

Ali Davoodi

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EDUCATION:

Mazandaran University of Medical Sciences (2015-2019)

Ph. D (Pharmacognosy and Herbal Medicine)

Dissertation: Extraction, Isolation and Structure Elucidation of Alkaloids of Colchicum species from North of Iran; Pharmacopeial Evaluation of these species and High Production of Colchicin by Immobilized Plant Cell Method
Dissertation Supervisors: Prof. Mohammad Azadbakht, Prof. Seyyed Jalal Hosseinimehr, Prof. Saeed Emami.

Mazandaran University of Medical Sciences (2009-2015)

Pharm. D, Doctorate of Pharmacy

Thesis: PEG-Serine nanoparticles as novel nanostructure for attenuation of organophosphate poisoning: Synthesize, characterization, in vitro and in vivo studies.

Thesis Supervisors: Dr. Hamidreza Mohammadi, Dr. Pedram Ebrahimnejad, Dr. Hamid Irannejad.

PROFESSIONAL SERVICE:

None.

TEACHING & ADVISING EXPERIENCE:

- **Lecturer, Mazandaran University of Medical Sciences, Faculty of Pharmacy (2019-present)**
Courses: Pharmacognosy I & II, Herbal Medicines, Pharmacognosy-Lab, Persian Medicine, Traditional Pharmacy (Pharm.D and Ph.D students).
- **Supervising Undergraduate Dissertations and Student Assessment**

RESEARCH INTERESTS:

Herbal Medicines, Medicinal Plants & Seaweeds, Natural Products, Isolation of Secondary Metabolites, Elucidation of the structures, Chromatography and Phyto-Chemical Analytical Methods, Biological and Pharmacological Effects of Herbal Medicines.

RESEARCH EXPERIENCE:

- Designed and Conducted Up to 25 Research Projects Related to Pharmacognosy, Secondary Metabolite Isolation and Herbal Medicines approved by the Mazandaran University of Medical Sciences Research Center and Ayatollah Amoli Islamic Azad University (2018-2021).

PUBLICATIONS:

- Antibacterial activity of *Mespilus germanica* L. leaf extract. *Journal of Mazandaran University of Medical Sciences*. 2017; 26 (146):173-8. (in Persian)
<https://jmums.mazums.ac.ir/article-1-9643-en.html>
- Medicinal, biological and phytochemical properties of *Gentiana* species. *Journal of traditional and complementary medicine*. 2017; 7 (4): 400-408.
<https://www.sciencedirect.com/science/article/pii/S2225411017300044>
- Cytotoxic Activity of *Citrullus colocynthis* (L.) Schrad Fruit Extract on Gastric Adenocarcinoma and Breast Cancer Cell Lines. *International Journal of Pharmaceutical Sciences Review and Research*. 2017; 45 (1): 175-178.
<https://www.globalresearchonline.net/pharmajournal/vol45iss1.aspx>
- PHYSICOCHEMICAL CHARACTERIZATION OF *ASTRAGALUS CAMPYLORHYNCHUS* GUM EXUDATE AND ITS MODIFICATION TO TRAGACANTH UTILIZABLE IN PHARMACY. *ACTA POLONIAE PHARMACEUTICA*. 2017; 74 (6):1913-20.
<https://www.ptfarm.pl/wydawnictwa/czasopisma/acta-poloniae-pharmaceutica/110/16532>
- Characterization and HPLC analysis of manna from some *Cotoneaster* species. *International Journal of Pharmaceutical Sciences and Research*. 2017; 8 (1): 1000-06.
<https://ijpsr.com/bft-article/characterization-and-hplc-analysis-of-manna-from-some-cotoneaster-species/?view=fulltext>
- The Determination of Blood Glucose Lowering and Metabolic Effects of *Mespilus germanica* L. Hydroacetic Extract on Streptozocin-Induced Diabetic Balb/c Mice. *Medicines*. 2018; 5 (1): 1-7.
<https://www.mdpi.com/2305-6320/5/1/1>
- Comparison of *Albizia Julibressin* and Silver Sulfadiazine in Healing of Second and Third Degree Burns. *World journal of plastic surgery*. 2018 Jan; 7 (1): 34-44.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5890364/>
- FORMULATION AND PHYSICOCHEMICAL EVALUATION OF MEDLAR (*MESPILUS GERMANICA* L.) AND OAK (*QUERCUS CASTANEIFOLIA* CA MEY.) EFFERVESCENT TABLETS. *INTERNATIONAL JOURNAL OF PHARMACEUTICAL SCIENCES AND RESEARCH*. 2018; 9 (9) 3870-3875.
<https://ijpsr.com/bft-article/formulation-and-physicochemical-evaluation-of-medlar-mespilus-germanica-l-and-oak-quercus-castaneifolia-c-a-mey-effervescent-tablets/>
- Materia Medica Used in Jaundice Based on Persian Medicine. *Research Journal of Pharmacognosy*. 2018; 5 (4): 83-93.
http://www.rjpharmacognosy.ir/&url=http://www.rjpharmacognosy.ir/article_69226.html
- Is cotoneaster manna improving the treatment of neonatal jaundice? *Bangladesh Journal of Pharmacology*. 2018; 13 (2): 168-178.
<http://bdpsjournal.org/index.php/bjp/article/view/766>

- The traditional medicine aspects, biological activity and phytochemistry of *Arnebia* spp. *Medicinski Glasnik*. 2018; 15 (1) 1-9.
<https://ljkzedo.ba/wordpress/wp-content/uploads/2018/03/06-Hosseini-926-A.pdf>
- Starting dose calculation for medicinal plants in animal studies; recommendation of a simple and reliable method. *Research Journal of Pharmacognosy*. 2018; 5 (2): 1-7.
http://www.rjpharmacognosy.ir/article_58474.html
- A Review on Medicinal Plants Used for Nausea and Vomiting in Persian Medicine. *Global Journal of Medical Research*. 2018; 18 (1): 28-45.
<https://globaljournals.org/journals/medical-research/pharma-drug-discovery-toxicology-medicine>
- Hairy Root Cultures of *Hypericum perforatum* L.; A Promising Method for The High Scale Production of Hypericin. *Journal of Medicinal Plants*. 2018; 7 (67): 56-68.
http://jmp.ir/browse.php?a_code=A-10-1552-6&slc_lang=en&sid=1
- Peg-serine nanoparticles as novel nanostructures for attenuation of organophosphate poisoning: synthesis, characterization, in vitro and in vivo studies. *Toxicology Letters*. 2018; 56 (7): 719-719.
<https://ur.booksc.eu/book/76073158/78a95d>
- Preventive effect of Purgative Manna on neonatal jaundice: A double blind randomized controlled clinical trial. *Journal of Ethnopharmacology*. 2019; 236: 240-249.
<https://www.sciencedirect.com/science/article/pii/S0378874118323043>
- Plant cells technology as an effective biotechnological approach for high scale production of pharmaceutical natural compounds; A meta-analysis study. *Pharmaceutical and Biomedical Research*. 2019; 5(2): 1-9.
<https://pbr.mazums.ac.ir/article-1-234-en.html>
- In Vitro Antitrichomonal Activity of Some Species of *Allium*. *Jundishapur Journal of Natural Pharmaceutical Products*. 2019; 15(1): 1-5.
<https://sites.kowsarpub.com/jjnpp/articles/89649.html>
- Anticancer Effects of Senecionine and *Senecio vulgaris* L. on Prostate Cancer Cell Lines. *Journal of Mazandaran University of Medical Sciences*. 2019; 28(169): 1-13.
<https://jmums.mazums.ac.ir/article-1-12343-en.html>
- Protective Effect of Sankol Herbal Product on Kidney Stone in Balb/C Mice. *Journal of Mazandaran University of Medical Sciences*. 2019; 29(180): 1-7.
<https://jmums.mazums.ac.ir/article-1-12336-en.html>
- Response Surface Methodology for Optimization of Supercritical Fluid Extraction of Orange Peel Essential Oil. *Pharmaceutical and Biomedical Research*. 2020; 6(4): 303-312.
http://pbr.mazums.ac.ir/browse.php?a_id=310&sid=1&slc_lang=en

- Antibacterial Activities of Gel Containing 5% Hydroalcoholic Extract of *Rhamnus cathartica* L. bark. Journal of Mazandaran University of Medical Sciences. 2020; 29(182): 106-110.
<http://jmums.mazums.ac.ir/article-1-13699-en.html>
- Ethnobotanical Study of Medicinal Plants used in Skin Diseases in the Area Alamut-Qazvin, Iran. Journal of Medicinal Plants. 2020; 4(72): 121-132.
http://jmp.ir/browse.php?a_id=1706&sid=1&slc_lang=en
- Effect of *Prunus Mahaleb* L. Seed Extract on Ethylene glycol-and Ammonium Chloride-Induced Urolithiasis in BALB/c Mice. Iranian Journal of Medical Sciences. 2020; 45(2): 134-140.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7071555/>
- Optimization of Colchicine Extraction from *Colchicum Kurdicum* (Bornm.) Stef. Corm and Evaluating Anti-Inflammatory and Anti-Oxidant Activities of the Plant Extract. Journal of Mazandaran University of Medical Sciences. 2020; 30(184): 126-135.
<http://jmums.mazums.ac.ir/article-1-14375-en.html>
- A Mini-Review on Iron Chelating Agents as a Promising Therapeutic Target in Treatment of Leishmaniasis. Journal of Mazandaran University of Medical Sciences. 2020; 30(185): 173-183.
<http://jmums.mazums.ac.ir/article-1-14137-en.html>
- Tropolone alkaloids from *Colchicum kurdicum* (Bornm.) Stef.(Colchicaceae) as the potent novel antileishmanial compounds; purification, structure elucidation, antileishmanial activities and molecular docking studies. Experimental Parasitology. 2020; 213: 1-10.
<https://www.sciencedirect.com/science/article/abs/pii/S0014489419304035>
- Evaluation of therapeutic strategies of neonatal jaundice by medicinal herbalists of Mazandaran province: a descriptive cross sectional study. Journal of Medicinal Plants. 2020; 19(74): 255-276.
http://jmp.ir/browse.php?a_code=A-10-774-2&slc_lang=en&sid=1
- Optimization of Ultrasound-assisted Acidic-solvent Extraction of Colchicine from *Colchicum kurdicum* (Bornm.) Stef. Using Response Surface Methodology. Research Journal of Pharmacognosy. 2020; 7(3): 5-13.
http://www.rjpharmacognosy.ir/article_106223.html
- Phytochemical, physicochemical and biological evaluation of *Colchicum kurdicum* (Bornm.) Stef.: a study on materia medica of Persian medicine. Journal of Medicinal Plants. 2020; 19(76): 36-45.
http://jmp.ir/browse.php?a_code=A-10-1282-1&slc_lang=en&sid=1
- The Preventive Effects of *Asparagus officinalis* Extract on Sodium Selenite-Induced Cataractogenesis in Experimental Animal Models. Evidence-Based Complementary and Alternative Medicine. 2020; 2020: 1-10.
<https://www.hindawi.com/journals/ecam/2020/3708730/>
- Qualitative and Quantitative Study of Pyrrolizidine Alkaloids in Medicinal Plants Sold in Herb Shops. Journal of Mazandaran University of Medical Sciences. 2020; 30(191): 109-114.
<http://jmums.mazums.ac.ir/article-1-14864-en.html>

- Investigation of the physicochemical and pharmacognostical properties of Anzaroot (The manna of *Astragalus sarcocola* Dymock.) according to the World Health Organization. Medical Journal of Tabriz University of Medical Sciences. 2020; 42(5): 564-571.
<https://mj.tbzmed.ac.ir/Article/24007>
- Formulation, Preparation and Evaluation of Antiperspirant Effects of Hydrogel of *Salvia virgata* Jacq Aerial Part: A Randomized, Double Blind and Placebo-Controlled Clinical Trial. Journal of Mazandaran University of Medical Sciences. 2021; 31(192): 35-43.
<https://jmums.mazums.ac.ir/article-1-14551-en.html>
- Phytochemical Profiles, Physicochemical Analysis, and Biological Activity of Three Colchicum Species. Jundishapur Journal of Natural Pharmaceutical Products. 2021; 16(2): 1-11.
<https://sites.kowsarpub.com/jjnpp/articles/98868.html>
- Phytochemical Screening and Antinociceptive Activity of the Hydroalcoholic Extract of *Potentilla reptans* L. Pharmaceutical and Biomedical Research. 2021; 7(4): 1-10.
http://pbr.mazums.ac.ir/browse.php?a_code=A-10-49-2&slc_lang=en&sid=1
- Effect of Lipogel Containing Extracts of *Eryngium campestre* L. and *Satureja hortensis* L. on Wound Healing in Male Wistar Rats. Journal of Mazandaran University of Medical Sciences. 2021; 31(203): 152-162.
<http://jmums.mazums.ac.ir/article-1-16751-en.html>
- Cotoneaster manna oral drop for the management of neonatal hyperbilirubinemia; a randomized, double-blinded and placebo controlled clinical trial. Immunopathologia Persa. 2022; 7(2): 1-8).
<https://immunopathol.com/Article/ipp-13200>
- Mohammad Azadbakht, Amirsaeed Hosseini, Ali Davoodi. Materia Medica in Persian Medicine, Arjmand Publications. 2018 (Book-Persian).

CONFERENCE PRESENTATIONS:

None.

ACHIEVEMENTS AND AWARDS:

- Second Rank in Comprehensive Pharmacy Examination in Iran.
- Premier Young award in Golestan Province.
- Premier Technical Officer in Mazandaran Province Pharmacies.

PROFESSIONAL MEMBERSHIPS:

- Iran's National Elites Foundation Membership.
- Membership of Medical Council of the Islamic Republic of Iran as Pharmacist
- Membership of The Iranian Society of Pharmacognosy
- Membership of Pharmaceutical Science Research Center and Hemoglobinopathy Institute, Mazandaran University of Medical Sciences, Sari, Iran
- Membership of Medicinal Plants Research Center, Mazandaran University of Medical Sciences, Sari, Iran
- Membership of Traditional and Complementary Medicine Research Center, Addiction Institute, Mazandaran University of Medical Sciences, Sari, Iran

LANGUAGES:

- **Persian:** Native
- **English:** Fluent, Advanced in Reading and Writing
- **Italian:** Intermediated in Reading and Writing

SKILLS:

- **Research:** Extraction Methods, Isolation and Purification of Secondary Metabolites, Chromatography Methods (TLC, HPLC, GC, CC), Spectroscopy (NMR, IR, Mass), Design of Animal Studies
- **Software:** Microsoft Office (Word, Excel, Power Point), End note, SPSS, Chem Draw, Prism-GraphPad, Design Expert, etc.
- **Lecture:** About Marine Natural Products, Alkaloids in advance, Phyto-Therapy and Herbal Medicines Benefits, Isolation and Analytical Methods