26)

Fibromyalgia Syndrome and Acne Vulgaris: A New Link (AbstractView.aspx?PID=2019-12-4-27)

Author(s): Mohammed Hadi Alosami, Faiq I. Gorial, Dalia Mohammed Jasim

DOI: 10.5958/0974-360X.2019.00272.5 (<https://www.doi.org/10.5958/0974-360X.2019.00272.5>)

Views: 17 (pdf), 781 (html)

Access:  Open Access

Cite: Mohammed Hadi Alosami, Faiq I. Gorial, Dalia Mohammed Jasim. *Fibromyalgia Syndrome and Acne Vulgaris: A New Link*. *Research J. Pharm. and Tech.* 2019; 12(4):1632-1636. doi: 10.5958/0974-360X.2019.00272.5 (<https://www.doi.org/10.5958/0974-360X.2019.00272.5>)

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(AbstractView.aspx?
PID=2019-12-
4-27)

Development and Validation of a Stability Indicating RP-HPLC Method for Estimation of Etizolam in Tablet Dosage Form (AbstractView.aspx? PID=2019-12-4-28)

Author(s): Sowjanya Gummadi, Ganapaty Seru, Sree Ganesh Chittajallu

DOI: 10.5958/0974-360X.2019.00273.7 (<https://www.doi.org/10.5958/0974-360X.2019.00273.7>)

Views: 31 (pdf), 940 (html)

Access:  Open Access

Cite: Sowjanya Gummadi, Ganapaty Seru, Sree Ganesh Chittajallu. *Development and Validation of a Stability Indicating RP-HPLC Method for Estimation of Etizolam in Tablet Dosage Form*. *Research J. Pharm. and Tech.* 2019; 12(4):1637-1642. doi: 10.5958/0974-360X.2019.00273.7 (<https://www.doi.org/10.5958/0974-360X.2019.00273.7>)

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(AbstractView.aspx?
PID=2019-12-
4-28)

Galectin-8 Gene Polymorphism among Iraqi Patients with Rheumatoid Arthritis (AbstractView.aspx?PID=2019-12-4-29)

Author(s): Tarek. Q. Muss, M. AL-Faham, Faiq I. Gorial., Adil K. Zghair

DOI: 10.5958/0974-360X.2019.00274.9 (<https://www.doi.org/10.5958/0974-360X.2019.00274.9>)

Views: 5 (pdf), 755 (html)

Access:  Open Access

Cite: Tarek. Q. Muss, M. AL-Faham, Faiq I. Gorial., Adil K. Zghair. Galectin-8 Gene Polymorphism among Iraqi Patients with Rheumatoid Arthritis. *Research J. Pharm. and Tech.* 2019; 12(4):1643-1645 doi: 10.5958/0974-360X.2019.00274.9 (<https://www.doi.org/10.5958/0974-360X.2019.00274.9>)

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(AbstractView.aspx?
PID=2019-12-
4-29)

A Novel Instrumentation System for Monitoring of Foot Ulcer (AbstractView.aspx?PID=2019-12-4-3)

Author(s): J. Samson Isaac, P. Kingston Stanley, P. Vijay Daniel, D. Pamela

DOI: 10.5958/0974-360X.2019.00248.8 (<https://www.doi.org/10.5958/0974-360X.2019.00248.8>)

Views: 16 (pdf), 834 (html)

Access:  Open Access

Cite: J. Samson Isaac, P. Kingston Stanley, P. Vijay Daniel, D. Pamela. A Novel Instrumentation System for Monitoring of Foot Ulcer. *Research J. Pharm. and Tech.* 2019; 12(4):1504-1506. doi: 10.5958/0974-360X.2019.00248.8 (<https://www.doi.org/10.5958/0974-360X.2019.00248.8>)

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(AbstractView.aspx?
PID=2019-12-
4-3)

Gastroprotective Effect of *Lannea coromandelica* Stem Bark in Rat induced by Aspirin (AbstractView.aspx?PID=2019-12-4-30)

Author(s): Jastria Pusmarani, Mus Ifaya, Muhammad Isrul, Ahmad Saleh, Himaniarwati

DOI: 10.5958/0974-360X.2019.00275.0 (<https://www.doi.org/10.5958/0974-360X.2019.00275.0>)

Views: 26 (pdf), 910 (html)

Access:  Open Access

Cite: Jastria Pusmarani, Mus Ifaya, Muhammad Isrul, Ahmad Saleh, Himaniarwati. Gastroprotective Effect of *Lannea coromandelica* Stem Bark in Rat induced by Aspirin. *Research J. Pharm. and Tech.* 2019; 12(4):1646-1648. doi: 10.5958/0974-360X.2019.00275.0 (<https://www.doi.org/10.5958/0974-360X.2019.00275.0>)

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(AbstractView.aspx?
PID=2019-12-
4-30)

Solid Dispersion Technique for Solubility Improvement of Ketoconazole for Vaginal Delivery (AbstractView.aspx?PID=2019-12-4-31)

Author(s): Mahore J. G., Deshkar S. S., Kumare P. P.

DOI: 10.5958/0974-360X.2019.00276.2 (<https://www.doi.org/10.5958/0974-360X.2019.00276.2>)

Views: 79 (pdf), 1143 (html)

Access:  Open Access

Cite: Mahore J. G., Deshkar S. S., Kumare P. P. Solid Dispersion Technique for Solubility Improvement of Ketoconazole for Vaginal Delivery. *Research J. Pharm. and Tech.* 2019; 12(4):1649-1654. doi: 10.5958/0974-360X.2019.00276.2 (<https://www.doi.org/10.5958/0974-360X.2019.00276.2>)

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(AbstractView.aspx?
PID=2019-12-
4-31)

UV Spectrophotometric Method for the Determination of Sirolimus in Bulk and its Dosage Form (AbstractView.aspx?PID=2019-12-4-32)

Author(s): S K. Mastanamma, S K. Reehana, Prudhvi. L, Ravi Kiran

DOI: 10.5958/0974-360X.2019.00277.4 (<https://www.doi.org/10.5958/0974-360X.2019.00277.4>)

Views: 52 (pdf), 782 (html)

Access:  Open Access

Cite: S K. Mastanamma, S K. Reehana, Prudhvi. L, Ravi Kiran. UV Spectrophotometric Method for the Determination of Sirolimus in Bulk and its Dosage Form. *Research J. Pharm. and Tech.* 2019; 12(4):1655-1658. doi: 10.5958/0974-360X.2019.00277.4 (<https://www.doi.org/10.5958/0974-360X.2019.00277.4>)

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(AbstractView.aspx?

PID=2019-12-

4-32)

Evaluation of Liver Function in Type 2 Diabetic Patients during Clinical Trials in Kirkuk City (AbstractView.aspx?PID=2019-12-4-33)

Author(s): Fadheelah S Azeez, Ali M Saadi

DOI: 10.5958/0974-360X.2019.00278.6 (<https://www.doi.org/10.5958/0974-360X.2019.00278.6>)

Views: 3 (pdf), 708 (html)

Access:  Open Access

Cite: Fadheelah S Azeez, Ali M Saadi. Evaluation of Liver Function in Type 2 Diabetic Patients during Clinical Trials in Kirkuk City. *Research J. Pharm. and Tech.* 2019; 12(4):1659-1663. doi: 10.5958/0974-360X.2019.00278.6 (<https://www.doi.org/10.5958/0974-360X.2019.00278.6>)

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(AbstractView.aspx?

PID=2019-12-

4-33)

Solubility improvement of Lapatinib by Novel Techniques of Solid Dispersion (AbstractView.aspx?PID=2019-12-4-34)

Author(s): Mohanty. Mitrabhanu, Apte. S. S, Pavani. A, Appadwedula. VS

DOI: 10.5958/0974-360X.2019.00279.8 (<https://www.doi.org/10.5958/0974-360X.2019.00279.8>)

Views: 87 (pdf), 1044 (html)

Access:  Open Access

Cite: Mohanty. Mitrabhanu, Apte. S. S, Pavani. A, Appadwedula. VS. Solubility improvement of Lapatinib by Novel Techniques of Solid Dispersion. *Research J. Pharm. and Tech.* 2019; 12(4):1664-1674. doi: 10.5958/0974-360X.2019.00279.8 (<https://www.doi.org/10.5958/0974-360X.2019.00279.8>)

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(AbstractView.aspx?
PID=2019-12-
4-34)

Correlation between Osteopontin Promoter Gene and Fresh Semen Quality in Friesian Holstein Dairy Cows (AbstractView.aspx?PID=2019-12-4-35)

Author(s): Tatik Hernawati, Yudit Oktanella, Sri Mulyati, Rimayanti, Tri Wahyu Suprayogi

DOI: 10.5958/0974-360X.2019.00280.4 (<https://www.doi.org/10.5958/0974-360X.2019.00280.4>)

Views: 53 (pdf), 812 (html)

Access:  Open Access

Cite: Tatik Hernawati, Yudit Oktanella, Sri Mulyati, Rimayanti, Tri Wahyu Suprayogi. Correlation between Osteopontin Promoter Gene and Fresh Semen Quality in Friesian Holstein Dairy Cows. *Research J. Pharm. and Tech.* 2019; 12(4):1677-1682. doi: 10.5958/0974-360X.2019.00280.4 (<https://www.doi.org/10.5958/0974-360X.2019.00280.4>)

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(AbstractView.aspx?
PID=2019-12-
4-35)

Study on South Korea's Recent Low Fertility Resolution Option (AbstractView.aspx?PID=2019-12-4-36)

Author(s): Myung-Hee Kim

DOI: 10.5958/0974-360X.2019.00281.6 (<https://www.doi.org/10.5958/0974-360X.2019.00281.6>)

Views: 9 (pdf), 781 (html)

Access:  Open Access

Cite: Myung-Hee Kim. Study on South Korea's Recent Low Fertility Resolution Option. *Research J. Pharm. and Tech.* 2019; 12(4):1683-1687. doi: 10.5958/0974-360X.2019.00281.6 (<https://www.doi.org/10.5958/0974-360X.2019.00281.6>)

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(AbstractView.aspx?
PID=2019-12-
4-36)

Impact of Nanoparticulate Drug Delivery System of Herbal Drug in Control of Diabetes Mellitus (AbstractView.aspx?PID=2019-12-4-37)

Author(s): Senthilnathan. B, Vivekanandan. K, Bhavya. E, Masilamani, Swarna Priya. B

DOI: 10.5958/0974-360X.2019.00282.8 (<https://www.doi.org/10.5958/0974-360X.2019.00282.8>)

Views: 36 (pdf), 818 (html)

Access:  Open Access

Cite: Senthilnathan. B, Vivekanandan. K, Bhavya. E, Masilamani, Swarna Priya. B. Impact of Nanoparticulate Drug Delivery System of Herbal Drug in Control of Diabetes Mellitus. *Research J. Pharm. and Tech.* 2019; 12(4): 1688-1694. doi: 10.5958/0974-360X.2019.00282.8 (<https://www.doi.org/10.5958/0974-360X.2019.00282.8>)

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(AbstractView.aspx?
PID=2019-12-
4-37)

Awareness and Knowledge of Physiotherapy among Medical and Health Sciences Students: A Cross-Sectional Study (AbstractView.aspx?PID=2019-12-4-38)

Author(s): *Martin Ebenezer. C, Goh C.X.H, Jemeela. S, Manoj Abraham. M, Jabbar. M. S*

DOI: *10.5958/0974-360X.2019.00283.X (https://www.doi.org/10.5958/0974-360X.2019.00283.X)*

Views: *268 (pdf), 3367 (html)*

Access:  *Open Access*

Cite: *Martin Ebenezer. C, Goh C.X.H, Jemeela. S, Manoj Abraham. M, Jabbar. M. S. Awareness and Knowledge of Physiotherapy among Medical and Health Sciences Students: A Cross-Sectional Study. Research J. Pharm. and Tech. 2019; 12(4): 1695-1706. doi: 10.5958/0974-360X.2019.00283.X (https://www.doi.org/10.5958/0974-360X.2019.00283.X)*

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(AbstractView.aspx?
PID=2019-12-
4-38)

Antidiabetic Activity of leaf extract from three types of Mangrove Originating from Sambera Coastal Region Indonesia (AbstractView.aspx?PID=2019-12-4-39)

Author(s): *Usman, Muh. Amir M. Farah Erika, M. Nurdin, Hadi Kuncoro*

DOI: *10.5958/0974-360X.2019.00284.1 (https://www.doi.org/10.5958/0974-360X.2019.00284.1)*

Views: *39 (pdf), 1201 (html)*

Access:  *Open Access*

Cite: *Usman, Muh. Amir M. Farah Erika, M. Nurdin, Hadi Kuncoro. Antidiabetic Activity of leaf extract from three types of Mangrove Originating from Sambera Coastal Region Indonesia. Research J. Pharm. and Tech. 2019; 12(4):1707-1712. doi: 10.5958/0974-360X.2019.00284.1 (https://www.doi.org/10.5958/0974-360X.2019.00284.1)*

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(AbstractView.aspx?
PID=2019-12-
4-39)

Effect of Active and Passive Warm-up on Heart Rate and Oral Temperature in Healthy Female Subjects (AbstractView.aspx?PID=2019-12-4-4)

Author(s): B. Sujatha, A. Brite Saghaya Rayna, Annie Sunil George

DOI: 10.5958/0974-360X.2019.00249.X (<https://www.doi.org/10.5958/0974-360X.2019.00249.X>)

Views: 5 (pdf), 999 (html)

Access:  Open Access

Cite: B. Sujatha, A. Brite Saghaya Rayna, Annie Sunil George. *Effect of Active and Passive Warm-up on Heart Rate and Oral Temperature in Healthy Female Subjects*. *Research J. Pharm. and Tech.* 2019; 12(4): 1507-1509. doi: 10.5958/0974-360X.2019.00249.X (<https://www.doi.org/10.5958/0974-360X.2019.00249.X>)

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(AbstractView.aspx?
PID=2019-12-
4-4)

The Relationship between Serum Level of Ferritin and Cardiac Troponin T (cTnT) in Children with Major Beta-Thalassemia (AbstractView.aspx?PID=2019-12-4-40)

Author(s): Mutaz Sabah A, Khedhair Abbas K, Shaymaa Mohammed Salih

DOI: 10.5958/0974-360X.2019.00285.3 (<https://www.doi.org/10.5958/0974-360X.2019.00285.3>)

Views: 31 (pdf), 857 (html)

Access:  Open Access

Cite: Mutaz Sabah A, Khedhair Abbas K, Shaymaa Mohammed Salih. *The Relationship between Serum Level of Ferritin and Cardiac Troponin T (cTnT) in Children with Major Beta-Thalassemia*. *Research J. Pharm. and Tech.* 2019; 12(4):1713-1716. doi: 10.5958/0974-360X.2019.00285.3 (<https://www.doi.org/10.5958/0974-360X.2019.00285.3>)

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(AbstractView.aspx?
PID=2019-12-
4-40)

Detection of AML in Blood Microscopic Images using Local Binary Pattern and Supervised Classifier (AbstractView.aspx?PID=2019-12-4-41)

Author(s): Chitra P, Ebenezer Jebarani M R, Kavipriya P, Srilatha K, Sumathi M, Lakshmi S

DOI: 10.5958/0974-360X.2019.00286.5 (<https://www.doi.org/10.5958/0974-360X.2019.00286.5>)

Views: 24 (pdf), 945 (html)

Access:  Open Access

Cite: Chitra P, Ebenezer Jebarani M R, Kavipriya P, Srilatha K, Sumathi M, Lakshmi S. Detection of AML in Blood Microscopic Images using Local Binary Pattern and Supervised Classifier. *Research J. Pharm. and Tech.* 2019; 12(4):1717-1720. doi: 10.5958/0974-360X.2019.00286.5 (<https://www.doi.org/10.5958/0974-360X.2019.00286.5>)

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(AbstractView.aspx?

PID=2019-12-
4-41)

Influence of Medial and Lateral Hamstring Strengthening Exercises in women with Osteoarthritis knee: A Randomized trail (AbstractView.aspx?PID=2019-12-4-42)

Author(s): Praharsitha. R, Sowmya M. V, Anandh Kalaiselvan, Rahul Dev, M Manoj Abraham

DOI: 10.5958/0974-360X.2019.00287.7 (<https://www.doi.org/10.5958/0974-360X.2019.00287.7>)

Views: 21 (pdf), 803 (html)

Access:  Open Access

Cite: Praharsitha. R, Sowmya M. V, Anandh Kalaiselvan, Rahul Dev, M Manoj Abraham. Influence of Medial and Lateral Hamstring Strengthening Exercises in women with Osteoarthritis knee: A Randomized trail. *Research J. Pharm. and Tech.* 2019; 12(4):1721-1725. doi: 10.5958/0974-360X.2019.00287.7 (<https://www.doi.org/10.5958/0974-360X.2019.00287.7>)

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(AbstractView.aspx?

PID=2019-12-
4-42)

Sulfisoxazole GuanidinyI Derivatives: Synthesis, Characterization and Docking Studies for potential Anti-TB agents (AbstractView.aspx?PID=2019-12-4-43)

Author(s): Mahesh Bhat, Madhu N, Sagar B K, E. Vijay Sekhar

DOI: 10.5958/0974-360X.2019.00288.9 (<https://www.doi.org/10.5958/0974-360X.2019.00288.9>)

Views: 12 (pdf), 837 (html)

Access:  Open Access

Cite: Mahesh Bhat, Madhu N, Sagar B K, E. Vijay Sekhar. Sulfisoxazole GuanidinyI Derivatives: Synthesis, Characterization and Docking Studies for potential Anti-TB agents. *Research J. Pharm. and Tech.* 2019; 12(4):1726-1730. doi: 10.5958/0974-360X.2019.00288.9 (<https://www.doi.org/10.5958/0974-360X.2019.00288.9>)

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(AbstractView.aspx?

PID=2019-12-
4-43)

Lab-Built Semi-automated Stop-Flow System for Spectrophotometric Phosphate Determination in different water samples (AbstractView.aspx?PID=2019-12-4-44)

Author(s): Mohammad Th. K. Al-Balaawi, K. H. Al-Sowdani

DOI: 10.5958/0974-360X.2019.00289.0 (<https://www.doi.org/10.5958/0974-360X.2019.00289.0>)

Views: 22 (pdf), 777 (html)

Access:  Open Access

Cite: Mohammad Th. K. Al-Balaawi, K. H. Al-Sowdani. Lab-Built Semi-automated Stop-Flow System for Spectrophotometric Phosphate Determination in different water samples. *Research J. Pharm. and Tech.* 2019; 12(4):1731-1734. doi: 10.5958/0974-360X.2019.00289.0 (<https://www.doi.org/10.5958/0974-360X.2019.00289.0>)

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(AbstractView.aspx?

PID=2019-12-
4-44)

Effect of a Combined Exercise Intervention in the management of Benign Paroxysmal Positional Vertigo- A Single Blinded Randomized Controlled Trial (AbstractView.aspx?PID=2019-12-4-45)

Author(s): Ramanathan. K, Veena Kirthika. S, Padmanabhan. K, Selvaraj Sudhakar, Senthil Kumar. S

DOI: 10.5958/0974-360X.2019.00290.7 (<https://www.doi.org/10.5958/0974-360X.2019.00290.7>)

Views: 47 (pdf), 679 (html)

Access:  Open Access

Cite: Ramanathan. K, Veena Kirthika. S, Padmanabhan. K, Selvaraj Sudhakar, Senthil Kumar. S. Effect of a Combined Exercise Intervention in the management of Benign Paroxysmal Positional Vertigo- A Single Blinded Randomized Controlled Trial. *Research J. Pharm. and Tech.* 2019; 12(4):1735-1739. doi: 10.5958/0974-360X.2019.00290.7 (<https://www.doi.org/10.5958/0974-360X.2019.00290.7>)

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(AbstractView.aspx?
PID=2019-12-
4-45)

A Legion Study on the Comparison of Therapeutic Potential of Arecaceae and Refined Saccharum officinarum Sugar (AbstractView.aspx?PID=2019-12-4-46)

Author(s): J. Yuvaraj, Mark Keith Faraday, A. Arun

DOI: 10.5958/0974-360X.2019.00291.9 (<https://www.doi.org/10.5958/0974-360X.2019.00291.9>)

Views: 5 (pdf), 744 (html)

Access:  Open Access

Cite: J. Yuvaraj, Mark Keith Faraday, A. Arun. A Legion Study on the Comparison of Therapeutic Potential of Arecaceae and Refined Saccharum officinarum Sugar. *Research J. Pharm. and Tech.* 2019; 12(4):1740-1744. doi: 10.5958/0974-360X.2019.00291.9 (<https://www.doi.org/10.5958/0974-360X.2019.00291.9>)

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(AbstractView.aspx?
PID=2019-12-
4-46)

Extraction, Characterization and Functionalization of Tamarind Gum (AbstractView.aspx?PID=2019-12-4-47)

Author(s): Kailas K. Mali, Shashikant C. Dhawale, Remeth J. Dias

DOI: 10.5958/0974-360X.2019.00292.0 (<https://www.doi.org/10.5958/0974-360X.2019.00292.0>)

Views: 55 (pdf), 1230 (html)

Access:  Open Access

Cite: Kailas K. Mali, Shashikant C. Dhawale, Remeth J. Dias. *Extraction, Characterization and Functionalization of Tamarind Gum. Research J. Pharm. and Tech.* 2019; 12(4):1745-1752. doi: 10.5958/0974-360X.2019.00292.0 (<https://www.doi.org/10.5958/0974-360X.2019.00292.0>)

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(AbstractView.aspx?
PID=2019-12-
4-47)

UV Spectrophotometric Estimation of Secnidazole by zero order and area under curve methods in Bulk and Pharmaceutical Dosage Form (AbstractView.aspx?PID=2019-12-4-48)

Author(s): Rajan V. Rele

DOI: 10.5958/0974-360X.2019.00293.2 (<https://www.doi.org/10.5958/0974-360X.2019.00293.2>)

Views: 13 (pdf), 1244 (html)

Access:  Open Access

Cite: Rajan V. Rele. *UV Spectrophotometric Estimation of Secnidazole by zero order and area under curve methods in Bulk and Pharmaceutical Dosage Form. Research J. Pharm. and Tech.* 2019; 12(4):1753-1756. doi: 10.5958/0974-360X.2019.00293.2 (<https://www.doi.org/10.5958/0974-360X.2019.00293.2>)

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(AbstractView.aspx?
PID=2019-12-
4-48)

The Influence of the Fast-Track Program on the Functional State of Kidneys in Patients with Chronic Kidneys Pathology at Simultane Treatment of Combined Surgical Diseases of Organs of Abdominal Cavity and Anterior Abdominal Wall (AbstractView.aspx?PID=2019-12-4-49)

Author(s): Oksana Yu. Gerbali, Andrey V. Petrov, Aleksandr V. Kostyrnoy, Lesya N. Gumenyuk, Usein I. Basnaev

DOI: 10.5958/0974-360X.2019.00294.4 (<https://www.doi.org/10.5958/0974-360X.2019.00294.4>)

Views: 1 (pdf), 673 (html)

Access:  Open Access

Cite: Oksana Yu. Gerbali, Andrey V. Petrov, Aleksandr V. Kostyrnoy, Lesya N. Gumenyuk, Usein I. Basnaev. *The Influence of the Fast-Track Program on the Functional State of Kidneys in Patients with Chronic Kidneys Pathology at Simultane Treatment of Combined Surgical Diseases of Organs of Abdominal Cavity and Anterior Abdominal Wall.* *Research J. Pharm. and Tech.* 2019; 12(4):1757-1760. doi: 10.5958/0974-360X.2019.00294.4 (<https://www.doi.org/10.5958/0974-360X.2019.00294.4>)

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(AbstractView.aspx?
PID=2019-12-
4-49)

Formulation and Evaluation of Gastroretentive Floating Dosage Forms of Clarithromycin (AbstractView.aspx?PID=2019-12-4-5)

Author(s): Saripilli Rajeswari, Koralla Hari, K. V. Ramana Murthy

DOI: 10.5958/0974-360X.2019.00250.6 (<https://www.doi.org/10.5958/0974-360X.2019.00250.6>)

Views: 11 (pdf), 895 (html)

Access:  Open Access

Cite: Saripilli Rajeswari, Koralla Hari, K. V. Ramana Murthy. *Formulation and Evaluation of Gastroretentive Floating Dosage Forms of Clarithromycin.* *Research J. Pharm. and Tech.* 2019; 12(4):1510-1516. doi: 10.5958/0974-360X.2019.00250.6 (<https://www.doi.org/10.5958/0974-360X.2019.00250.6>)

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(AbstractView.aspx?
PID=2019-12-
4-5)

Evaluation of In vitro Anti-Diabetic and Anti-Oxidant activities and Preliminary Phytochemical screening of Gel, Epidermis and Flower extract of Aloe vera (AbstractView.aspx?PID=2019-12-4-50)

Author(s): Spoorthy N. Babu, S. Govindarajan, M. A. Vijayalakshmi, Ayesha Noor

DOI: 10.5958/0974-360X.2019.00295.6 (<https://www.doi.org/10.5958/0974-360X.2019.00295.6>)

Views: 42 (pdf), 1002 (html)

Access:  Open Access

Cite: Spoorthy N. Babu, S. Govindarajan, M. A. Vijayalakshmi, Ayesha Noor. Evaluation of In vitro Anti-Diabetic and Anti-Oxidant activities and Preliminary Phytochemical screening of Gel, Epidermis and Flower extract of Aloe vera. *Research J. Pharm. and Tech.* 2019; 12(4):1761-1768. doi: 10.5958/0974-360X.2019.00295.6 (<https://www.doi.org/10.5958/0974-360X.2019.00295.6>)

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(AbstractView.aspx?
PID=2019-12-
4-50)

Automatic Patch Adhesion Testing using Arduino (AbstractView.aspx?PID=2019-12-4-51)

Author(s): Ramya P, Padmapriya B, Poornachandra S, Arumugaraja M

DOI: 10.5958/0974-360X.2019.00296.8 (<https://www.doi.org/10.5958/0974-360X.2019.00296.8>)

Views: 16 (pdf), 861 (html)

Access:  Open Access

Cite: Ramya P, Padmapriya B, Poornachandra S, Arumugaraja M. Automatic Patch Adhesion Testing using Arduino. *Research J. Pharm. and Tech.* 2019; 12(4):1769-1772. doi: 10.5958/0974-360X.2019.00296.8 (<https://www.doi.org/10.5958/0974-360X.2019.00296.8>)

Read More »

(AbstractView.aspx?
PID=2019-12-
4-51)

In Silico Anti-HIV Analysis of FTIR Identified Bioactive Compounds Present in *Vitex altissima* L and *Vitex leucoxylo*n L (AbstractView.aspx?PID=2019-12-4-52)

Author(s): Santhanabharathi Naganathan, Anupama Natarajan, Vivek. P, Kesavan D, Ivo Romauld S

DOI: 10.5958/0974-360X.2019.00297.X (<https://www.doi.org/10.5958/0974-360X.2019.00297.X>)

Views: 17 (pdf), 826 (html)

Access:  Open Access

Cite: Santhanabharathi Naganathan, Anupama Natarajan, Vivek. P, Kesavan D, Ivo Romauld S. In Silico Anti-HIV Analysis of FTIR Identified Bioactive Compounds Present in *Vitex altissima* L and *Vitex leucoxylo*n L. *Research J. Pharm. and Tech.* 2019; 12(4):1773-1782. doi: 10.5958/0974-360X.2019.00297.X (<https://www.doi.org/10.5958/0974-360X.2019.00297.X>)

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(AbstractView.aspx?
PID=2019-12-
4-52)

Curcumin Loaded Ethosomal Vesicular Drug Delivery System for the Treatment of Melanoma Skin Cancer (AbstractView.aspx?PID=2019-12-4-53)

Author(s): Radha Krishna Kollipara, Vyshnavi Tallapaneni, Bharat Kumar Reddy Sanapalli, Vinoth Kumar G, Veera Venkata Satyanarayana Reddy Karri

DOI: 10.5958/0974-360X.2019.00298.1 (<https://www.doi.org/10.5958/0974-360X.2019.00298.1>)

Views: 66 (pdf), 952 (html)

Access:  Open Access

Cite: Radha Krishna Kollipara, Vyshnavi Tallapaneni, Bharat Kumar Reddy Sanapalli, Vinoth Kumar G, Veera Venkata Satyanarayana Reddy Karri. Curcumin Loaded Ethosomal Vesicular Drug Delivery System for the Treatment of Melanoma Skin Cancer. doi: 10.5958/0974-360X.2019.00298.1 (<https://www.doi.org/10.5958/0974-360X.2019.00298.1>)

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(AbstractView.aspx?
PID=2019-12-
4-53)

A Study on Personality types of University Students and Parent-Adolescent Communication, Daily Stress and Stress Coping Strategies (AbstractView.aspx?PID=2019-12-4-54)

Author(s): See-Yeoun Shin, Hwa-Jin Lee, Ye-Jong Lee

DOI: 10.5958/0974-360X.2019.00299.3 (<https://www.doi.org/10.5958/0974-360X.2019.00299.3>)

Views: 4 (pdf), 616 (html)

Access:  Open Access

Cite: See-Yeoun Shin, Hwa-Jin Lee, Ye-Jong Lee. A Study on Personality types of University Students and Parent-Adolescent Communication, Daily Stress and Stress Coping Strategies. *Research J. Pharm. and Tech.* 2019; 12(4): 1793-1798. doi: 10.5958/0974-360X.2019.00299.3 (<https://www.doi.org/10.5958/0974-360X.2019.00299.3>)

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(AbstractView.aspx?
PID=2019-12-
4-54)

Spectrophotometric Quantification of Telmisartan Employing Multivariate Calibration Technique in Bulk and Pharmaceutical Formulations (AbstractView.aspx?PID=2019-12-4-55)

Author(s): A. Sai Susmitha., Kokilambigai K. S, Lakshmi K. S.

DOI: 10.5958/0974-360X.2019.00300.7 (<https://www.doi.org/10.5958/0974-360X.2019.00300.7>)

Views: 42 (pdf), 982 (html)

Access:  Open Access

Cite: A. Sai Susmitha., Kokilambigai K. S, Lakshmi K. S.. Spectrophotometric Quantification of Telmisartan Employing Multivariate Calibration Technique in Bulk and Pharmaceutical Formulations. *Research J. Pharm. and Tech.* 2019; 12(4):1799-1805. doi: 10.5958/0974-360X.2019.00300.7 (<https://www.doi.org/10.5958/0974-360X.2019.00300.7>)

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(AbstractView.aspx?
PID=2019-12-
4-55)

A Comparative Study of the effect of Metformin and Metformin plus Garlic on Blood Glucose Level in patients with Type 2 Diabetes Mellitus in Iraq (AbstractView.aspx?PID=2019-12-4-56)

Author(s): Qayssar Joudah Fadheel

DOI: 10.5958/0974-360X.2019.00301.9 (<https://www.doi.org/10.5958/0974-360X.2019.00301.9>)

Views: 19 (pdf), 801 (html)

Access:  Open Access

Cite: Qayssar Joudah Fadheel. A Comparative Study of the effect of Metformin and Metformin plus Garlic on Blood Glucose Level in patients with Type 2 Diabetes Mellitus in Iraq. *Research J. Pharm. and Tech.* 2019; 12(4):1806-1810. doi: 10.5958/0974-360X.2019.00301.9 (<https://www.doi.org/10.5958/0974-360X.2019.00301.9>)

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(AbstractView.aspx?
PID=2019-12-
4-56)

Comparative Evaluation of Antioxidant capacity, Total flavonoid and Phenolic content of Ehretia acuminata R. Br. fruit (AbstractView.aspx?PID=2019-12-4-57)

Author(s): Abha Shukla, Amanpreet Kaur, Rishi Kumar Shukla, Anchal

DOI: 10.5958/0974-360X.2019.00302.0 (<https://www.doi.org/10.5958/0974-360X.2019.00302.0>)

Views: 36 (pdf), 1037 (html)

Access:  Open Access

Cite: Abha Shukla, Amanpreet Kaur, Rishi Kumar Shukla, Anchal. Comparative Evaluation of Antioxidant capacity, Total flavonoid and Phenolic content of Ehretia acuminata R. Br. fruit. *Research J. Pharm. and Tech.* 2019; 12(4):1811-1816. doi: 10.5958/0974-360X.2019.00302.0 (<https://www.doi.org/10.5958/0974-360X.2019.00302.0>)

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(AbstractView.aspx?
PID=2019-12-
4-57)

Comparative Evaluation of Baicalein from *Oroxylum indicum* by using Conventional and Non-Conventional Extraction Methodology (AbstractView.aspx?PID=2019-12-4-58)

Author(s): Sachin Bhusari, Supriya Morey, Kanchan Nikam, Pravin Wakte

DOI: 10.5958/0974-360X.2019.00303.2 (<https://www.doi.org/10.5958/0974-360X.2019.00303.2>)

Views: 43 (pdf), 1102 (html)

Access:  Open Access

Cite: Sachin Bhusari, Supriya Morey, Kanchan Nikam, Pravin Wakte. Comparative Evaluation of Baicalein from *Oroxylum indicum* by using Conventional and Non-Conventional Extraction Methodology. *Research J. Pharm. and Tech.* 2019; 12(4):1817-1822. doi: 10.5958/0974-360X.2019.00303.2 (<https://www.doi.org/10.5958/0974-360X.2019.00303.2>)

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(AbstractView.aspx?
PID=2019-12-
4-58)

GC-MS Analysis of Phytochemical Compounds Present in the Leaves of *Citrus medica*. L (AbstractView.aspx?PID=2019-12-4-59)

Author(s): R. Suja Pandian, A. Thajun Noora

DOI: 10.5958/0974-360X.2019.00304.4 (<https://www.doi.org/10.5958/0974-360X.2019.00304.4>)

Views: 104 (pdf), 993 (html)

Access:  Open Access

Cite: R. Suja Pandian, A. Thajun Noora. GC-MS Analysis of Phytochemical Compounds Present in the Leaves of *Citrus medica*. L. *Research J. Pharm. and Tech.* 2019; 12(4):1823-1826. doi: 10.5958/0974-360X.2019.00304.4 (<https://www.doi.org/10.5958/0974-360X.2019.00304.4>)

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(AbstractView.aspx?
PID=2019-12-
4-59)

Visible Extractive Spectrophotometric Estimation of Sofosbuvir in Bulk and in Pharmaceutical Formulations (AbstractView.aspx?PID=2019-12-4-6)

Author(s): Nakka Raju, P. Raveendra Reddy, P. Janaki Pathi, N. Appala Raju

DOI: 10.5958/0974-360X.2019.00251.8 (<https://www.doi.org/10.5958/0974-360X.2019.00251.8>)

Views: 32 (pdf), 1005 (html)

Access:  Open Access

Cite: Nakka Raju, P. Raveendra Reddy, P. Janaki Pathi, N. Appala Raju. Visible Extractive Spectrophotometric Estimation of Sofosbuvir in Bulk and in Pharmaceutical Formulations. *Research J. Pharm. and Tech.* 2019; 12(4):1517-1520. doi: 10.5958/0974-360X.2019.00251.8 (<https://www.doi.org/10.5958/0974-360X.2019.00251.8>)

Read More »

(AbstractView.aspx?
PID=2019-12-
4-6)

Formulation and Evaluation of Fast Dissolving Tablets of Aripiprazole (AbstractView.aspx?PID=2019-12-4-60)

Author(s): Peenal Gangotia, Shweta Nehate, Hitesh Jain, D. B. Meshram

DOI: 0.5958/0974-360X.2019.00305.6 (<https://www.doi.org/0.5958/0974-360X.2019.00305.6>)

Views: 83 (pdf), 1096 (html)

Access:  Open Access

Cite: Peenal Gangotia, Shweta Nehate, Hitesh Jain, D. B. Meshram. Formulation and Evaluation of Fast Dissolving Tablets of Aripiprazole. *Research J. Pharm. and Tech.* 2019; 12(4):1827-1831. doi: 0.5958/0974-360X.2019.00305.6 (<https://www.doi.org/0.5958/0974-360X.2019.00305.6>)

Read More »

(AbstractView.aspx?
PID=2019-12-
4-60)

Production and Optimization of Extra-cellular protease from Ganoderma sp. (AbstractView.aspx?PID=2019-12-4-61)

Author(s): Vidhya C. V.

DOI: 10.5958/0974-360X.2019.00306.8 (<https://www.doi.org/10.5958/0974-360X.2019.00306.8>)

Views: 10 (pdf), 756 (html)

Access:  Open Access

Cite: Vidhya C. V. Production and Optimization of Extra-cellular protease from Ganoderma sp. *Research J. Pharm. and Tech.* 2019; 12(4):1832-1838. doi: 10.5958/0974-360X.2019.00306.8 (<https://www.doi.org/10.5958/0974-360X.2019.00306.8>)

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(AbstractView.aspx?
PID=2019-12-
4-61)

Antihyperglycemic, Antidyslipidemic and Antifibrotic effect of EGCG in STZ - High Fat Diet Induced DCM rats (AbstractView.aspx?PID=2019-12-4-62)

Author(s): K. Pramila, A. Julius

DOI: 10.5958/0974-360X.2019.00307.X (<https://www.doi.org/10.5958/0974-360X.2019.00307.X>)

Views: 10 (pdf), 649 (html)

Access:  Open Access

Cite: K. Pramila, A. Julius. Antihyperglycemic, Antidyslipidemic and Antifibrotic effect of EGCG in STZ - High Fat Diet Induced DCM rats. *Research J. Pharm. and Tech.* 2019; 12(4): 1839-1842. doi: 10.5958/0974-360X.2019.00307.X (<https://www.doi.org/10.5958/0974-360X.2019.00307.X>)

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(AbstractView.aspx?
PID=2019-12-
4-62)

Comparative Study of Antimicrobial and Antioxidant Activity between Seeds and Leaves of Crude Drug *Moringa oleifera* (AbstractView.aspx?PID=2019-12-4-63)

Author(s): Nitin H. Indurwade, Sunil B. Chaudhari, Rina G. Maskare, Juhi U. Bandre, Nikhil Bhivgade

DOI: 10.5958/0974-360X.2019.00308.1 (<https://www.doi.org/10.5958/0974-360X.2019.00308.1>)

Views: 39 (pdf), 1103 (html)

Access:  Open Access

Cite: Nitin H. Indurwade, Sunil B. Chaudhari, Rina G. Maskare, Juhi U. Bandre, Nikhil Bhivgade. Comparative Study of Antimicrobial and Antioxidant Activity between Seeds and Leaves of Crude Drug *Moringa oleifera*. *Research J. Pharm. and Tech.* 2019; 12(4):1843-1848. doi: 10.5958/0974-360X.2019.00308.1 (<https://www.doi.org/10.5958/0974-360X.2019.00308.1>)

Read More »

(AbstractView.aspx?
PID=2019-12-
4-63)

In Silico Analysis of the Betuline from the Fiddler Crab, *Uca annulipes* and its antimicrobial as well as anti lung cancer activities. (AbstractView.aspx?PID=2019-12-4-64)

Author(s): Thant Zin, J. Sivakumar, C. Shanmuga Sundaram, U. S. Mahadeva Rao

DOI: 10.5958/0974-360X.2019.00309.3 (<https://www.doi.org/10.5958/0974-360X.2019.00309.3>)

Views: 10 (pdf), 892 (html)

Access:  Open Access

Cite: Thant Zin, J. Sivakumar, C. Shanmuga Sundaram, U. S. Mahadeva Rao. In Silico Analysis of the Betuline from the Fiddler Crab, *Uca annulipes* and its antimicrobial as well as anti lung cancer activities. *Research J. Pharm. and Tech.* 2019; 12(4): 1849-1856. doi: 10.5958/0974-360X.2019.00309.3 (<https://www.doi.org/10.5958/0974-360X.2019.00309.3>)

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(AbstractView.aspx?
PID=2019-12-
4-64)

Alcoholic Extract of Poly Herbal Powder Mixture for Anti-Obesity effect on Wistar Rats (AbstractView.aspx?PID=2019-12-4-65)

Author(s): Rashmi Saxena Pal, Nikita Saraswat, Yogendra Pal, Pranay Wal, Ankita Wal, A. K. Rai

DOI: 10.5958/0974-360X.2019.00310.X (<https://www.doi.org/10.5958/0974-360X.2019.00310.X>)

Views: 27 (pdf), 553 (html)

Access:  Open Access

Cite: Rashmi Saxena Pal, Nikita Saraswat, Yogendra Pal, Pranay Wal, Ankita Wal, A. K. Rai. Alcoholic Extract of Poly Herbal Powder Mixture for Anti-Obesity effect on Wistar Rats. *Research J. Pharm. and Tech.* 2019; 12(4): 1857-1864. doi: 10.5958/0974-360X.2019.00310.X (<https://www.doi.org/10.5958/0974-360X.2019.00310.X>)

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(AbstractView.aspx?
PID=2019-12-
4-65)

Effectiveness of an Education Program on Nurses' Knowledge at Orthopedic Wards in Ghazi Al-Hariri Martyr Hospital for Surgical Specialties (AbstractView.aspx?PID=2019-12-4-66)

Author(s): Harith F. Khudhayer, Hussein H. Atiyah

DOI: 10.5958/0974-360X.2019.00314.7 (<https://www.doi.org/10.5958/0974-360X.2019.00314.7>)

Views: 17 (pdf), 915 (html)

Access:  Open Access

Cite: Harith F. Khudhayer, Hussein H. Atiyah. Effectiveness of an Education Program on Nurses' Knowledge at Orthopedic Wards in Ghazi Al-Hariri Martyr Hospital for Surgical Specialties. *Research J. Pharm. and Tech.* 2019; 12(4): 1865-1870. doi: 10.5958/0974-360X.2019.00314.7 (<https://www.doi.org/10.5958/0974-360X.2019.00314.7>)

Read More »

(AbstractView.aspx?
PID=2019-12-
4-66)

Evaluation of some Coagulation Factors in Male rat with Induce Chronic Renal Failure (CRD) (AbstractView.aspx?PID=2019-12-4-67)

Author(s): Alaa Hashim Alqatab, Ayyed Hameed Hassan

DOI: 10.5958/0974-360X.2019.00315.9 (<https://www.doi.org/10.5958/0974-360X.2019.00315.9>)

Views: 10 (pdf), 903 (html)

Access:  Open Access

Cite: Alaa Hashim Alqatab, Ayyed Hameed Hassan. Evaluation of some Coagulation Factors in Male rat with Induce Chronic Renal Failure (CRD). *Research J. Pharm. and Tech.* 2019; 12(4):1871-1874. doi: 10.5958/0974-360X.2019.00315.9 (<https://www.doi.org/10.5958/0974-360X.2019.00315.9>)

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(AbstractView.aspx?
PID=2019-12-
4-67)

Development and Validation of a simple and rapid RP-HPLC method for the simultaneous estimation of Amlodipine and Atorvastatin in Tablet Dosage Form (AbstractView.aspx?PID=2019-12-4-68)

Author(s): Celina Nazareth, Shefali Naik, Anwasha Dourado

DOI: 10.5958/0974-360X.2019.00316.0 (<https://www.doi.org/10.5958/0974-360X.2019.00316.0>)

Views: 21 (pdf), 962 (html)

Access:  Open Access

Cite: Celina Nazareth, Shefali Naik, Anwasha Dourado. Development and Validation of a simple and rapid RP-HPLC method for the simultaneous estimation of Amlodipine and Atorvastatin in Tablet Dosage Form. *Research J. Pharm. and Tech.* 2019; 12(4):1875-1879. doi: 10.5958/0974-360X.2019.00316.0 (<https://www.doi.org/10.5958/0974-360X.2019.00316.0>)

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(AbstractView.aspx?
PID=2019-12-
4-68)

The effect of a group Counseling Program for Problem-solving on the Child-Rearing Stress and Parenting efficacy among Mothers of Infants (AbstractView.aspx?PID=2019-12-4-69)

Author(s): Jeong-Sook Lee, Sung-Joo Park

DOI: 10.5958/0974-360X.2019.00317.2 (<https://www.doi.org/10.5958/0974-360X.2019.00317.2>)

Views: 3 (pdf), 615 (html)

Access:  Open Access

Cite: Jeong-Sook Lee, Sung-Joo Park. The effect of a group Counseling Program for Problem-solving on the Child-Rearing Stress and Parenting efficacy among Mothers of Infants. *Research J. Pharm. and Tech.* 2019; 12(4):1880-1884. doi: 10.5958/0974-360X.2019.00317.2 (<https://www.doi.org/10.5958/0974-360X.2019.00317.2>)

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(AbstractView.aspx?
PID=2019-12-
4-69)

Vegetable Waste as an Alternate Plant Tissue Culture Media for Laboratory and Industry (AbstractView.aspx?PID=2019-12-4-7)

Author(s): R. Subbaiya, B. Aakash, A. Shanmugaraja, R. Devika, S. Chozhavendhan, S. Vinoth, G. Karthiga Devi, M. Masilamani Selvam

DOI: 10.5958/0974-360X.2019.00252.X (<https://www.doi.org/10.5958/0974-360X.2019.00252.X>)

Views: 39 (pdf), 957 (html)

Access:  Open Access

Cite: R. Subbaiya, B. Aakash, A. Shanmugaraja, R. Devika, S. Chozhavendhan, S. Vinoth, G. Karthiga Devi, M. Masilamani Selvam. Vegetable Waste as an Alternate Plant Tissue Culture Media for Laboratory and Industry. *Research J. Pharm. and Tech.* 2019; 12(4):1521-1528. doi: 10.5958/0974-360X.2019.00252.X (<https://www.doi.org/10.5958/0974-360X.2019.00252.X>)

Read More »

(AbstractView.aspx?
PID=2019-12-
4-7)

Development and Validation of HPLC Method for determination of Decitabine impurity profile in Decitabine for Injection 50mg/vial (AbstractView.aspx?PID=2019-12-4-70)

Author(s): Suresh Reddy, Yelampalli, J. V. Shanmukha Kumar, Useni Reddy Mallu

DOI: 10.5958/0974-360X.2019.00311.1 (<https://www.doi.org/10.5958/0974-360X.2019.00311.1>)

Views: 95 (pdf), 1941 (html)

Access:  Open Access

Cite: Suresh Reddy, Yelampalli, J. V. Shanmukha Kumar, Useni Reddy Mallu. Development and Validation of HPLC Method for determination of Decitabine impurity profile in Decitabine for Injection 50mg/vial. *Research J. Pharm. and Tech.* 2019; 12(4):1885-1894. doi: 10.5958/0974-360X.2019.00311.1 (<https://www.doi.org/10.5958/0974-360X.2019.00311.1>)

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(AbstractView.aspx?
PID=2019-12-
4-70)

A Comparative Study of Homology Modeling Algorithms for NPTX2 Structure Prediction (AbstractView.aspx?PID=2019-12-4-71)

Author(s): Sowmya H

DOI: 10.5958/0974-360X.2019.00312.3 (<https://www.doi.org/10.5958/0974-360X.2019.00312.3>)

Views: 12 (pdf), 798 (html)

Access:  Open Access

Cite: Sowmya H. A Comparative Study of Homology Modeling Algorithms for NPTX2 Structure Prediction. *Research J. Pharm. and Tech.* 2019; 12(4):1895-1900. doi: 10.5958/0974-360X.2019.00312.3 (<https://www.doi.org/10.5958/0974-360X.2019.00312.3>)

Read More »

(AbstractView.aspx?
PID=2019-12-
4-71)

Retinal Blood Vessels and Optical Disc Segmentation in Branch Retinal Vein Occluded Fundus Images Using Digital Image Processing Techniques (AbstractView.aspx?PID=2019-12-4-72)

Author(s): Ganesan P, B.S. Sathish, L.M.I. Leo Joseph, K.M. Subramanian, V. Kalist5, K. Vasanth

DOI: 10.5958/0974-360X.2019.00313.5 (<https://www.doi.org/10.5958/0974-360X.2019.00313.5>)

Views: 22 (pdf), 872 (html)

Access:  Open Access

Cite: Ganesan P, B.S. Sathish, L.M.I. Leo Joseph, K.M. Subramanian, V. Kalist5, K. Vasanth. Retinal Blood Vessels and Optical Disc Segmentation in Branch Retinal Vein Occluded Fundus Images Using Digital Image Processing Techniques. *Research J. Pharm. and Tech.* 2019; 12(4):1901-1906. doi: 10.5958/0974-360X.2019.00313.5 (<https://www.doi.org/10.5958/0974-360X.2019.00313.5>)

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(AbstractView.aspx?
PID=2019-12-
4-72)

Synthesis, Characterization, Antimicrobial Evaluation of 2-Amino pyrimidine Schiff base derivative (AbstractView.aspx?PID=2019-12-4-73)

Author(s): S. Ramachandran, M. Vijey Aanandhi, M. Tamilselvam, V. Sursha, K. T. Vigneshwara

DOI: 10.5958/0974-360X.2019.00318.4 (<https://www.doi.org/10.5958/0974-360X.2019.00318.4>)

Views: 42 (pdf), 868 (html)

Access:  Open Access

Cite: S. Ramachandran, M. Vijey Aanandhi, M. Tamilselvam, V. Sursha, K. T. Vigneshwara. Synthesis, Characterization, Antimicrobial Evaluation of 2-Amino pyrimidine Schiff base derivative. *Research J. Pharm. and Tech.* 2019; 12(4):1907-1909. doi: 10.5958/0974-360X.2019.00318.4 (<https://www.doi.org/10.5958/0974-360X.2019.00318.4>)

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(AbstractView.aspx?
PID=2019-12-
4-73)

Reading of Immune picture in Chronic Myeloid Leukemia in Iraqi Patients (AbstractView.aspx?PID=2019-12-4-74)

Author(s): Muhammed A. H. Aldabagh, Sahar S. Karieb, Ali N. Yassen, Saddam H. Jaber, Mohammed S. Abbas, Ali M. Jawad

DOI: 10.5958/0974-360X.2019.00319.6 (<https://www.doi.org/10.5958/0974-360X.2019.00319.6>)

Views: 7 (pdf), 669 (html)

Access:  Open Access

Cite: Muhammed A. H. Aldabagh, Sahar S. Karieb, Ali N. Yassen, Saddam H. Jaber, Mohammed S. Abbas, Ali M. Jawad. Reading of Immune picture in Chronic Myeloid Leukemia in Iraqi Patients. *Research J. Pharm. and Tech.* 2019; 12(4):1910-1914. doi: 10.5958/0974-360X.2019.00319.6 (<https://www.doi.org/10.5958/0974-360X.2019.00319.6>)

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(AbstractView.aspx?
PID=2019-12-
4-74)

Determination of some Bronchodilator and Expectorant Drugs (Guaifenesin and Theophylline) using HPLC Technique (AbstractView.aspx?PID=2019-12-4-75)

Author(s): Mohamad Kabaweh, Amir Alhaj Sakur

DOI: 10.5958/0974-360X.2019.00320.2 (<https://www.doi.org/10.5958/0974-360X.2019.00320.2>)

Views: 10 (pdf), 588 (html)

Access:  Open Access

Cite: Mohamad Kabaweh, Amir Alhaj Sakur. Determination of some Bronchodilator and Expectorant Drugs, (Guaifenesin and Theophylline) using HPLC Technique. *Research J. Pharm. and Tech.* 2019; 12(4):1915-1918. doi: 10.5958/0974-360X.2019.00320.2 (<https://www.doi.org/10.5958/0974-360X.2019.00320.2>)

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(AbstractView.aspx?
PID=2019-12-
4-75)

Isolation and Identification of Avian Influenza Virus Sub type H9N2 in Poultry from Karbala City, Iraq (AbstractView.aspx?PID=2019-12-4-76)

Author(s): Mohammed A. Hussein, Emad J. Khammas

DOI: 10.5958/0974-360X.2019.00321.4 (<https://www.doi.org/10.5958/0974-360X.2019.00321.4>)

Views: 14 (pdf), 790 (html)

Access:  Open Access

Cite: Mohammed A. Hussein, Emad J. Khammas. Isolation and Identification of Avian Influenza Virus Sub type H9N2 in Poultry from Karbala City, Iraq. *Research J. Pharm. and Tech.* 2019; 12(4):1919-1921. doi: 10.5958/0974-360X.2019.00321.4 (<https://www.doi.org/10.5958/0974-360X.2019.00321.4>)

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(AbstractView.aspx?
PID=2019-12-
4-76)

Assessment of Ototoxicity and Nephrotoxicity in patients receiving weekly Cisplatin Chemotherapy: A Prospective Observational Study (AbstractView.aspx?PID=2019-12-4-77)

Author(s): Vinodkumar Mugada, Jyothipriya Hanumanthu, Juhi Shagufa, Sosamma Iype, Sowmya Yerlapati

DOI: 10.5958/0974-360X.2019.00322.6 (<https://www.doi.org/10.5958/0974-360X.2019.00322.6>)

Views: 7 (pdf), 915 (html)

Access:  Open Access

Cite: Vinodkumar Mugada, Jyothipriya Hanumanthu, Juhi Shagufa, Sosamma Iype, Sowmya Yerlapati. Assessment of Ototoxicity and Nephrotoxicity in patients receiving weekly Cisplatin Chemotherapy: A Prospective Observational Study. *Research J. Pharm. and Tech.* 2019; 12(4):1922-1926. doi: 10.5958/0974-360X.2019.00322.6 (<https://www.doi.org/10.5958/0974-360X.2019.00322.6>)

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(AbstractView.aspx?
PID=2019-12-
4-77)

Anti-Alzheimer's Activity of aqueous extract of leaves of *Murraya koenigii* in Aluminium chloride Induced Neurotoxicity in rats (AbstractView.aspx?PID=2019-12-4-78)

Author(s): B. Maheswari Reddy, C. K. Dhanapal, B.V.S. Lakshmi

DOI: 10.5958/0974-360X.2019.00323.8 (<https://www.doi.org/10.5958/0974-360X.2019.00323.8>)

Views: 60 (pdf), 1070 (html)

Access:  Open Access

Cite: B. Maheswari Reddy, C. K. Dhanapal, B.V.S. Lakshmi. Anti-Alzheimer's Activity of aqueous extract of leaves of *Murraya koenigii* in Aluminium chloride Induced Neurotoxicity in rats. *Research J. Pharm. and Tech.* 2019; 12(4):1927-1934. doi: 10.5958/0974-360X.2019.00323.8 (<https://www.doi.org/10.5958/0974-360X.2019.00323.8>)

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(AbstractView.aspx?

PID=2019-12-
4-78)

Placental Cells Number and Caspase-9 Expression in White Rat (*Rattus norvegicus*) apoptosis exposed with Carbon Black (AbstractView.aspx?PID=2019-12-4-79)

Author(s): Ariz Juliprihanto, Viski Fitri Hendrawan, Desi Wulansari, Yudit Oktanella, Widjiati

DOI: 10.5958/0974-360X.2019.00324.X (<https://www.doi.org/10.5958/0974-360X.2019.00324.X>)

Views: 34 (pdf), 916 (html)

Access:  Open Access

Cite: Ariz Juliprihanto, Viski Fitri Hendrawan, Desi Wulansari, Yudit Oktanella, Widjiati. Placental Cells Number and Caspase-9 Expression in White Rat (*Rattus norvegicus*) apoptosis exposed with Carbon Black. *Research J. Pharm. and Tech.* 2019; 12(4):1935-1942. doi: 10.5958/0974-360X.2019.00324.X (<https://www.doi.org/10.5958/0974-360X.2019.00324.X>)

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(AbstractView.aspx?

PID=2019-12-
4-79)

Synthesis, Characterization, Antimicrobial activity and Release Study of Cinnamon loaded poly (DL-lactide-co-glycolide) Nanoparticles (AbstractView.aspx?PID=2019-12-4-8)

Author(s): Vinod Kumari, Aditi Sangal

DOI: 10.5958/0974-360X.2019.00253.1 (<https://www.doi.org/10.5958/0974-360X.2019.00253.1>)

Views: 22 (pdf), 1101 (html)

Access:  Open Access

Cite: Vinod Kumari, Aditi Sangal. Synthesis, Characterization, Antimicrobial activity and Release Study of Cinnamon loaded poly (DL-lactide-co-glycolide) Nanoparticles. *Research J. Pharm. and Tech.* 2019; 12(4):1529-1535. doi: 10.5958/0974-360X.2019.00253.1 (<https://www.doi.org/10.5958/0974-360X.2019.00253.1>)

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(AbstractView.aspx?
PID=2019-12-
4-8)

Synthesis and Characterization New Heterocyclic Compounds derivatives from Vanillin (AbstractView.aspx?PID=2019-12-4-80)

Author(s): Hutham Abd Ali Abd Al Hussain, Sawsan Khudhair Abbas

DOI: 10.5958/0974-360X.2019.00325.1 (<https://www.doi.org/10.5958/0974-360X.2019.00325.1>)

Views: 48 (pdf), 1057 (html)

Access:  Open Access

Cite: Hutham Abd Ali Abd Al Hussain, Sawsan Khudhair Abbas. Synthesis and Characterization New Heterocyclic Compounds derivatives from Vanillin. *Research J. Pharm. and Tech.* 2019; 12(4):1943-1946. doi: 10.5958/0974-360X.2019.00325.1 (<https://www.doi.org/10.5958/0974-360X.2019.00325.1>)

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(AbstractView.aspx?
PID=2019-12-
4-80)

Inhibitory activities of some Folklore remedies on Aldose reductase of rat lens and generation of advanced glycation end products (AbstractView.aspx?PID=2019-12-4-81)

Author(s): Gaviraj EN, Ramarao A, Veeresham C, Shivakumar B, Kalyane NV, Biradar SM

DOI: 10.5958/0974-360X.2019.00326.3 (<https://www.doi.org/10.5958/0974-360X.2019.00326.3>)

Views: 20 (pdf), 796 (html)

Access:  Open Access

Cite: Gaviraj EN, Ramarao A, Veeresham C, Shivakumar B, Kalyane NV, Biradar SM. Inhibitory activities of some Folklore remedies on Aldose reductase of rat lens and generation of advanced glycation end products. *Research J. Pharm. and Tech.* 2019; 12(4):1947-1952. doi: 10.5958/0974-360X.2019.00326.3 (<https://www.doi.org/10.5958/0974-360X.2019.00326.3>)

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(AbstractView.aspx?
PID=2019-12-
4-81)

Treatment of oil refinery wastewater simultaneously with bioelectricity production in mediator-less microbial fuel cell using native gram positive Bacillus sp. (AbstractView.aspx?PID=2019-12-4-82)

Author(s): Reena Meshram, Shailesh Kumar Jadhav

DOI: 10.5958/0974-360X.2019.00327.5 (<https://www.doi.org/10.5958/0974-360X.2019.00327.5>)

Views: 23 (pdf), 928 (html)

Access:  Open Access

Cite: Reena Meshram, Shailesh Kumar Jadhav. Treatment of oil refinery wastewater simultaneously with bioelectricity production in mediator-less microbial fuel cell using native gram positive Bacillus sp. *Research J. Pharm. and Tech.* 2019; 12(4):1953-1961. doi: 10.5958/0974-360X.2019.00327.5 (<https://www.doi.org/10.5958/0974-360X.2019.00327.5>)

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(AbstractView.aspx?
PID=2019-12-
4-82)

Screening and Isolation of Fibrinolytic Enzymes from Bacteria using Agro-waste for Thrombolytic Treatment (AbstractView.aspx?PID=2019-12-4-83)

Author(s): S. Lakshmi Priya, K. Krishna Prema

DOI: 10.5958/0974-360X.2019.00328.7 (<https://www.doi.org/10.5958/0974-360X.2019.00328.7>)

Views: 40 (pdf), 986 (html)

Access:  Open Access

Cite: S. Lakshmi Priya, K. Krishna Prema. Screening and Isolation of Fibrinolytic Enzymes from Bacteria using Agro-waste for Thrombolytic Treatment. *Research J. Pharm. and Tech.* 2019; 12(4): 1963-1966. doi: 10.5958/0974-360X.2019.00328.7 (<https://www.doi.org/10.5958/0974-360X.2019.00328.7>)

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(AbstractView.aspx?
PID=2019-12-
4-83)

Phytochemical Analysis, Standardization and Cytotoxic Activity of Curcuma aureginosa Extract in Human Breast Cancer (MCF-7) Cell Line (AbstractView.aspx?PID=2019-12-4-84)

Author(s): Muhammad Isrul, Risky Juliansyah, Ahmad Saleh, Wa Ode Yuliasri, Jastria Pusmarani, Himaniarwati, Wa Ode Wahyuni Maulidina

DOI: 10.5958/0974-360X.2019.00329.9 (<https://www.doi.org/10.5958/0974-360X.2019.00329.9>)

Views: 30 (pdf), 848 (html)

Access:  Open Access

Cite: Muhammad Isrul, Risky Juliansyah, Ahmad Saleh, Wa Ode Yuliasri, Jastria Pusmarani, Himaniarwati, Wa Ode Wahyuni Maulidina. Phytochemical Analysis, Standardization and Cytotoxic Activity of Curcuma aureginosa Extract in Human Breast Cancer (MCF-7) Cell Line. *Research J. Pharm. and Tech.* 2019; 12(4): 1967-1973. doi: 10.5958/0974-360X.2019.00329.9 (<https://www.doi.org/10.5958/0974-360X.2019.00329.9>)

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(AbstractView.aspx?
PID=2019-12-
4-84)

The Role of Leukotriene Receptor Antagonist as an add on therapy to β 2-Agonists in Acute Asthma (AbstractView.aspx?PID=2019-12-4-85)

Author(s): A. Ramya, P. Geetha, M. Nandhini, M. Manoj Kumar Raja

DOI: 10.5958/0974-360X.2019.00330.5 (<https://www.doi.org/10.5958/0974-360X.2019.00330.5>)

Views: 12 (pdf), 667 (html)

Access:  Open Access

Cite: A. Ramya, P. Geetha, M. Nandhini, M. Manoj Kumar Raja. *The Role of Leukotriene Receptor Antagonist as an add on therapy to β 2-Agonists in Acute Asthma.* *Research J. Pharm. and Tech.* 2019; 12(4):1974-1978. doi: 10.5958/0974-360X.2019.00330.5 (<https://www.doi.org/10.5958/0974-360X.2019.00330.5>)

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(AbstractView.aspx?
PID=2019-12-
4-85)

Research of Independent Living-Supporting Service for Developmental Disabilities in Era of Convergence - Focusing on supporting Developmental Disabilities in Japan (AbstractView.aspx?PID=2019-12-4-86)

Author(s): Hee Kyong Chong

DOI: 10.5958/0974-360X.2019.00331.7 (<https://www.doi.org/10.5958/0974-360X.2019.00331.7>)

Views: 7 (pdf), 775 (html)

Access:  Open Access

Cite: Hee Kyong Chong. *Research of Independent Living-Supporting Service for Developmental Disabilities in Era of Convergence - Focusing on supporting Developmental Disabilities in Japan.* *Research J. Pharm. and Tech.* 2019; 12(4):1979-1985. doi: 10.5958/0974-360X.2019.00331.7 (<https://www.doi.org/10.5958/0974-360X.2019.00331.7>)

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(AbstractView.aspx?
PID=2019-12-
4-86)

A Review Study on Self-hypnosis in the Management of High-Level Anxiety Affecting Educational Performance of University Students (AbstractView.aspx?PID=2019-12-4-87)

Author(s): Vidya Bhagat, Sheila Menon

DOI: 10.5958/0974-360X.2019.00332.9 (<https://www.doi.org/10.5958/0974-360X.2019.00332.9>)

Views: 32 (pdf), 1256 (html)

Access:  Open Access

Cite: Vidya Bhagat, Sheila Menon. A Review Study on Self-hypnosis in the Management of High-Level Anxiety Affecting Educational Performance of University Students. *Research J. Pharm. and Tech.* 2019; 12(4): 1986-1990. doi: 10.5958/0974-360X.2019.00332.9 (<https://www.doi.org/10.5958/0974-360X.2019.00332.9>)

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(AbstractView.aspx?
PID=2019-12-
4-87)

A Review on Orthogonal Derivations in Rings (AbstractView.aspx?PID=2019-12-4-88)

Author(s): Kotte Amaranadha Reddy, K Madhusudhan Reddy, S. Sharief Basha

DOI: 10.5958/0974-360X.2019.00333.0 (<https://www.doi.org/10.5958/0974-360X.2019.00333.0>)

Views: 56 (pdf), 991 (html)

Access:  Open Access

Cite: Kotte Amaranadha Reddy, K Madhusudhan Reddy, S. Sharief Basha. A Review on Orthogonal Derivations in Rings. *Research J. Pharm. and Tech.* 2019; 12(4):1991-1996. doi: 10.5958/0974-360X.2019.00333.0 (<https://www.doi.org/10.5958/0974-360X.2019.00333.0>)

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(AbstractView.aspx?
PID=2019-12-
4-88)

Personalized Nano Delivery Strategy in Treating Uveitis (AbstractView.aspx?PID=2019-12-4-89)

Author(s): Arun Radhakrishnan, Gowthamarajan Kuppusamy , Senthil Venkatachalam, Rohithkrishnan Vijayakumar, Nikhitha K Shanmukhan

DOI: 10.5958/0974-360X.2019.00334.2 (<https://www.doi.org/10.5958/0974-360X.2019.00334.2>)

Views: 12 (pdf), 1082 (html)

Access:  Open Access

Cite: Arun Radhakrishnan, Gowthamarajan Kuppusamy , Senthil Venkatachalam, Rohithkrishnan Vijayakumar, Nikhitha K Shanmukhan . Personalized Nano Delivery Strategy in Treating Uveitis. *Research J. Pharm. and Tech.* 2019; 12(4):1997-2008. doi: 10.5958/0974-360X.2019.00334.2 (<https://www.doi.org/10.5958/0974-360X.2019.00334.2>)

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(AbstractView.aspx?
PID=2019-12-
4-89)

In Vitro Antioxidant Activity of Leaves Extracts of Areca catechu (AbstractView.aspx?PID=2019-12-4-9)

Author(s): Nishmitha Gretta Dsouza, Jennifer Fernandes, Sonal D'Souza, Ronald Fernandes

DOI: 10.5958/0974-360X.2019.00254.3 (<https://www.doi.org/10.5958/0974-360X.2019.00254.3>)

Views: 16 (pdf), 890 (html)

Access:  Open Access

Cite: Nishmitha Gretta Dsouza, Jennifer Fernandes, Sonal D'Souza, Ronald Fernandes. In Vitro Antioxidant Activity of Leaves Extracts of Areca catechu. *Research J. Pharm. and Tech.* 2019; 12(4): 1536-1540. doi: 10.5958/0974-360X.2019.00254.3 (<https://www.doi.org/10.5958/0974-360X.2019.00254.3>)

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(AbstractView.aspx?
PID=2019-12-
4-9)

Phytoremediation- A Miracle Technique for Waste Water Treatment (AbstractView.aspx?PID=2019-12-4-90)

Author(s): Prerna Jain, Antra Andotra, Aiman Aziz, Prabhjot Kaur, Anshika Mahajan, Anish Kumar

DOI: 10.5958/0974-360X.2019.00341.X (<https://www.doi.org/10.5958/0974-360X.2019.00341.X>)

Views: 127 (pdf), 1592 (html)

Access:  Open Access

Cite: Prerna Jain, Antra Andotra, Aiman Aziz, Prabhjot Kaur, Anshika Mahajan, Anish Kumar. *Phytoremediation- A Miracle Technique for Waste Water Treatment. Research J. Pharm. and Tech.* 2019; 12(4):2009-2016. doi: 10.5958/0974-360X.2019.00341.X (<https://www.doi.org/10.5958/0974-360X.2019.00341.X>)

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(AbstractView.aspx?

PID=2019-12-
4-90)

Design and Screening of PPAR-γ agonist based Isatin derivatives and its remarkable activity as Anti-cancer and Anti-diabetic (AbstractView.aspx?PID=2019-12-4-91)

Author(s): Y. B. Zambare, S. S. Chitlange, R. P. Bhole

DOI: 10.5958/0974-360X.2019.00335.4 (<https://www.doi.org/10.5958/0974-360X.2019.00335.4>)

Views: 27 (pdf), 915 (html)

Access:  Open Access

Cite: Y. B. Zambare, S. S. Chitlange, R. P. Bhole. *Design and Screening of PPAR-γ agonist based Isatin derivatives and its remarkable activity as Anti-cancer and Anti-diabetic. Research J. Pharm. and Tech.* 2019; 12(4):2017-2026. doi: 10.5958/0974-360X.2019.00335.4 (<https://www.doi.org/10.5958/0974-360X.2019.00335.4>)

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(AbstractView.aspx?

PID=2019-12-
4-91)

Educating Parents on Hazards of Adolescence That Can enable them to Grow Their Teens as a Healthy Adult (AbstractView.aspx?PID=2019-12-4-92)

Author(s): Vidya Bhagat, Nordin Bin Simbak, Sheila Menon

DOI: 10.5958/0974-360X.2019.00336.6 (<https://www.doi.org/10.5958/0974-360X.2019.00336.6>)

Views: 8 (pdf), 665 (html)

Access:  Open Access

Cite: Vidya Bhagat, Nordin Bin Simbak, Sheila Menon. Educating Parents on Hazards of Adolescence That Can enable them to Grow Their Teens as a Healthy Adult. *Research J. Pharm. and Tech.* 2019; 12(4): 2027-2036. doi: 10.5958/0974-360X.2019.00336.6 (<https://www.doi.org/10.5958/0974-360X.2019.00336.6>)

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(AbstractView.aspx?
PID=2019-12-
4-92)

Repurposing of Aspirin: Opportunities and Challenges (AbstractView.aspx?PID=2019-12-4-93)

Author(s): Tapas Kumar Mohapatra, Bharat Bhusan Subudhi

DOI: 10.5958/0974-360X.2019.00337.8 (<https://www.doi.org/10.5958/0974-360X.2019.00337.8>)

Views: 94 (pdf), 1525 (html)

Access:  Open Access

Cite: Tapas Kumar Mohapatra, Bharat Bhusan Subudhi. Repurposing of Aspirin: Opportunities and Challenges. *Research J. Pharm. and Tech.* 2019; 12(4):2037-2044. doi: 10.5958/0974-360X.2019.00337.8 (<https://www.doi.org/10.5958/0974-360X.2019.00337.8>)

Read More »

(AbstractView.aspx?
PID=2019-12-
4-93)

Alzheimer's Disease Pathophysiology and its Implications (AbstractView.aspx?PID=2019-12-4-94)

Author(s): Shatabdi Choudhury, Chitra Vellapandian

DOI: 10.5958/0974-360X.2019.00338.X (<https://www.doi.org/10.5958/0974-360X.2019.00338.X>)

Views: 15 (pdf), 726 (html)

Access:  Open Access

Cite: Shatabdi Choudhury, Chitra Vellapandian. Alzheimer's Disease Pathophysiology and its Implications. *Research J. Pharm. and Tech.* 2019; 12(4):2045-2048. doi: 10.5958/0974-360X.2019.00338.X (<https://www.doi.org/10.5958/0974-360X.2019.00338.X>)

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(AbstractView.aspx?
PID=2019-12-
4-94)

Marketing research of the Pharmaceutical market in Ukraine: Peculiarities, Trends, Problems, Tendencies (AbstractView.aspx?PID=2019-12-4-95)

Author(s): Pestun I. V., Mnushko Z. M., levtushenko O. M.

DOI: 10.5958/0974-360X.2019.00339.1 (<https://www.doi.org/10.5958/0974-360X.2019.00339.1>)

Views: 17 (pdf), 901 (html)

Access:  Open Access

Cite: Pestun I. V., Mnushko Z. M., levtushenko O. M.. Marketing research of the Pharmaceutical market in Ukraine: Peculiarities, Trends, Problems, Tendencies. *Research J. Pharm. and Tech.* 2019; 12(4):2049-2054. doi: 10.5958/0974-360X.2019.00339.1 (<https://www.doi.org/10.5958/0974-360X.2019.00339.1>)

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(AbstractView.aspx?
PID=2019-12-
4-95)

RESEARCH ARTICLE

Correlation between Osteopontin Promoter Gene and Fresh Semen Quality in Friesian Holstein Dairy Cows

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ABSTRACT:

This study aims to investigate the polymorphism of osteopontin promoter gene in Holstein Friesian (FH) dairy cows and its correlation with quality of fresh semen in FH dairy cows. The basis determining for osteopontin as the main bio-marker in the determination of male Holstein dairy cow fertility by several previous studies which showed that osteopontin levels in seminal plasma Holstein dairy cows with a good fertility have osteopontin concentrations higher than the low fertility of dairy cows. A total of 14 blood samples taken from Holstein Friesian dairy cows then the DNA extracted and amplified using primers SPP1F and SPP1R. The 306 bp band as a target was detected in all 14 samples then sequenced for analysis of the nucleotide base. The results showed that all samples with low sperm concentration occurred deletion at 10080 bp and the transition (G-A) at 10090 bp. The results indicated that this mutation site could be related with the trait susceptibility to sperm concentration. Further studies are needed to address other parameter related to comprehensive sperm quality.

KEYWORDS: Polymorphism, Osteopontin, Male fertility, dairy cows.

INTRODUCTION:

Examination of semen in males as a measure of fertility rates have only done through macroscopic and microscopic examination. In addition to such examinations can also be seen from the pedigree, namely the selection of which is based on the reputation demonstrated by the ancestors of cows is concerned but the test is less accurate, because a bloodline or the offspring of individuals who either does not necessarily mean that the characteristics of good will selection and inherited through marriage. Another male fertility test that is based on progeny test is a test to see heritability trait but this test takes approximately 4-6 years old so it is not efficient^{1,2,3}.

Basic determination of osteopontin as a bio-marker principal in determining the fertility of dairy cows Holstein bull is based on some earlier research which showed that the levels of osteopontin in seminal plasma

Holstein dairy cows with a good fertility has a concentration of osteopontin 2.5-fold when compared with the low fertility of dairy cows. Erikson *et al.*, (2007) said that the males are inspected dairy cows and fresh cement containing osteopontin has a great potential in the success of fertilization in vitro and in vivo than not containing osteopontin. This is reinforced by previous studies that prove the relationship between osteopontin with fresh semen quality dairy cows FH in Indonesia^{4,5}.

Osteopontin gene promoter polymorphism associated with male fertility in dairy cows Holstein. Some evidence suggests that there is a relationship between gene polymorphisms promoter osteopontin, one of which is polymorphism promoter osteopontin motility and viability of spermatozoa fresh semen cow. Osteopontin gene promoter region determination based on previous research conducted by Rorie *et al.*, (2016) identified seven SNPs region that acts as a promoter osteopontin, among others: 3379 bp, 3490 bp, 3492 bp, 5075 bp, 5205 bp, 5209 bp and 5263 bp of osteopontin gene promoter. Then, substitution thymine to guanine at 3379 bp correlated with an increase in the percentage motility

spermazoa, but for the viability parameters have not been identified. Morales *et al*, (2013) in a research report that testing of males routinely in the IB program is very important as an indicator of fertility^{6,7}.

Development of dairy cow population ahead should be selected based on the value of breeding (breeding value), the use identifier genetically especially those controlling reproduction and application of BSE so stud dairy cattle FH in the Central IB can be accounted for its quality, because the male who will spread the trait superior to the population. Development testing of the study through the identification identifier genetically to semen quality has been done in some developed countries, it is expected to support the accelerated population of dairy cows FH superior in quality. Genetic selection system requires the identification of the genetic identifiers as candidate genes that control reproductive traits, especially the bulls^{8,9}.

MATERIAL AND METHODS:

Tools and materials:

The tools used in the study include a glove, mask, ice box, paper labels, microcentrifuge tube (1.5 mL), micro PCR tube (200 mL), micropipette, white tip, yellow tip, vortex engine, centrifugator, incubator CO2, freezer, thermocycler, EDTA, Horizaontal SDS-PAGE (Biorad), Gel Documentation (Biorad), thermocycler (Biorad), Nano-200 Micro-spectrophotometer nucleic acid. Materials used in research FH male cattle blood samples, Genomic DNA mini kit tissue, ddH2O, forward primer (SPP1_F) 5'-GCAAATCAGAAGTGTGATAGA-3 'and reverse primer (SPP1_R) 5'-CCAAGCCAAACGTATGAGTT-3', the PCR mix, DNA ladder 100 bp and 1 kb, TBE, agarose 1% and 2%, loading dye, alcohol 70%, aluminum foil, red gel.

Cow Blood Sample Selection FH Males:

Samples taken in the form of blood samples of 14 Holstein Friesian dairy cows 3-5 years old adult male obtained from BBIB Singosari, Malang, East Java, Indonesia, and local cattle ranchers.

Table 1: Males FH Cow Sample Data

No.	Origin	Code
1	BBIB	2
2	breeder	7
3	breeder	8
4	BBIB	17
5	breeder	19
6	breeder	D
7	breeder	H
8	BBIB	I
9	BBIB	J
10	BBIB	L
11	BBIB	M
12	BBIB	N
13	BBIB	13
14	BBIB	14

Cow Blood Sampling FH Males:

Location blood sampling performed on coccygea vein. The volume of blood samples are taken as 3cc of each individual bull. The blood sample is inserted into EDTA vacutainer tube and labeled according to the name of the individual samples of cattle. Samples were then stored at a temperature of 4⁰C. Storage of whole blood samples at a temperature of 40⁰C have been selected for the distance between sampling and DNA isolation process is not too long.

After blood collection examination fresh semen quality with cement collected in advance. Fresh semen collection is done by using an artificial vagina. Artificial vagina is prepared with an internal temperature of 45⁰C and already smeared with vaseline. The males are lured by using dummy / female pemancik then proceeds semen collection examined macroscopically immediately include: volume, color, odor, pH and viscosity and microscopic examination.

Isolation of DNA:

Isolation of DNA from blood samples of male cattle FH using insulation kit from Geneaid namely Genomic DNA mini kit tissue and blood. The main principle in the isolation of DNA, there are three namely the destruction (lysis), DNA extraction or separation of solid materials such as cellulose and proteins, and DNA purification^{10,11}.

Quantity and Quality Test DNA:

DNA quantity insulation test results done using machine Micro-Nano-200 spectrophotometer nucleic acids. Shells TE buffer used is obtained from a kit geneaid, TE buffer is dripped directly onto the pedestal submicroliter cell as 1µL, then absorbance is measured by pressing a button blank blank after the lid (cover) is closed. The wavelengths used are 260 nm and 280 nm. An initial stages, a total of 1 mL sample was dropped on pedestal submicroliter cell that has been cleaned using a tissue. Lid closed above the sample was dropped and pressed the button sample and then wait until the results come out on the screen. To sample the stages are the same as above, done up to the last sample. Data out in the form of numbers or graphs.

Primer design:

Primers used for DNA amplification by polymerase chain reaction technique (PCR) was designed using NCBI Genebank: AY878328.1. Forward primer and reverse primer obtained through primer 3plus using data AY878328.1 with 12,300bp linear DNA. A pair of forward primer (SPP1_F) 5'-GCAAATCAGAAGTGTGATAGA-3 '(Length: 21 bp, Tm: 53.7, GC: 38.1% and the reverse primer (SPP1_R) 5'-CCAAGCCAAACGTATGAGTT-3' (Length: 20 bp, tm: 56.3, GC: 45%).

The process of Polymerase Chain Reaction (PCR):

DNA samples of steers was amplified using the PCR method. A pair of primers used forward primer (SPP1_F) and reverse (SPP1_R). PCR amplification dengna machine (Biorad) begins by mixing the DNA 1µL, 1µL 10 pmol forward primer, 10 pmol reverse primer 1µL, 5µL PCR mix and 2 mL ddH₂O into microtube 200 mL. According Zuhriana (2010), amplification stages starting from predenaturation 94°C for two minutes, denaturation 94°C for 30 seconds, and then annealed at a temperature of 55-60°C for 30 seconds. Extension at a temperature of 72°C for 30 seconds and post extension at 72°C for 7 minutes. The process will be repeated for 30-35 cycles¹².

Purification of PCR Products:

Purification of the PCR product aimed to purify DNA and eliminate the remnants of PCR mix covering dNTPs, Taq polymerase, Mg ions, as well as ddH₂O and PCR primers located within the tube. The method used in the purification protocol was modified Santella by ethanol precipitation.

DNA sequencing:

Sequencing of the PCR product of the gene Osteopontin be two-way, namely by using a primer SPP1_F 10 pmol and 10 pmol SPP1_R to see osteopontin gene sequences were amplified using dye terminator method. PCR product DNA concentration of at least 50 ng / mL to do sequencing. Sequencing the form of a graph representing the content of adenine, thymine, guanine and cytosine contained in the DNA fragment that had been labeled by ddNTPs.

Data analysis:

Analysis of the data used is NCBI Blast, Bioedit and MEGA 7.0. Through the NCBI Blast program can know the percentage of homology and molecular variation in isolates a sample of SNPs (Single Nucleotide Polymorphism) such as insertions, deletions, and substitutions (transition or transversion) by aligning the results of the fourth sample sequence with the NCBI database Genebank: AY878328.1 alignment using algorithm Clustal W multiple allignment. Further analysis of the molecular variation isolates the sample is to use Bioedit program to see what kind of mutation that occurs, the type of amino acid and nucleotide positions that have mutations in the sample isolates. Phylogenetic analysis using MEGA version 7.0 software with bootstrapped Neighbor-Joining method (NJ) uses 1000 times repetition. The results of the analysis of the MEGA program will be acquired genetic distance matrix equation of bases.

RESULTS:

Semen Quality Inspection FH Fresh Dairy Cattle:

Fresh semen examination was conducted on the examination of the volume, color, odor, pH and concentration. Fourteen fresh semen of male dairy cows examined three times. Data quality fresh cement were shown in Table 2.

Table 2: Semen Quality Inspection of Males FH

Code	The average of fresh semen volume (ml)	Color and Odor	pH	The mean concentration of fresh cement / ml	Overall quality
2	6.9	Normal	6.8	1.031,4x106	Good
7	5.3	Normal	6.8	799.7 x106	Good
8	10.1	Normal	6.8	705.7 x106	Good
13	6.2	Normal	6.8	1418.7 x106	Good
14	11	Normal	6.8	1090 x106	Good
17	5.4	Normal	6.8	1075 x106	Good
19	3.8	Normal	6.8	429.4 x106	Poor
D	5.1	Normal	6.8	755.3 x106	Good
H	4.1	Normal	6.8	286.6 x106	Poor
I	5.8	Normal	6.8	1345.9 x106	Good
J	5.9	Normal	6.8	1173.9 x106	Good
L	7.3	Normal	6.8	1290 x106	Good
M	6.2	Normal	6.8	1142.7 x106	Good
N	4	Normal	6.8	312.4 x106	Poor

Isolation of DNA from blood samples FH Cow Males:

Isolation of DNA is done using a blood sample by using Genomic DNA mini kit in accordance with the procedure tissue. Results obtained in the form of total DNA extraction which further test the quantity and quality. Test quantity by machine Micro-Nano-200 Nucleic acid spectrophotometer with a wavelength of 260 nm and 280 nm. DNA total yield of isolation is then used for the amplification process osteopontin from bulls with the PCR technique to determine the sequence of the gene osteopontin from some bulls, so as to know their gene polymorphism promoter osteopontin in dairy cows Holstein Friesian (HF) and its relationship to the level of fertility spermatozoa, as indicated by the quality of dairy cows FH spermatozoa from fresh cement.

Table 3: The Concentration and Purity of DNA Total Cattle FH Males

Sample Code	Concentration ng / mL	Purity
2	308	1.92
7	190	1.91
8	223	1.81
13	254	1.87
14	302	1.89
17	201	1.91
19	210	1.81
D	254	1.87
H	338	1.98
I	176	1.91
J	220	1.81
L	271	1.88
M	289	1.80
N	198	1.77

Osteopontin Gene amplification by PCR Method:

Osteopontin gene amplification is done to increase the osteopontin gene fragment prior to sequencing so that it can be used to determine the osteopontin gene sequences FH male cattle. Primers used to amplify the gene osteopontin taken from Genebank with number sequences AY878328.1 and designed using primer3plus program, so we get a forward and reverse primer pair shown in Table 4. PCR method used in this study includes the step pre denaturation, denaturation, annealing, extension and post-extension with suu and time listed in Table 5.

Table 4: Primary Nucleotide Sequence Cow Osteopontin gene FH Males

Primary	Oligo Nucleotide Sequence
forward (SPP1_F)	GCAAATCAGAAGTGTGATAGA 5'-3'
Reverse(SPP1_R)	CCAAGCCAACGTATGAGTT 5'-3'

Table 5: PCR program for cattle Osteopontin Gene Amplification FH Males (35x cycle)

Condition	Time	Temperature
Pre denaturation	4 minutes	94 °C
Denaturation	30 seconds	94 °C
Annealing	30 seconds	55-69 °C
Extensions	30 seconds	72 °C
Post extension	7 minutes	72 °C

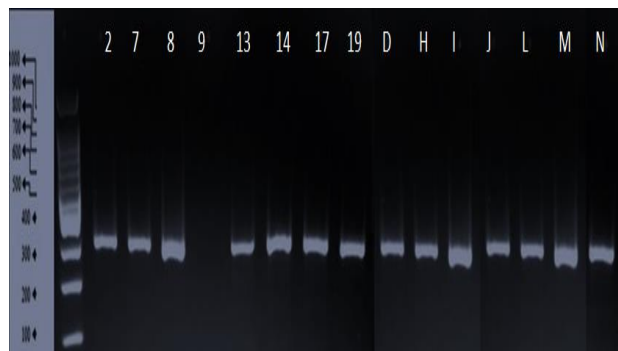


Figure 1. Photographs 2% agarose gels of PCR amplification products with a target of 306bp band was detected in all samples (n = 14) (Gel Doc, Biorad).

The results of the purified PCR products subsequently aim to purify DNA and eliminate the remnants of PCR mix, and ddH₂O primer inside the PCR tube. The method used in purification is ethanol precipitation with Santella protocol modification. The results of the purification product then sequenced the DNA of the gene osteopontin be two-way, namely by using a primer SPP1_F and SPP1_R to see osteopontin gene sequences were amplified.

Osteopontin Gene Sequence Analysis Results:

Sequencing the form of graphs that show the content of adenine, thymine, guanine and cytosine contained in the DNA fragment and format data in the form fasta. The fourth sample is inserted into the NCBI BLAST program for alignment of the sequencing results with NCBI

Genebank AY878328.1. The alignment results of that magnitude ident and alignment on the sample base with NCBI database Table 6.

Table 6: Results of alignment with NCBI database

Sample Code	Identity (%)
2	99
7	99
8	99
13	99
14	99
17	99
19	99
D	97
H	98
I	99
J	99
L	99
M	99
N	98

Results of identity of all samples above 95%, it shows that all the samples had good similarity with the NCBI AY878328.1. Osteopontin gene sequences of all male cattle FH aligned with the reference gene osteopontin AY878328.1 NCBI database. Sample sequences aligned sequence starting from the base to 9900-10092.

```

-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
          9910      9920      9930      9940      9950
AY878328.1 AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
D_SP1R      AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
H_SP1R      AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
I_SP1R      AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
J_SP1R      AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
L_SP1R      AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
M_SP1F      AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
N_SP1R      AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
2_SP1R      AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
7_SP1R      -----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
8_SP1R      AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
13_SP1R     AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
14_SP1R     AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
17_SP1R     AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
18_SP1R     AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT
19_SP1R     AGAGAGTCAC CTTTGGATTA TCCAGGCTAA TAGGGAGGTG ATTTTAGTTT

          9960      9970      9980      9990      10000
AY878328.1 TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
D_SP1R      TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
H_SP1R      TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
I_SP1R      TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
J_SP1R      TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
L_SP1R      TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
M_SP1F      TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
N_SP1R      TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
2_SP1R      TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
7_SP1R      -----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
8_SP1R      TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
13_SP1R     TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
14_SP1R     TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
17_SP1R     TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
18_SP1R     TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT
19_SP1R     TGGGGGTGTG CATTAAATCA TGGATTCTCT GATCCOCTGA GAATTTTCAT

          10010     10020     10030     10040     10050
AY878328.1 TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
D_SP1R      TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
H_SP1R      TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
I_SP1R      TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
J_SP1R      TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
L_SP1R      TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
M_SP1F      TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
N_SP1R      TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
2_SP1R      TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
7_SP1R      -----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
8_SP1R      TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
13_SP1R     TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
14_SP1R     TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
17_SP1R     TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
18_SP1R     TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC
19_SP1R     TTCAAATAGA AAAGGTAGTC TCACAATITAT GTATCTGTAT TTAATGGATC

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.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....
          10060      10070      10080      10090      10100
AY878328.1 ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGTGT
D_SP1R      ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGGTT
H_SP1R      ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGGT-
I_SP1R      ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGTT-
J_SP1R      ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGGT-
L_SP1R      ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGTTC
M_SP1F      ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGTGT
N_SP1R      ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGTT-
2_SP1R      ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGGT-
7_SP1R      -----
8_SP1R      ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGGT-
13_SP1R     ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGGT-
14_SP1R     ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGTT-
17_SP1R     ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGTT-
18_SP1R     ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGGT-
19_SP1R     ATTGAAATTT GGTAAATTAG TGTTTATTAT GAACACGGAA AAA-CAGGT-
  
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Figure 2. The result of the alignment of the nucleotide bases using Bioedit program

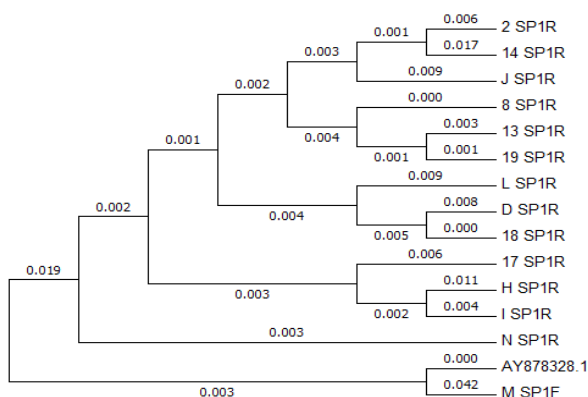


Figure 3. Cattle phylogenetic tree male FH Neighbor-Joining method with Bootstrap replication 1000x.

Based on the phylogenetic tree in Figure 3, there are known two major clade. The first clade consisting of the sample with the code 2, 14, J, 8, 13, 19, L, D, 17, H, I, and N. As a second clade consisting of NCBI AY878328.1 and sample M. All sample shows the results of genetic distance with NCBI Genebank AY878328.1 above 0,020 or above 2%.

Table 7: Comparison with data examination of cement

Code	The mean concentration of fresh cement / ml	Overall quality	Results Gene Sequences
2	1.031,4x10 ⁶	Good	Transition
7	799.7 x10 ⁶	Good	Can not be read
8	705.7 x10 ⁶	Good	Transition
13	1418.7 x10 ⁶	Good	Transition
14	1090 x10 ⁶	Good	Transition
17	1075 x10 ⁶	Good	Transition
19	429.4 x10 ⁶	Poor	deletions
D	755.3 x10 ⁶	Good	Transition
H	286.6 x10 ⁶	Poor	Deletions, Transitions
I	1345.9 x10 ⁶	Good	Transition
J	1173.9 x10 ⁶	Good	Transition
L	1290 x10 ⁶	Good	Transition
M	1142.7 x10 ⁶	Good	Transition
N	312.4 x10 ⁶	Poor	Deletions, Transitions

DISCUSSION:

Based on the quantity of isolation cement test results known that almost all of the samples have a good degree of purity that is still within the range of 1.8 to 2.0 and all samples had concentrations above 100 ng / mL. If the DNA purity values below 1.8 indicate the DNA extraction yield there are contaminants in the form of protein compounds. Contamination in the form of protein compounds in the DNA can be caused by the addition of a protease enzyme on DNA isolation protocol. DNA purity value above 2.0 indicates there are contaminants in the form of RNA. This may be due to the addition of the study was not done ribonuclease. According Fatchiyah (2011), nano-drop test result is a value purity DNA at A260 / A280 and the concentration of DNA^{13,14}.

The results of sequencing all samples alignment homolog with NCBI Genebank database (AY878328.1) obtained their deletion in the code sample 7 from the beginning of the sequence to the end, Sample code H, N, 19 (T - -) bases of DNA polymorphisms to-10080. Characterized by differences in the nucleotide sequence between individuals. Transition (T - C) in the sample code D, H, I, L, M, N, 2, 17, 18 bases to-10044 and transition (G - A) in the sample code H, I, J, N, 2, 8, 13, 14, 17. The deletions affect amino acids that form, because there is a missing nucleotide bases. According Sharma and Sharma (2014) and Griffith *et al.* (1999), transition mutation means a mutation that occurs when pyrimidine bases in DNA nucleotide chain is replaced by another pyrimidine base or purine base is replaced by another purine base¹⁵⁻¹⁹.

The comparison between gene sequences with the results of the concentration data of cement each sample obtained in samples that experienced deletions in the sequence of its gene have a concentration of low cement compared to the group, for example, in a sample of H and N concentrations were low compared to cows FH other males who come from BBIB Singosari. While in the 19 samples had a low concentration also compared with samples 8. The results indicated resources site that this mutation could be related with the trait susceptibility to sperm concentration. It is possible that other genes linked with this molecular genetic markers affected the sperm quality. But the weakness of this study is at least phenotype samples with a low concentration of spermatozoa. Further studies are needed to address reviews these possibilities²⁰⁻²².

CONCLUSION:

The results of this study indicate between gene sequences with the results of the concentration data of cement each sample obtained in samples that experienced deletions in the sequence of its gene have a

concentration of low cement and resources site that this mutation could be related with the trait susceptibility to sperm concentration.

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CONFLICT OF INTEREST:

The authors declare no conflict of interest.

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