



Volume 1, Issue 9

DPC Newsletter

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Editorial



I am happy to announce that DPC Newsletter has entered in its ninth issue of publication.

DPC is honored to win in this year's DUPHAT (Dubai International Pharmaceuticals and Technologies Conference and Exhibition), which brings together students, alumni, corporate partners and academic representatives together.

As part of our concern of the impacts on our planet, DPC joined hands with Earth Hour 2012 celebrations at Burj Plaza, Down Town, Dubai. Kudos to the *Student Union* for organizing Mothers' Day celebration and free health checkup.

I also wish the students for the upcoming mid-semester exams.

Prof.Saeed Ahmed Khan
Dean, Dubai Pharmacy College



News & Events

Dubai Pharmacy College does it again at DUPHAT 2012!



DUPHAT, one of the largest annual pharmaceutical events in the Middle East, was held at Dubai International Convention and Exhibition Center from 12-14 March 2012. The participants presented valued scientific presentations and scientific research papers.

The competition this year was indeed challenging, with a total of **129 Student Posters** from different pharmacy universities within the region and **26 students competed in the Oral Student Presentation category.**



The students of Dubai Pharmacy College ensured that the tradition of their institution at the annual DUPHAT 2012 (*Dubai International Pharmaceutical and Technologies Conference and Exhibition*) remained intact by securing the first position in the Student Poster and Oral Presentation Competitions. They were also awarded other prized merit certificates recognizing the relentless hard work and determination of the students to succeed in their endeavor to keep DPC right on top. . In recognition of their tremendous work, they won **3 prizes in the Student Poster Presentation** category in addition to the **first position in Student Oral Presentations** and the **Best Oral Presenter award for 2012.**



Dr. Ali Al Sayed, Director of Pharmaceutical Services, Dubai Health Authority (DHA) and Chairman of DUPHAT appreciated the 10 **volunteers from Dubai Pharmacy College** by presenting mementos on stage.

Volunteers: 2nd Year (*Fatma Adel Zaky Abdelaal, Mai Mohamed Ibrahim El Saka, Arwa Nousheen*) **3rd Year** (*Asmaa M.Rajeh Alabrash, Nada Ghaleb Abd-Almajeed, Quratulain Muhammad, Rama Hicham Alkateb, Samar Mahmoud Abdulla Elgendy, Thuraya O.S. Shbair, Umama Samahat Syed Nusratullah*)



Have a **suggestion** or **comment**? Post it to <DPCnewsletter@dpc.edu>.

Congratulations to DPC Winners at DUPHAT 2012

The Best Pharmacy Student Oral Presentation Award

(First Prize)

Title: Antiobesity and hypolipemic effects of a polyherbal formulation in rats fed on atherogenic diet.

Presenter: Basma Matooq

Students : Sara Ragab , Alaa Allam, Noha Najla.

Supervisors: Prof.Saeed A. Khan and Dr. M.W. Islam
Batch-17

(Eighth Prize)

Title: Development of Metronidazole-Loaded Sodium Alginate Hydrogel for Wound Dressing.

Students: Al Hanouf M. Al-jabri, Farah Mohammed Amin and Marwa Shamsaldin

Supervisors: Dr. Bazigha K. Abdul Rasool.
Batch-17

The Best Thematic Pharmacy Student Poster Award

(Fourth Position)

Title: Development of Medicated Chewing Gum containing Calcium and Vitamin D3

Students: Noor Monadhil, Rawdha Mohammed, Ayesha Choukri, Lamis Ali.

Supervisors: Dr. Aliasgar Shahiwala.
Batch-17

The Best Quality Pharmacy Student Poster Award

(Tenth Position)

Title: Anthelmintic activity for the hydro-distilled oil and the alcoholic extract prepared from Family Chenopodiaceae grown in UAE.

Students: Abeer M. Shehab, Hager Ibrahim and Khadiga Ali, Farah Al Chikhoni.

Supervisors: Dr. Naglaa Ahmed
Batch-17



Participants in DUPHAT 2012 from Batch-17

Participants in Student Poster

- 1-Title:** Investigation on the Hypoglycaemic Effects of Extracts of Two Emirates Desert Plants in Normal and Alloxan-diabetic Mice
Students: Sarea Bahaa, Joud Zaher and Joud Jalab, Aya Bashar
Supervisors: Dr. Eman Abu-Gharbieh
- 2-Title:** Hepatoprotective effect of Fagonia indica extract on carbon tetrachloride induced hepatotoxicity in mice
Students: Dania Janem, Douaa Jamal and Fatima Mohammad, Nazma Razeena
Supervisors: Dr. Eman Abu-Gharbieh
- 3-Title :** Possible protective effects of alpha lipoic acid in experimentally-induced convulsions in mice
Students: Amna Mohammad, Aisha Muhammad Zarar, Nadia Mahmood Mohammadi
Supervisors: Dr. Amina Mahdy
- 4-Title :** Possible protective effects of beta carotene in combination with lisinopril in gentamycin-induced nephrotoxicity in mice
Students: Shaheena Ismail, Fatima Bano and Mona Mobarak, Safaa Abdul Baset
Supervisors: Dr. Amina Mahdy
- 5-Title :** Evaluation of Xanthine oxidase inhibitory activities of different Organic Extracts of Citrullus colocynthis Leaves
Students: Hanan Wael Khalid Numan, Wala Majdi Moh'd, Hadia Nazal Al Bathali, Aya Mostafa M.El. Hanafi
Supervisors: Dr. Fazilatun Nessa and Prof. Dr. Saeed A. Khan
- 6-Title :** Evaluation of Lipid peroxidation inhibitory activities of different Organic Extracts of Phyllanthus niruri Leaves
Students: Allaa Mohamed Jalal Juha, Eman Zakaria Al Shantaf, Zainab Mhd Ali Al Said, Soha Abed Almajeed Thabit, Mona Sala Alqattan
Supervisors: Dr. Fazilatun Nessa and Prof. Dr. Saeed A. Khan

- 8-Title :** Natural and alternative ways to decrease antipsychotic medications risks: The effect of acute and sub-chronic administration of polyherbal formulation on reversal of haloperidol induced motor deficits (Catalepsy) in mice.
Students: Aya A. El-Hosari , Nehal A. Elkilany and Shafa R. Abdualazeez, Lubna A. Daud
Supervisors: Prof. Dr. Saeed A. Khan and Dr. M.W. Islam
- 9-Title :** Evaluation of herbal hand wash formulation using chamomile extract
Students: Hamda Jamie Obaid, Nourhan Adnan Baroud
Supervisors: Prof. Dr. Heyam S.Ali and Mrs Rana Sammour
- 10- Title :** Formulation and Evaluation of herbal shampoo from Ziziphus Spina leaves extract
Students: Fatma.A.Masoud, Mona.M. Alshihry and Sabah .A. Memon
Supervisors: Prof. Dr. Heyam S.Ali and Mrs Rana Sammour
- 11- Title :** Fabrication of Mouth Dissolving Films of Amlodipine Besylate
Students: Yasmeen Alsaadi, Sabreen El Bana and Samah Mohammed
Supervisors: Dr. Aliasgar Shahiwala
- 12- Title :** Design and Evaluation of Nicotine Mucoadhesive Buccal Films
Students: Khadija S. Alrawahi, Zohour A. Almoselli and Tasneem M. Mouri, Fatma A. Mohamud
Supervisors: Dr. Bazigha K. Abdul Rasool
- 13- Title :** Association of Type 2 Diabetes Mellitus and Glutathione S Transferase (GSTM1 and GSTT1) Genetic Polymorphism with Blood Lipids
Students: Isra Faiz Abel Emdookh, Fatma Al Zahra Adam Gadam and Zahra Salem Mubarek Obaid
Supervisors: Dr. Gazala Afreen Khan

- 7-Title :** Association of Type 2 Diabetes Mellitus and Glutathione- S -Transferase (GSTM1 and GSTT1) Genetic Polymorphism
Students: Reham Haitam Hamid, Dalia Khalid Ahmed, Noor Al Huda S. Hussain
Supervisors: Dr Gazala Afreen Khan

Participants in student Oral poster

- 1-Title:** Hepatoprotective effect of Fagonia indica extract on carbon tetrachloride induced hepatotoxicity in mice
Students: Nazma Razeena
Supervisors: Dr. Eman Abu-Gharbieh
- 2-Title:** Natural and alternative ways to decrease antipsychotic medications risks: The effect of acute and sub-chronic administration of polyherbal formulation on reversal of haloperidol induced motor deficits (Catalepsy) in mice.
Students: Lubna A. Daud
Supervisors: Prof. Dr. Saeed A. Khan
- 3-Title:** Development of Medicated Chewing Gum containing Calcium and Vitamin D3
Students: Lamis Ali
Supervisors: Dr. Aliasgar Shahiwala



Composition and Bioactivities of the flowers of *Spathodea campanulata*

Naglaa G. Shehab¹, Soheir M. El-Zalabani, Eid H.H.²

¹Pharmacognosy and Phytochemistry Department, Dubai Pharmacy College, U.A.E.

²Department of Pharmacognosy, Faculty of Pharmacy, Cairo University, Egypt



Abstract

Introduction: *Spathodea campanulata* P. Beauv. (Family Bignoniaceae) is a medium-size ornamental tree characterized by its showy red flowers. The plant is widely distributed in tropical and subtropical areas. The folk medicinal uses of the flowers are mostly as diuretic and anti-inflammatory; they are also reported to exert a molluscicidal effect.

Aim: To investigate the volatile constituents of the flowers collected at different stages viz., unexpanded flower buds and expanded flowers. To perform a bioactivity-guided fractionation of the ethanol extract of the flowers targeting to isolate the metabolites expected to mediate the tested activities.

Procedures and Results: The volatiles were prepared from the different samples (expanded flowers, flower buds and a mixture of both) by two different methods viz., hydro-distillation and hydro-distillation/solvent extraction using n-hexane as the organic phase. The GC/MS conditions adopted for analysis revealed the presence of a number of oxygenated and non-oxygenated constituents. Qualitative variability was observed amongst the different samples. Thiophene, tetrahydro-1,1 dioxide (Bondelane A) which predominates the chromatographic profile of the hydro-distilled volatiles of the flower buds obviously decreased on flower expansion (62.04% and 11.62%, respectively).

A sample of dried flowers was exhaustively extracted with ethanol. A bioactivity-guided fractionation of the extract was performed, based on evaluation of the antimicrobial and cytotoxic potentialities. The parent extract (ethanol) and fractions (n-hexane, chloroform, ethyl acetate and n-butanol) exhibited significant antimicrobial activities with the n-hexane fraction being the most effective. All the tested samples (ethanol extract and fractions) exhibited a dose-dependent cellular growth inhibitory effect on two human tumour cell lines viz., mammary and colon cell layers. In addition, the ethanol extract manifested a marked in-vitro anthelmintic activity when tested against earth worms. Finally, the acute toxicity study revealed the safety of the ethanol extract (no mortality up to 4 grams/kg), thus encouraging its use as a traditional medicine.

Phenolics were estimated qualitatively and quantitatively adopting HPLC technique. Five phenolic compounds were isolated from the chloroform, ethyl acetate and n-butanol fractions by repeated column chromatographic fractionation. Identification of the isolates was based on physico-chemical and spectral data.



Constituents and biological activity Of the essential oil and the aqueous extract of *Micromeria fruticosa* (L.) Druce subsp. *serpyllifolia*

Naglaa Gamil Shehab¹ and Eman Abu-Gharbieh²

¹ Pharmacognosy and Phytochemistry Department, Dubai Pharmacy College, U.A.E.

² Department of Pharmacology and Therapeutics, Dubai Pharmacy College, UAE



Abstract

Micromeria fruticosa L Druce subsp. *serpyllifolia* is a medicinal herb that is widely used as folk medicine in the treatment of abdominal pains, diarrhea, eye infections, heart disorders, elevated blood pressure, colds and wounds.

This study aims to investigation the constituents and biological activity of the essential oil and aqueous extract of the plant that had been collected from Nablus. The oil was prepared by hydro-distillation method and analyzed by GC/MS. The oxygenated constituents were prevalent (87.4%) with the pulegone (58.5%) was the major constituents.

Antitumor and analgesic activities of the isolated oil and the aqueous extract of *M. fruticosa* were investigated. Both the oil and the aqueous extract exhibited marked antitumor activities against Human Colon Tumor cells (HCT) and Mammary Carcinoma F7 (MCF7). The oil showed less IC_{50s} against both cell lines (10, 12.7 µg/ml respectively). Also the extract significantly inhibited acetic acid-induced writhing response ($p < 0.05$) and increased hot-plate pain threshold of mice at doses of 100 and 200 mg/kg while the oil did not show any analgesic activity on both models. Therefore, we concluded that the aqueous extract of *M. fruticosa* has a remarkable inhibitory activity in non-inflammatory reactions as well as inflammatory pain.



News & Events

EARTH HOUR 2012



Dubai Pharmacy College showed solidarity against the biggest threat to planet earth, climate change by participating in Earth Hour* 2012 on 31st March.

To encourage conservation in all our daily lives Dubai Electricity and Water Authority under the patronage of H.H. Sheikh Hamdan bin Mohammed bin Rashid al Maktoum, Crown Prince of Dubai & Chairman of Dubai Executive Council and in partnership The Supreme Council of Energy and Emirates Wildlife Society (EWS) in association with the World Wide Fund for Nature (WWF) and in cooperation with Emaar promoted participation in the Earth Hour 2012 celebrations.



*Earth Hour is a global movement uniting people to protect the planet. On the last Saturday of March every year, Earth Hour brings together communities from across the world celebrating a commitment to the planet by switching off lights for one designated hour or more.



Have a **suggestion** or **comment**? Post it to <DPCnewsletter@dpc.edu>.



Health Checkup

Free medical checkup was organized for staff, students and workers.

The medical checkup included eye check up, skin test, blood glucose level which was conducted by MNCs. Special thanks for the organizers of the event, President of the Student Union Fatima Adel and her team.

Mother's Day

"A little girl, asked where her home was, replied, "where mother is."

-- Keith L. Brooks

On the 21st of March, Dubai Pharmacy College students decided to say thanks for their loving mothers. Not only the mother at home but also the teachers who stand all day long to make students better, generous and proactive citizens.

On the spot salad making completion refreshed the competitors and the audience alike. Students felicitated the faculty with bouquet - hats off to the student-union who made this day memorable.



The best way to
make your
dreams come true
is to wake up!

Student Creative Expressions



A Thought...

Everyone encourages Dreaming. Dreams are expectations coloured with imagination & wound with care. They are filled with the heart's happiness & beauty of the unexpected being so realistic.

At times one should NOT DREAM. When one builds that world of dreams with so much thought and reckless emotions it makes a special place in ones life. The hard part comes when one word, sentence, thought shatters the entire existence of the world into pieces. You are left in complete doubt, confusion about which are the pieces of this lost world that you want to keep and which are those that you need to leave.

With a wounded soul and a broken heart you don't know how many injuries u can bear while picking up those shattered pieces.

There are no boundaries to dreaming, but it's time we all learn to set some. If one wishes to live without losses of one's soul's pieces then thinking a little more practically helps a lot.

Innocent dreams do harm to such an extent that nothing hurts more than their existence not coming to life.

By: *Quratulain Muhammad*





Student Creative Expressions

MOTHER...



**She is someone, whose happiness is in our laughter,
She is someone, whose sorrow is in our tears,
She is someone we can't live without,
She is everything.**

Mother... This word associates with something sweet, tender, nice and merciful. We are born little and defenseless to this world and at once we sink in her love. Mother is a divine gift to man. She is an example of affection. A mother actually is an ordinary woman but in her tiny appearance lies an extraordinary strength, an unselfish soul and a very kind heart.

Over centuries, motherhood is always the most sacred and noble feeling. Whether it's a baby or an adult, mother is the person who is always beside to protect and take care. She teaches us how to behave in life; gives us love and always forgives our mistakes. She is happy when we succeed but is also the one who comforts us when we fail. Her trust in us is stronger than the base of Burj Khalifa. She prays for the goodness of her child's life in this world and also in the hereafter. Nothing can come close to the love that a mother feels for her child. She is like a guardian angel for the whole family. A mother leads a life of service and sacrifice. She is serving us since the time we came in this world. Her debt is un-repayable.

I ask for Allah's blessings on the mothers of the entire world.

Finally I'd like to point out the fact that in Islam: honoring and loving your parents is a daily obligation. Every day is a mother's day.

'I believe in love at first sight because I love my mother since I opened my eyes.'



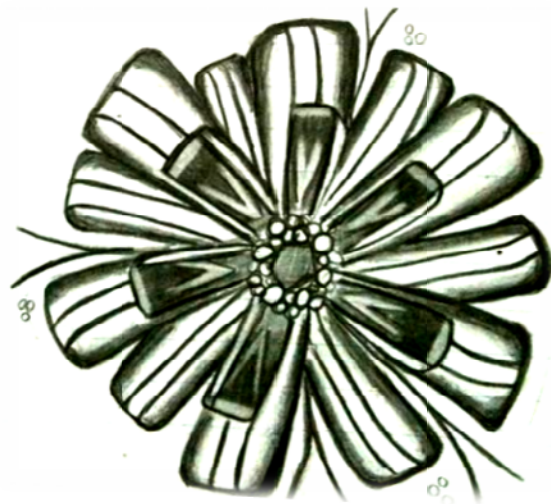
By: *Sidra Parveen*





Arwa Nousheen

Batch 19



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