



Student research group on phytochemistry

Academic year 2020-2021

Acronym: **PHYTOCHEM**

Research team:

Senior lecturer Laczkó-Zöld Eszter PhD
Senior lecturer Varga Erzsébet PhD
Senior lecturer Ștefănescu Ruxandra PhD

Technician Balizs Attila

Contact:

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Research topics:

- Analysis of hydrophilic and lipophilic compounds extracted from herbal drugs and berries with antioxidant capacity
- Critical evaluation of dietary supplements from Romanian market
- Phytochemical, microbiological and pharmacological study of some medicinal plants
- Phytochemical analysis of polyphenolic compounds from *Vaccinium* species

Students currently involved in PHYTOCHEM research group:

5 th Year of study, Pharmacy	4 th Year of study, Pharmacy
Hobai Henrietta	Bárdi Örs
Hoha Georgiana	Birtalan Noémi
Horea Valentina	Cupșe Ioana
Kovács Alexandra	Ilieș Larisa
Márton Sarolta	Kinda Andrea
Mathe Valentina	Kolcsár Blanka
Miklós Emőke	Korech Beáta
Sebesteny Monica	Madarász Andrea
Székely Kinga	Orbán Orsolya
Szeredai Henrietta	Rîștei Ioana
Toth Larisa	Șandor Denisa
	Szél Orsolya





Relevant research infrastructure:

UV/VIS Spectrophotometer, HPLC-DAD, microscopy

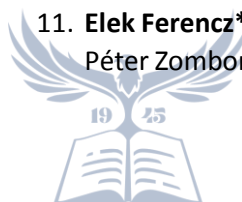
Relevant abstracts/in extenso publications with student's contribution (*student):

Year 2020:

1. Ștefănescu R, Tero-Vescan A, **Negroiu A***, **Aurică E***, Vari CE: *A Comprehensive Review of the Phytochemical, Pharmacological, and Toxicological Properties of Tribulus terrestris L.* Biomolecules, 2020, 10 (5), doi.org/10.3390/biom10050752.
2. Ruxandra Ștefănescu, Eszter Laczko-Zold, Anca Mare, Sigrid Eșianu, Izabela Grama, **Ancuța Negroiu***, Camil Vari – *Risks and Benefits Associated with Tribulus terrestris Products Assessed by Phytochemical and Pharmacological Screening.* Rev.Chim., 2020, 71 (4), 416-423.
3. **Ferencz Elek***, **Demeter Eszter***, **Király Rebeka***, Vancea Szende, **Urkon Melinda***, Laczkó-Zöld Eszter - *A romániai piacon található kasvirág tartalmú étrend-kiegészítők feltérképezése és a leggyakrabban használt termékek minőségi értékelése (Mapping of Echinacea-based dietary supplements on the Romanian market and qualitative evaluation of the most commonly used products).* Orvostudományi Értesítő (Bulletin of Medical Sciences), 2020, 93(2), Ahead of print. DOI: 10.2478/orvtudert-2020-0008.
4. Varga E., **Lieb D.***, Maráz A. *Primula veris L. kivonatok fitokémiai és antimikrobás hatásának vizsgálata (Investigation of the phytochemical and antimicrobial activity of Primula veris L. extracts).* OrvTudErt 2020, 93(1), 33-37. ISSN 2537-5059, in press.
5. **Roncea F***, Laczko-Zold E, Ștefănescu R: *The analysis of total polyphenolic content and antioxidant activity of different honey samples.* Acta Marisiensis Seria Medica, 2020, 66, 78. International congress for students, young doctors and pharmacists Marisiensis, 25-29 martie 2020, Târgu Mureș, România.
6. **Marian (Ignat) R***, Ștefănescu R: *Antioxidant capacity of a daily face cream with anthocyanins extracted from bilberry,* Acta Marisiensis Seria Medica, 2020, 66, 78. International congress for students, young doctors and pharmacists Marisiensis, 25-29 martie 2020, Târgu Mureș, România.

Year 2019:

7. Eszter Laczkó-Zöld, **Andrea Komlósi***, Erzsébet Varga, Nóra Papp: *Comparative histological evaluation of the fruit of Ribes nigrum and Ribes rubrum.* Acta Biologica Marisiensis, 2019, 2(2), 5-14. Indexat BDI. DOI: 10.2478/Abmj-2019-0006.
8. **Negroiu A***, Vari CE, Farczadi L, Ștefănescu R: *The effects of Tribulus terrestris on testosterone levels of diabetic rats.* Acta Medica Marisiensis, 2019, 65, S1, 69. International Congress for Students, Young doctors and Pharmacists Marisiensis, Târgu Mureș, 2019.
9. Varga E, Szőke H, **Chiorean C***, **Lieb D***: *A Primula veris L. növényi részek hatóanyagainak vizsgálata.* Orvostudományi Értesítő, 2019, 92 (2), 40. Erdélyi Múzeum Egyesület, Orvos-és Gyógyszertudományi Szakosztály, XXIX Tudományos Ülésszak, Satu-Mare, 11-13 aprilie 2019. ISSN:1453-0953 (print).
10. Eszter Laczkó Zöld, Attila Horváth, **Blanka Bacsadi***, Dezső Csupor: *Development and validation of a HPLC-UV method for the quantification of charantin in Momordica charantia products.* Trends in Natural Product Research – PSE Young Scientists' Meeting Budapest, June 19th-21st, 2019, Book of abstract, pg 119, doi: 10.14232/tnpr.2019.af.
11. **Elek Ferencz***, Norbert Kúsz, Judit Hohmann, Martin Vollár, Ágnes Molnár, Eszter Laczkó-Zöld, Zoltán Péter Zomborszki, Boglárka Csupor-Löffler: *Chemical characterization of common ragweed (Ambrosia*





artemisiifolia L.) root. Trends in Natural Product Research – PSE Young Scientists’ Meeting Budapest, June 19th-21st, 2019, Book of abstract, pg 118, doi: 10.14232/tnpr.2019.af.

Year 2018:

1. Eszter Laczkó-Zöld, **Andrea Komlósi***, **Timea Ülkei***, Erzsébet Fogarasi, Mircea Croitoru, Ibolya Fülöp, Erzsébet Domokos, Ruxandra Ștefănescu, Erzsébet Varga: Extractability of polyphenols from black currant, red currant and gooseberry and their antioxidant activity, *Acta Biologica Hungarica*, 2018, 69 (2), 156-169, cotat ISI, FI 0,439.
2. Varga E, **Schmidt I***, **Szövérfi B***, Pop MD, Kelemen H, Tóth A: Phenolic content from medicinal plants and their products used in veterinary medicine, *Acta medica Marisiensis*, 2018, 64 (2), 77-82, BDI
3. **Ferencz Elek***: A parlagnőgyökér (*Ambrosiae artemisiifoliae radix*) farmakognóziái vizsgálata / Studiul farmacognostic a rădăcinii de ambrozia (*Ambrosiae artemisiifoliae radix*). Conferința TDK, Ediția 25, 21-24 martie 2018. Locul I
4. **Dulau Carina Melina***, Eșianu Sigrid, Ștefănescu Ruxandra: Understanding flavonoid-drug interactions. *Acta Medica Marisiensis*, 2018, 64, suppl. 1, pp.85. Conferința Marisiensis, 28 martie-1 aprilie, 2018.
5. **Blaș Iuliana***: Influența căilor de administrare a uleiului volatil de fenicul în diabetul zaharat indus prin streptozocină la șobolani. Coordonator: Eșianu Sigrid, Ștefănescu Ruxandra. Volum de rezumate lucrări științifice, Congresul Național al Studenților Farmaciști din România, Editia a 16-a, Iași, 28 martie -1 aprilie 2018.
6. Laczkó Zöld Eszter, **Szabó Dalma***, Májai Fogarasi Erzsébet, Ștefănescu Ruxandra, Varga Erzsébet: Polifenolos vegyületek vizsgálata madárberkenye (*Sorbus aucuparia L.*) terméből. Studiul compușilor polifenolici extrași din fructe de scoruș de munte (*Sorbus aucuparia L.*). Abstract. *Buletin de Științe Medicale/Orvostudományi Értesítő*, 2018, 91, suppl.2, 28. XXVIII-a Ediție a Sesiunii Științifice Anuale, 19-21 aprilie 2018, Târgu Mureș.
7. **Elek Ferencz***, Eszter Laczkó-Zöld, Boglárka Csupor-Löffler: Phytochemical analysis of common ragweed root (*Ambrosiae artemisiifoliae radix*), *Acta Medica Marisiensis*, 2018, 64, supl 3, pp 12. ISSN: 2068 – 3324. Scientific Aniversary Symposium - 70 Years from Foundation of University Botanical Garden, Tîrgu Mureș 1948 – 2018, 30 May - 01 June 2018, Tîrgu Mureș
8. Eszter Laczkó-Zöld, **Dalma Szabó***, Erzsébet Fogarasi, Rita Tömösközi-Farkas, Ruxandra Ștefănescu, Erzsébet Varga, Sigrid Eșianu: Contribution to the phytochemical evaluation of rowanberry fruits (*Sorbus aucuparia L.*), *Acta Medica Marisiensis*, 2018, 64, supl 3, pp 13. ISSN: 2068 – 3324. Scientific Aniversary Symposium - 70 Years from Foundation of University Botanical Garden, Tîrgu Mureș 1948 – 2018, 30 May - 01 June 2018, Tîrgu Mureș
9. Varga E, **Schmidt I***, **Szövérfi B***, Pop M, Tóth A: The role of medicinal plants used in the veterinary medicine, *Acta Medica Marisiensis*, 64, supl 3, pp.24. ISSN: 2068 – 3324. Scientific Aniversary Symposium - 70 Years from Foundation of University Botanical Garden, Tîrgu Mureș 1948 – 2018, 30 May - 01 June 2018, Tîrgu Mureș
10. Varga E, **Schmidt I***, Pop M, **Szövérfi B***: Allatgyógyászati termékek formulálásánál figyelembe vett polifenolos vegyületek. *Buletin de Științe Medicale / Orvostudományi Értesítő*, 2018, 91, suppl.2, 49. XXVIII-a Ediție a Sesiunii Științifice Anuale, 19-21 aprilie 2018, Târgu Mureș.
11. Ștefănescu R, **Negroiu A***, Mare A, Vari C: Phytochemical and pharmacological profiles of two products with *Tribulus terrestris.*, Days of the University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Scientific Session of University Academic Staff, December 10th-14th 2018. Book of abstracts 2018, 1, 68-69. ISSN 2602-1609.

Year 2017:

1. **Bacsadi Blanka***: Castravete amar cultivat în România (*Momordica charantia L.*) – contribuții la studiul farmacognostic. Abstract în *Buletin de Științe Medicale*, 2017, 90 (suppl.1), pp. 157.





Coordonator: dr. Laczkó-Zöld Eszter. Conferința Științifică Studentească, 29 martie - 1 aprilie 2017, Tîrgu Mureș.

2. **Komlósi Andrea***, **Ülkei Timea***: Compușii polifenolici, activitatea antioxidantă și analiza microscopică a unor fructe de *Ribes*. Abstract în Buletin de Științe Medicale, 2017, 90 (suppl.1), pp. 158. Coordonator: dr. Laczkó-Zöld Eszter. Conferința Științifică Studentească, 29 martie - 1 aprilie 2017, Tîrgu Mureș.
3. Varga E, **Schmidt I***, **Szövérfi B***, Fazakas M: Determination and comparison of phenolic compounds of medicinal plants and veterinary herbal medicines. Book of Abstracts of the 7th BBBB International Conference on Pharmaceutical Sciences, Acta Pharmaceutica Hungarica, 2017, 87 (3-4), pp. 172-173.
4. Ferencz Adél, Boros Katinka, Kovács Erika, **Komlósi Andrea***, Varga Erzsébet, Papp Nóra: Etnofarmakobotanikai felmérés Homoródszentmárton környékén. Abstract. Buletin de Științe Medicale, 2017, 90, suppl.2, pp.17.
5. **Fábián Adélka***, Schulte Sonja, Varga Erzsébet: Spagyrika, mint a kiválsztó készülek megbetegedéseiben használt gyógymód. Abstract. Buletin de Științe Medicale, 2017, 90, suppl.2, pp.14.
6. Laczkó-Zöld Eszter, **Komlósi Andrea***, **Ülkei Timea***, Fogarasi Erzsébet, Croitoru Mircea Dumitru, Fülöp Ibolya, Domokos Erzsébet, Varga Erzsébet: Profilul polifenolic și activitatea antioxidantă a unor fructe de *Ribes*. Abstract. Buletin de Științe Medicale, 2017, 90, suppl.2, pp.33.
7. Erzsébet Varga, **Bernadett Papp***, Mircea Dumitru Croitoru, Erzsébet Májai Fogarasi, Ibolya Fülöp, Erzsébet Domokos, Eszter Laczkó-Zöld: Phenolic compounds and antioxidant potential of *Crataegus monogyna* fruits from Romania. Abstract at The 21th International Congress Phytopharm, 2-5 July 2017, Graz, Austria. Reviews on Clinical Pharmacology and Drug Therapy, 2017, vol.15, suppl.1. pp.74.

Year 2016:

1. Laczkó-Zöld Eszter, Májai Fogarasi Erzsébet, **Komlósi Andrea***, Ștefănescu Ruxandra, Eșianu Sigrid, Varga Erzsébet: Antioxidant activity and phenolic compounds in fruits of *Prunus spinosa* (blackthorn), Abstract at The National Congress of Pharmacy from Romania, Bucharest, 28th September – 1st October 2016.
2. Varga Erzsébet, Croitoru Mircea Dumitru, Májai Fogarasi Erzsébet, Fülöp Ibolya, Domokos Erzsébet, **Komlósi Andrea***, Laczkó-Zöld Eszter: Identification of polyphenolic compounds from some berries by RP-HPLC method. Abstract at 22nd International Conference on Chemistry, Timisoara, November 3-6, 2016
3. **Andrea Komlósi***, Eszter Laczkó-Zöld, Erzsébet Májai Fogarasi, Erzsébet Domokos, Mircea Croitoru, Ibolya Fülöp, Erzsébet Varga: Polyphenolic profile and antioxidant activity of blackcurrant (*Ribes nigrum* L.) fruits, Acta Medica Marisiensis, 2016, 62, suppl.8, 80.





MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA

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DISCIPLINA DE FARMACOGNOZIE ȘI FITOTERAPIE

